UAT

2022-2024 Academic Catalog

GOVERNANCE

An Arizona corporation established in 1983, University of Advancing Technology (UAT) is a registered tradename of University of Advancing Computer Technology, Inc.

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ACCREDITATIONS, AUTHORIZATIONS AND APPROVALS

University of Advancing Technology (UAT) is accredited by the Higher Learning Commission (hlcommission.org), an institutional accreditation agency recognized by the U.S. Department of Education.

In addition, UAT holds the following accreditations, authorizations, approvals and memberships:

- Council for Higher Education Accreditation (CHEA), Accreditation Member
- Licensed by the Arizona State Board for Private Postsecondary Education
- Certified by the US Department of Education
- Designated by the U.S. National Security Agency (NSA) and Department of Homeland Security (DHS) as a National Center of Academic Excellence in Cyber Defense (CAE-CD)
  - Network Security curriculum has been validated through the NSA National Information Assurance Education Training Program in Information Assurance (IA)/Cyber Defense (CD)
- Programs approved for the training of veterans
- Approved by the Student and Exchange Visitor Information Systems (SEVIS) for training of foreign students
- Alpha Beta Kappa Honor Society
- American Council on Education, Member
- Tempe Chamber of Commerce, Member
- AZ Tech Council, Member

To view an updated list, visit www.uat.edu/accreditation. The major certificates of accreditation or membership are on display in the halls of the school. Those which are not on display may be viewed by directing a written request to the appropriate school official.

STATE AUTHORIZATION

University of Advancing Technology (UAT) pursues to offer online classes (distance education) in every state while abiding to regulatory and governing standards. UAT works through the State Authorization Reciprocity Agreement (SARA) process to confirm that when authorization or licensure is necessary, proper approvals are secured or enrollment by students in unapproved states may be restricted.

The state of Arizona is a member of SARA, and UAT is an approved SARA institution. This means UAT has reciprocity approval for distance education with other SARA approved states. This membership makes it possible for students to take online courses from other states. Students can rest assured their college meets SARA requirements for distance education.

Distance Education students may submit non-instructional complaints to the Arizona SARA Council after the institution's internal and the Arizona State Board for Private Postsecondary Education's Grievance Processes have been completed. Complaints regarding student grades or student conduct violations may not be appealed to the AZ SARA Council. Please refer to the Student Catalog under 'General Grievances' for full details on how to submit complaints. The Arizona State Board for Private Postsecondary Education’s grievance process can be found here: https://ppse.az.gov/resources/complaint-forms. The AZ SARA complaint process can be found here: https://azsara.arizona.edu/complaints.

SARA is overseen by the National Council (NC-SARA) and administered by four regional education compacts. Arizona’s regional compact is the Western Interstate Commission of Higher Education (WICHE).

For more information about the NC-SARA or approved Arizona institutions, please visit http://www.nc-sara.org/.

State of California

The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA 95833, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.
3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder or debt collector after a period of no collection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number.

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UAT OVERVIEW

MISSION

To educate students in advancing technology who innovate for our future.

VISION

UAT leads higher education by reimagining the future of learning, intellectual property and talent cultivation to accelerate Arizona and national tech-entrepreneurship.

INSTITUTIONAL VALUES

Fast—We work fast and we work hard, but we do it in a calm, mindful, purposeful and centered way.

Fun—We are not afraid to have a ridiculous amount of fun at work.

Friendly—We are a face-to-face working environment. We build relationships with each other because humans matter.

Smart—We are a family of wicked smart people. We are driven and have common sense.

Honor—We do honorable work every day and we truly believe in what we do. We do the right thing, even if it's hard.

Ownership—We own who we are and what we do. We value those who get things done, take ownership, and seek to learn and do more.

Leadership—We strive to be leaders in our own regard and surround ourselves with other leaders. We make a difference as leaders in the community and have a reputation for leading the way.

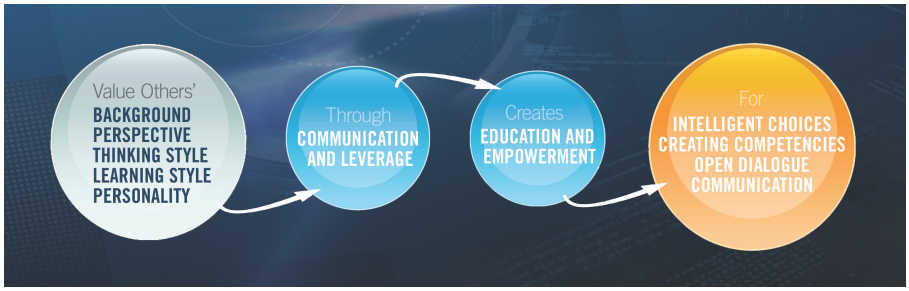
Growth—We will always do a better job tomorrow than we did today. We strive for continuous personal growth. Those who don't grow get left behind.

Team Sport—We play a big game as coworkers and family. We trust each other and operate above our own egos. We win and we lose together.

Pride—We are proud of who we are and the unique things we do. We are proud of each other and the University. We are our authentic selves and are proud of other's diversity.

DIVERSITY

At UAT, an appreciation that modern technology is the amalgam of the innovations from world-wide contributors stimulates the University to invest significant energy in teaching an understanding of others and an appreciation of the benefits and leverage that exist within our differences. These differences include those of background, perspective, thinking style, learning style, and personality. Further, the University believes that diversity in technology education requires educating and empowering students to serve the common good with success and distinction in an increasingly global environment while understanding of the profound impacts of the technologies they may develop. To encourage this appreciation, UAT provides a diverse set of learning experiences, and campus activities including curricular and extra-curricular interactions that foster an understanding and appreciation of the diversity of individuals and teams within a broad context. All endeavors are focused on this global context, creating competencies in inquiry, open dialogue, communication, and intelligent choice-making.



ABOUT UAT

University of Advancing Technology (UAT) is an intimate technology University focused on educating students in advancing technology who desire to innovate for our future.

UAT is the technophile's college experience — a community uniquely suited to provide students passionate about technology an ideal place to live and grow. UAT is a private and family-owned University that merges the values of the traditional academy with the modern technology campus, a fusion that enhances our ability to fulfill the mission of educating students in the fields of advancing technology who innovate for our future.

Learning at UAT extends from our students, staff and faculty to the institution itself. UAT's dedication to learning is reflected in our efforts to create and develop new ways of learning that focus on the personal mission and vision of every member of the UAT community.

UAT strives to foster knowledge creation and achieve academic excellence. We are at the forefront of developing academic programs that focus on expanding new and rising technology and tend to be unique among academia or emerge years ahead of other schools, such as Digital Arts, Creation & Simulation, Software Engineering, Cyber Security and Business & Innovation majors, as well as our established Game Studies majors that merged artistic and programming aspects long before other colleges chose that focus for themselves.

This technology University has the status of being among a select few 100 percent STEM-based universities in the nation. Our advancing technology degree programs are a benchmark of success within academia.

UAT is an ideal environment for technology students who value uniqueness and the power of advancing technology as well as the rigors of a traditional education. This fusion of the traditional academy with the technology-focused curricula creates a distinct, non-exclusionary University in which students learn to value their own uniqueness and the power of technology in education.

At the heart of UAT's curricula is our technology-infused campus in Tempe, Arizona. Our urban campus is a technology nexus; a collection of technophiles, geeks and mavens of the digital world that evolve into top technology executives, master programmers, cyber warriors, forensic sleuths, robotic engineers, interactive filmmakers and game innovators.

SYNCHRONIC LEARNING™

University of Advancing Technology (UAT) has developed a vibrant, multifaceted academic environment where students are challenged to explore both new and traditional concepts. Individual students and multidisciplinary teams work side-by-side with professors and industry leaders on innovative, real-world projects to achieve their potential.

Academics at UAT is designed especially for students of advancing technology through Synchronic Learning. Tailored to both undergraduate and graduate students, Synchronic Learning provides an education framework that prepares superior graduates to become tomorrow’s innovators. This model embodies UAT’s methodologies, curricula and people dedicated to fostering an environment of innovation that promotes demonstrated mastery and job readiness. An integral part of this framework is SyncFlex™, a flexible learning approach that provides real project experience for busy adult students.

SyncFlex is a dynamically flexible learning approach, designed to maximize convenience while integrating the project experience. For adult learners, UAT offers courses delivered with this method, breaking down the barriers of online and on-ground learning, and making the work and innovation more of the focus than the social aspects of campus life.

More information on Synchronic Learning can be found at www.uat.edu/synchronic-learning

FACULTY

Visit www.uat.edu/faculty for a complete list of faculty and more information.

OFFERINGS

University of Advancing Technology (UAT) delivers collegiate education and inquiry in a multitude of technology areas. UAT offers associate, bachelor and graduate degree programs in a year-round environment in arts and sciences. UAT offers the following degree programs:

Bachelor or Associate of Science majors:

> Advancing Computer Science
> Artificial Intelligence
> Business Technology
> Data Science
> Digital Maker and Fabrication
> Digital Marketing
> Game Programming
> Human Computer Interaction
> Network Engineering
> Network Security
> Robotics and Embedded Systems
> Technology Forensics
> Technology Studies
> Virtual Reality

Bachelor or Associate of Arts majors:

> Advertising Art
> Digital Video
> Game Art and Animation
> Game Design

Master of Science degrees:

> Cyber Security
> Game Production and Management
> Software Engineering
> Technology Innovation
> Technology Leadership

UNDERGRADUATE DEGREE PROGRAMS

PROGRAM OF STUDY

A program of study is the compilation of courses, credit hours and grades that make up a student's educational degree at the University. A program of study includes those courses a student needs to take to complete their degree requirements, and courses currently in progress as well as courses already completed by the student. Students enrolled in any of University of Advancing Technology's (UAT's) on-campus undergraduate degree programs attend a minimum of 12 credits per semester. Students enrolled in any of UAT-Online undergraduate degree programs attend a minimum of 9 credits per semester. All undergraduate programs incorporate General Education, University Core and Major-Specific Requirements in the program of study.

UNIVERSITY CORE AND GENERAL EDUCATION

UNIVERSITY CORE AND GENERAL EDUCATION OBJECTIVES—UNDERGRADUATE DEGREE

1. Student as Globally Minded Individual: Develops perspective on community and global matters, historical events, social conditions and related developments through knowledge gathering and critical inquiry; makes connections between disparate ideas, concepts and events.
2. Student as Problem-Solver: Applies thinking strategies (including critical, systems, creative, lateral and parallel) to effectively identify problems and articulate potential solutions; tests and enacts solutions based in scientific or industry standard principles and methods where appropriate.
3. Student as Innovation Leader: Synthesizes and applies practical knowledge to determine community needs or desires and then creates.
4. Student as Communicator: Develops professional, articulate voice in oral and written communication; displays professionalism in presentation; and articulates concepts and perspectives.

UNIVERSITY CORE

The University's Core curriculum addresses the question—*what should all students of technology need to know*? The Core prepares students to become part of, and be influential within, a techno-centric world.

Classes within the Core curriculum complement all our majors and enable fulfillment of the University's mission to educate students to become innovators. It is essential to the UAT student experience that the challenges they will face in the global community are easily comprehended with regard not only to specific industries and professions, but also to processes of continuous and often exponential change. To become thinking innovators, students must be able to comprehend how change occurs and why. Regardless of their selected degree, all students within the University are required to complete the Core curriculum to earn their degree from the University.

University Core Courses—Bachelor's Degree

BUS200 Entrepreneurship to Market
COM226 Communication in Technology
TCH310 Technology, Ethics and Society

AND 6 credits in SIP for the Student Innovation Project and Boards
AND at least 3 credits in an internship:

INT350 Internship
INT400 Internship

> Internship credit is only required for on-campus, undergraduate students. UAT-Online students can complete internship credit as an elective.

AND at least 6 credits in production/studio courses

PDS300 Production Studio I
PDS400 Production Studio II
PDS450 Production Studio III

> Students can take up to 12 credits of Production Studio.

University Core Courses—Associate's Degree

BUS200 Entrepreneurship to Market
SIP311 Student Innovation Project I

GENERAL EDUCATION

UAT offers students transferable life skills that complement technical skills learned in the majors. Students receive education in areas such as humanities, mathematics, science, languages and other topics that build a foundation for discourse and expression that enriches their experience beyond the academic forum. This approach meets widespread expectations of the undergraduate learning experience that honors the motivation for higher education: betterment of self and the world around us.

General education brings into clarity the spectrum of human expression, modes of thought and perspectives that enable all students to make profound connections between their technical skills and human development. In doing so, it complements the University's technology-intensive environment by making students aware of how the broad spectrum of human experience and knowledge integrates with their technology discipline. Regardless of their selected degree, all students within the University are required to complete the general education curriculum to earn their degree from the University.

General Education Requirements— Bachelor of Arts Degree

Minimum 36 total general education credit hours, including:

- TCH115 Thinking Strategies
- Humanities and Social Sciences—Minimum 18 credit hours, minimum of 6 upper division credits, including:
    - ENG101 Composition I
    - ENG102 Composition II
    - SS320 Contemporary Global Issues
- Mathematics and Science—Minimum 9 credit hours

General Education Requirements— Bachelor of Science Degree

Minimum 36 total general education credit hours, including:

- TCH115 Thinking Strategies
- Humanities and Social Sciences—Minimum 12 credit hours, minimum of 6 upper division credits, including:
    - ENG101 Composition I
    - ENG102 Composition II
    - SS320 Contemporary Global Issues
- Mathematics and Science—Minimum 18 credit hours, minimum of 3 upper division credits

General Education Requirements— Associate of Arts Degree

Minimum 24 general education credit hours, including:

- TCH115 Thinking Strategies
- Humanities and Social Sciences—Minimum 9 credit hours including:
    - ENG101 Composition I
    - ENG102 Composition II
- Mathematics and Science—Minimum 6 credit hours

General Education Requirements— Associate of Science Degree

Minimum 24 general education credit hours, including:

- TCH115 Thinking Strategies
- Humanities and Social Sciences—Minimum 9 credit hours including:
    - ENG101 Composition I
    - ENG102 Composition II
- Mathematics and Science—Minimum 9 credit hours

MAJOR-SPECIFIC REQUIREMENTS

Majors are established by the University to provide specialization and advanced work in a technological discipline. Each major represents an industry current technology field and is designed to change as the technology within the field progresses. In completing the course requirements of a major, students select topic areas that emphasize skills associated with specific industry targets.

The University has provided in this catalog grouped courses specific to each major; however, each student may select courses from any major they desire in combination to individually customize their educational degrees beyond the minimum requirements.

Courses within majors are noted for students within each major description. Taking all recommended credits within a major may result in minimum credit hours required in the degree program exceeding 120 in the bachelor's program and 60 in the associate's program. Students completing an associate degree must complete a minimum of 15 major-specific credits from the foundational, skills and synthesis courses listed within each major. Students completing a bachelor's degree must complete a minimum of 30 major-specific credits from the foundational, skills and synthesis courses listed within each major. Additionally, depending on the major, certain General Education or other courses may be required to fulfill prerequisites. Seeking guidance from Student Services is encouraged to promote each student's highest success.

Major specific requirements and degree requirements or further outlined below.

ASSOCIATE AND BACHELOR OF ARTS MAJORS

Arts degrees at UAT are focused at the intersection of creativity, traditional art theory and technology application. At the core of these degrees is the understanding that art and technology reach into everyone's lives, virtually all of the time, because technologies engage the primary senses of sight, sound and touch. Combining traditional art theory with technology application allows for the creation of intuitive, meaningful and striking presentation of information and innovation in the creation of product design and implementation. Students within arts majors will gain an appreciation for art, design and the intersection of these concepts with new technologies.

BACHELOR OF ARTS (BA) DEGREE REQUIREMENTS

Core Credits	24
General Education Credits (Minimum)	36
Major-Specific Credits (Minimum)	30
Elective Credits	30
Total Semester Credits (Minimum)	120
Within 120 minimum credit hours, the following requirements also apply: > Minimum Total 300/400 Level Credits	39

ASSOCIATE OF ARTS (AA) DEGREE REQUIREMENTS

Core Credits	6
General Education Credits (Minimum)	24
Major-Specific Credits (Minimum)	15
Elective Credits	15
Total Semester Credits (Minimum)	60

GRADUATION REQUIREMENTS

1. Successful completion of an approved program of study.
2. Successful completion of the minimum credits required by UAT's accrediting body for the desired degree.
3. Submittal of a completed and approved Application for Degree with the Office of the Registrar.
4. Meet minimum Satisfactory Academic Progress Standards at the completion of their program of study.
5. Meet minimum cumulative GPA of at least 2.0.
6. Successful completion of a major related internship (on-campus candidates only).
7. Completion of Student Innovation Project (SIP) and Boards requirement. SIP and Boards requirements include the submission and review of both digital and physical artifacts to demonstrate the student's capabilities within the discipline being studied (Bachelor's degree candidates only). For the dual degree, boards are required for each degree; additional Student Innovation Projects are not required.

Upon successfully completing the above requirements and meeting all University graduation requirements put forth in the graduation policy, a Bachelor or Associate of Arts degree will be awarded.

ADVERTISING ART

Harness and hone your artistic skills for a long-term career in advertising art. Students in the Advertising Art degree program will create captivating commercial art for display in many formats and contexts, such as print, online, and social media. Learn to create advertising assets that use a wide variety of media and techniques to reach customers, including traditional illustration, digital illustration, typography and photography. *The Classification of Instructional Programs (CIP) code for Advertising Art is 9.0909.*

ADVERTISING ART DEGREE OBJECTIVES

1. Apply the principles and elements of design to both online and offline deliverables.
2. Leverage an understanding of human behavior and conditioning to influence choice and decision-making using innovative methods and systems.
3. Follow branding guidelines for all visual communication to maintain a consistent and cohesive message through design and execution.
4. Create 2D, 3D and multi-media assets that incorporate compelling story-telling for the promotion of people, products and organizations.
5. Demonstrate the ability to build quality content that includes video, photography, web design and visual effects using the most advanced digital tools for media consumption.
6. Learn best practices and utilize tools that model creative agency environments and production studios.

ADVERTISING ART DEGREE COURSES

Courses in bold text are required for a Bachelor of Arts in Advertising Art. Courses with an asterisk (*) are required for an Associate of Arts in Advertising Art.

FOUNDATIONAL COURSES

ART103* Digital Asset Creation
ART112 Graphic Design Principles
ART121 Beginning Drawing I
ART209 Typography
ART231 Intermediate Drawing
ART233 Concept Art
ART234 Storyboarding
ART236 Basic Character Figure Drawing
ART240 Figure and Character Sculpting
CSC104 Beginning Website Interfaces
DMD150 Digital Tools for Media and Design
DVA145 Intro to 3D Studio Max and Maya
MKT120 Survey of Business and Marketing for Industry

SKILLS DEVELOPMENT COURSES

ART255 Visual Communications/Graphic Design
CSC256 Designing Website Interfaces I
DMD210 Vector Illustration
DMD220 Principles of Interface Design
DMD230 Personal Branding
DVA353 Visual Effects Composition

SYNTHESIS COURSES

BUS450 ROI Based Decision Making and Negotiations
CSC356 Designing Website Interfaces II
MKT320 New Media Communication and Marketing
MKT330 SEO and Online Applied Marketing
MKT345 International Web Development and Marketing
MKT415 Advanced Advertising Strategies and Creations
MKT430 Professional Ad Creation for Industry

DIGITAL VIDEO

A potent skill is being able to tell an engaging, compelling story from multiple sources yet have it be understandable to its audience. With the global presence of smartphones and other devices, you possess powerful digital tools for capturing still and video images with audio to create content. As wearable technology evolves and augmented reality becomes standard on our devices, new forms of produced and real-time interactions with images, graphics, animations and videos are accessible to most people connected to the internet. Multi-experience, multi-platform digital content represents the next evolution of storytelling. UAT's Digital Video degree prepares students to become creative technologists working behind the scenes to capture, edit and produce experiences for businesses, organizations, information sharing, brand development and entertainment. Students engage in real-world production work, learning industry practices and expectations while engaging with external clients. Through explorations of the aesthetic principles of visual storytelling and industry standard production and post-production tools, Digital Video students produce industry quality works shared across a variety of platforms, including web, mobile, kiosk, wearable, and AR/VR. As innovations in digital image creation, post-production and distribution continue to become the new industry standards, graduates of the Digital Video degree program will be uniquely positioned to apply new technological solutions to the task of delivering visual content to evolving 21st century audiences. *The Classification of Instructional Programs (CIP) code for Digital Video is 10.0304.*

DIGITAL VIDEO DEGREE OBJECTIVES

1. Demonstrate professional client and business interactions that are translated into completed media projects, fulfilling their needs, goals and intended delivery medium. This includes producing complete, industry standard projects against a timeline.
2. Demonstrate an understanding of specification requirements for media mediums and make pre-production and production decisions matching content tools (cameras, lenses, lighting, microphones, digital creation software, etc.) to the intended result.
3. Compose visuals that exhibit professional quality in terms of current and future camerawork, composition, effects and lighting techniques.
4. Assemble composite shots into complete works by employing industry standard and future trend editing tools and techniques.
5. Model competency in the various roles of field production, such as editing, color correction and color grading, to create media projects using industry standard post-production tools.
6. Generate high-quality mixed audio, including dialogue, sound effects and music, by recording and editing, and integrate it into complete digital film, agency, web and/or interactive media productions.

DIGITAL VIDEO DEGREE COURSES

Courses in bold text are required for a Bachelor of Arts in Digital Video. Courses with an asterisk (*) are required for an Associate of Arts in Digital Video.

FOUNDATIONAL COURSES

ART103 Digital Asset Creation
ART112 Graphic Design Principles
ART121 Beginning Drawing I
ART234 Storyboarding
DVA101* Digital Fundamentals
DVA110 Lighting and Environment Design
DVA140 Audio Fundamentals
DVA145 Introduction to 3D Studio Max and Maya
DVA150 Interpersonal Client Relationships and Communications
GAA110 Introduction to Game Art and Animation

SKILLS DEVELOPMENT COURSES

DVA215 Professional Practices
DVA220 Introduction to Production Design
DVA230 Digital Audio Production
DVA234 Special Effects and Character Makeup
DVA241 Content Production
DVA254 Motion Graphics
DVA258 Matching Tools to Media

DVA265 Innovative Camera Tools and Techniques
DVA274 Editing
DVA280 Audio Production Software I
DVA335 Cinematography
DVA353 Visual Effects Compositing
DVA380 Audio Production Software II
GAA220 3D Modeling Environments and FX
GAA230 3D Modeling Characters and Vehicles
GAA240 Game Texturing
GAA325 Materials, Shaders and Lighting
GAA330 Characters and Vehicle Animation
GAM310 Level Design

SYNTHESIS COURSES
DMD410 Media and Content Accessibility
DVA334 Special Effects and Character Makeup II
DVA365 Audio Mastering
DVA405 Virtual Sets and Production
GAA430 Advanced Character Rigging and MoCap Animation

GAME ART AND ANIMATION

Students in the Game Art and Animation program will gain an insight into what is involved at all levels of game development to create 2D and 3D art and animation assets for multiple video game platforms such as PC, consoles, mobile, online and virtual reality. Students will master the artistic principles used in video game art asset creation such as color theory, lighting, shading, anatomy, perspective, and scene staging. Students will show mastery in low polygon and high polygon modeling, texturing, rigging, framing, and motion capture animations. Students in this program will be prepared for jobs such as character artist modeler and texture artist, character artist animator and rigger, environment artist modeler and texture artist, environment artist animator, mechanical mesh modeler and texture artist, and mechanical mesh animator and rigger. *The Classification of Instructional Programs (CIP) code for Game Art and Animation is 50.0102.*

GAME ART AND ANIMATION DEGREE OBJECTIVES

1. Demonstrate and communicate aesthetic skills and choices based on traditional art theory, current game development practices and next generation research.
2. Conceptualize and generate pre-production art assets through pre-visualization and prototypes usable for multiple game platforms.
3. Demonstrate a cross-section of baseline skills needed to create 2D and 3D art, textures and animation assets utilizing industry standard software tools.
4. Demonstrate the ability to build industry-quality game assets specializing in specific 2D and/or 3D art and/or animations utilizing industry standard software tools, pipelines and platform guidelines.
5. Adapt, export, integrate, and optimize game art and animation assets (including shaders and lighting) into 2D and 3D game projects working within a production pipeline and the confines of a project's game engine, tools and other constraints.
6. Establish collaboration, mentorship and professional leadership skills by working with other disciplines to deliver highly polished and completed projects.

GAME ART AND ANIMATION DEGREE COURSES

Courses in bold text are required for a Bachelor of Arts in Game Art and Animation. Courses with an asterisk (*) are required for an Associate of Arts in Game Art and Animation.

FOUNDATIONAL COURSES
ART233 Concept Art
ART234 Storyboarding
ART236 Basic Character Figure Drawing
ART240 Figure and Character Sculpting
GAA105* Game Art and Animation Fundamentals

GAA110* **Introduction to Game Art and Animation**
GAM125 Introduction to Game Development

SKILLS DEVELOPMENT COURSES
GAA220 **3D Modeling Environments and FX**
GAA230 **3D Modeling Characters and Vehicles**
GAA240 Game Texturing
GAA320 Environmental and FX Animation
GAA325 Materials, Shaders and Lighting
GAA330 Characters and Vehicles Animation
GAA360 UI Design and Animation
VRT232 Gamification

SYNTHESIS COURSES
GAA420 Advanced Game Environment Creation
GAA430 Advanced Character Rigging and MoCap Animation
GAA440 Advanced Game Character Creation
GAM465 Game-A-Week

GAME DESIGN

Game Design students focus on the design principles, skills and techniques required to create mechanics, game documentation and functioning prototypes for innovative game projects. Students will utilize industry standard tool sets and resources, including game programming, scripting and asset creation. The coursework emphasizes design skills such as design documentation, systems design, level design, game balancing, play-testing, interactive storytelling and user experience design. Students in the Game Design program will also take a critical approach to the study of gameplay, player interaction and community dynamics, taking into account the unique features of the multiple video game platforms, including PC, consoles, mobile and virtual reality. In team-based projects, design students will work with artists and programmers to create complete projects. Working with artists and programmers in team-based projects, Game Design students apply all elements of the game creation process, developing the mentorship and leadership skills required to bring a project from initial concept to a final published product. *The Classification of Instructional Programs (CIP) code for Game Design is 50.0411.*

GAME DESIGN DEGREE OBJECTIVES

1. Prototype and complete original games for multiple platforms following the full game production pipeline.
2. Create and implement game elements, systems and play mechanics using industry standard tools, techniques, and production methods, including art or scripting/programming applications.
3. Demonstrate effective game design practices and techniques within the project scope and context, such as genre, style, platform and audience.
4. Demonstrate the ability to evaluate game designs for a variety of game play mechanics, game applications, and game genres.
5. Effectively articulate game design elements and mechanics across disciplines utilizing written and verbal communication skills.
6. Establish collaboration, mentorship, and professional leadership skills by working with other disciplines to deliver highly polished and completed projects.

GAME DESIGN DEGREE COURSES

Courses in bold text are required for a Bachelor of Arts in Game Design. Courses with an asterisk (*) are required for an Associate of Arts in Game Design.

FOUNDATIONAL COURSES
GAM101* **Introduction to Game Design**
GAM113* **Introduction to Game Tools**
GAM125 **Introduction to Game Development**
GAM170 Game Design Workshop I

SKILLS DEVELOPMENT COURSES

GAM200 Critical Game Studies
GAM218 Game Scripting for Designers
GAM235 Game AI Concepts
GAM310 Level Design
GAM395 Monetization Design and Strategies
GAM418 Deployment Strategies and Project Constraints
VRT232 Gamification

SYNTHESIS COURSES

GAM351 Writing for Interactive Games
GAM352 Game Systems Design
GAM370 Game Design Workshop II
GAM385 Casual Game Design
GAM425 Advanced Level Design
GAM465 Game-A-Week
VRT380 Serious Game Design

ASSOCIATE AND BACHELOR OF SCIENCE MAJORS

Science majors at UAT were created in response to a need for professional technology graduates in the emerging disciplines at the intersection of science and technology. Each science major requires students to explore the conceptual, scientific underpinning of their technology discipline so that, as the discipline advances, their capacity advances with it. Each major offers an opportunity to understand how technology integrates into society, adding functionality and speed to activity. Students in these majors will have the opportunity to learn and create software applications that advance their discipline. Graduates will be prepared for employment in companies of various size and complexity, from small businesses to enterprise-level corporations.

BACHELOR OF SCIENCE (BS) DEGREE REQUIREMENTS

Core Credits	24
General Education Credits (Minimum)	36
Major-Specific Credits (Minimum)	30
Elective Credits	30
Total Semester Credits (Minimum)	120
Within 120 minimum credit hours, the following requirements also apply: > Minimum Total 300/400 Level Credits	39

ASSOCIATE OF SCIENCE (AS) DEGREE REQUIREMENTS

Core Credits	6
General Education Credits (Minimum)	24
Major-Specific Credits (Minimum)	15
Elective Credits	15
Total Semester Credits (Minimum)	60

GRADUATION REQUIREMENTS

1. Successful completion of an approved program of study.
2. Successful completion of the minimum credits required by UAT's accrediting body for the desired degree.
3. Submittal of a completed and approved Application for Degree with the Office of the Registrar.
4. Meet minimum Satisfactory Academic Progress Standards at the completion of their program of study.
5. Meet minimum cumulative GPA of at least 2.0.
6. Successful completion of a major related internship (on-campus candidates only).
7. Completion of Student Innovation Project (SIP) and Boards requirement. SIP and Boards requirements include the submission and review of both digital and physical artifacts to demonstrate the student's capabilities within the discipline being studied (Bachelor's degree candidates only). For the dual degree, boards are required for each degree; additional Student Innovation Projects are not required.

Upon successfully completing the above requirements and meeting all University graduation requirements put forth in the graduation policy, a Bachelor or Associate of Science degree will be awarded.

ADVANCING COMPUTER SCIENCE

The craft of programming transcends individual programming languages and emphasizes design across multiple scales, from individual programs to complex multi-platform software architectures, including mobile platforms, multiple frameworks and multiple design patterns. The Advancing Computer Science (ACS) program balances the science of computing and the art of design with the application of these principles to real-world problems. Graduates of the ACS major will be prepared for software development positions where an understanding of algorithms and complex software design is important, in addition to being well-versed in mobile, frameworks and multiple programming languages and environments. *The Classification of Instructional Programs (CIP) code for Advancing Computer Science is 11.0701.*

ADVANCING COMPUTER SCIENCE DEGREE OBJECTIVES

1. Follow a software development process to analyze a problem and to design, build and test software solutions.
2. Demonstrate software development skills using more than one programming language and development environment.
3. Implement data-driven solutions.
4. Design and implement software solutions for mobile devices, embedded systems and/or multiple platforms.
5. Document the planning and development of software applications using industry standard tools, techniques and processes.
6. Within software solutions describe, implement and analyze data structure techniques such as lists, trees, hash tables and graphs, along with sorting and searching algorithms.

ADVANCING COMPUTER SCIENCE DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Advancing Computer Science. Courses with an asterisk (*) are required for an Associate of Science in Advancing Computer Science.

F O U N D A T I O N A L C O U R S E S

CSC102* **Introduction to Programming**
CSC150 Introduction to AI and Analytics
Choose from the following:
CSC202* **C# Programming I**
or
CSC203* **Java Programming I**
or
CSC215* **C/C++ Programming I**
or
CSC235* **Python Programming I**

S K I L L S D E V E L O P M E N T C O U R S E S

CSC211 Introduction to Databases
CSC230 Internet of Things
CSC240 Linux Operating System
CSC256 Designing Website Interfaces I
Choose from the following:
CSC262 **C# Programming II**
or
CSC263 **Java Programming II**
or
CSC275 **C++ Programming II**
or
CSC285 **Python Programming II**
CSC311 Advanced Databases
CSC312 Cloud Computing
CSC318 Software Engineering Principles
CSC338 Statistical Data Science
CSC340 Big Data Essentials
CSC342 React Native I
CSC352 React Native II
CSC372 E.L.K. – Elastic, Logstash, Kibana

CSC373 Machine Learning
CSC382 Data Structures and Algorithms
RBT211 Embedded Programming

SYNTHESIS COURSES
CSC313 Operating Systems Theory
CSC345 High Performance Embedded Systems
CSC370 Artificial Intelligence
CSC413 Advanced Software Development I
CSC436 Data Analytics
CSC442 Secure Coding
CSC444 Deep Learning
CSC448 Artificial Intelligence Simulations in Unity
CSC484 Data Mining
RBT431 Autonomous Aerial Vehicles

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) explores the theory and development of tools that simulate thinking, patterning and advanced decision behaviors through software running on computing devices. AI applications can solve and navigate complex scenarios that require drawing inferences appropriate to situations, performing decision-making using complex and changing data, discovering meaning and generalizing conclusions based upon learned events and from experience. AI approaches within software form the underpinnings of autonomous devices, such as self-driving vehicles and drones. Technologies such as big data analysis, voice recognition, simulation agents and IoT devices all require AI algorithms. Studies in UAT's Artificial Intelligence degree program cover the fundamentals of general and applied AI, including core programming languages and platforms used in computer science. Advanced coursework encompasses applying principles of natural language processing, machine learning, behavior simulation and deep learning based upon big data sets. Students prepare for future-oriented AI uses by applying computer science approaches and AI concepts as they develop solutions to real-world projects within production studio settings. *The Classification of Instructional Programs (CIP) code for Artificial Intelligence is 11.0102.*

ARTIFICIAL INTELLIGENCE DEGREE OBJECTIVES

1. Create, analyze and integrate artificial intelligence applications and IoT systems.
2. Demonstrate proficiency in the design and development of natural language processing systems.
3. Demonstrate the skills required to designing and create machine learning systems using best practices and patterns.
4. Demonstrate new and original data in deep learning by consuming big data with original algorithms.
5. Demonstrate software development skills using more than one programming language, development environment, platform, and source control system.
6. Describe, develop, analyze and integrate data structures, databases, and database management systems.

ARTIFICIAL INTELLIGENCE DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Artificial Intelligence. Courses with an asterisk (*) are required for an Associate of Science in Artificial Intelligence.

FOUNDATIONAL COURSES
CSC102* Introduction to Programming
CSC150 Introduction to AI and Analytics
Choose from the following:
CSC202* C# Programming I
or
CSC203* Java Programming I
or
CSC215* C/C++ Programming I
or
CSC235 Python Programming I

SKILLS DEVELOPMENT COURSES
CSC211 Introduction to Databases

CSC230 Internet of Things
CSC240 Linux Operating System
CSC262 C# Programming II
CSC263 Java Programming II
CSC275 C++ Programming II
CSC285 Python Programming II
CSC318 Software Engineering Principles
CSC338 Statistical Data Science
CSC342 React Native I
CSC352 React Native II
CSC373 Machine Learning
CSC382 Data Structures and Algorithms

SYNTHESIS COURSES
CSC370 Artificial Intelligence
CSC444 Deep Learning
CSC484 Data Mining

BUSINESS TECHNOLOGY

This leadership major is designed to prepare students for careers in today's technology-centric business world. Students learn a contemporary combination of business skills such as: data analysis, lean startup, Agile project management, startup financing and go-to market strategy. Upon graduation, students are empowered to lead in high-tech environments with a technology-minded workforce or even launch their own technology startup. *The Classification of Instructional Programs (CIP) code for Business Technology is 52.1206.*

BUSINESS TECHNOLOGY DEGREE OBJECTIVES

1. Demonstrate the ability to create and document technology strategies and product development plans.
2. Demonstrate the ability to assemble the resources and infrastructure needed to successfully take technologies to market.
3. Demonstrate the capacity to apply lean and Agile approaches in the development of an organizational mission, strategy and technology product.
4. Demonstrate baseline knowledge of business operational elements (finance, legal, operations, resources, marketing, market analysis, manufacturing and supply infrastructure).
5. Demonstrate competency in leading technology teams.
6. Generate and visualize data for decision-making analytics that measure and communicate organizational performance.

BUSINESS TECHNOLOGY DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Business Technology. Courses with an asterisk (*) are required for an Associate of Science in Business Technology.

FOUNDATIONAL COURSES
BUS102 Management in a Technology Environment
BUS220* Project Management
MKT100 Art of Sales
MKT120 Survey of Business and Marketing for Industry
MKT220 Brand Management Strategies

SKILLS DEVELOPMENT COURSES
BUS230 Organizational Development
BUS320 Financial Management in a Technology Environment
BUS330 Leading Technologists and Technology Teams
BUS415 Strategic Planning and Analytics
MKT250 Marketing Environments
TCH200 Product Development

SYNTHESIS COURSES
BUS300 Strategic Accounting

BUS420 Data Visualization and Mining
BUS440 Business Intelligence and Data Management
BUS450 ROI Based Decision Making and Negotiations
BUS455 Big Data Analytics
MKT320 New Media Communications and Marketing
MKT330 SEO and Applied Online Marketing
NTW428 The Business of Technology

TECHNOLOGY COURSES, ADDITIONAL REQUIREMENT
Students within the Business Technology major will complete a minimum of 15 credits of coursework drawn from the Foundational, Skills Development or Synthesis areas of a different technology major.

DATA SCIENCE

Cities, natural and social environments, organizations and humans generate digital footprints in the form of large real-time data. Going forward into the future, it will be the norm to capture, analyze and present this information in ways that solve complex problems and increase understanding of our environment. Human behavioral patterns, IoT, weather, nature, connected city infrastructures, biological, health and organizational operations are typical of systems generating data now and into the future. Organizations and individuals will rely on analysts capable of providing data science solutions to inform decisions about what to do next in order to be successful in the face of complexity and uncertainty. Students in UAT's Data Science degree program will learn to integrate world data, sometimes with the benefit of artificial intelligence and statistical analysis, into analytics, dashboards and software applications. Data Science students will use tools such as Python, ELK and artificial intelligence with embedded systems, and IoT, cloud edge architecture and data lakes with statistical methods, to interact with data and visualize it in ways that create new understandings and value. *The Classification of Instructional Programs (CIP) code for Data Science is 30.7001.*

DATA SCIENCE DEGREE OBJECTIVES

1. Assess, structure, manage and implement large data sets derived from real-time sources.
2. Compile data from multiple sources, including data selection, data scrubbing and feature engineering, with an emphasis on tidy data and the tidyverse.
3. Apply statistical tests and tools appropriately to analyze data sets drawn from different types of sources (nature, humankind, organizations, etc.), making inferences and projections from the data.
4. Create visualizations of large data sets in ways that clarify understanding of their meaning and implications.
5. Design and implement big data, artificial intelligence and statistical and visual analysis solutions that provide people and organizations with understanding, guidance and options drawn from the data.
6. Demonstrate best practices regarding digital privacy and the ethical use of personal information.

DATA SCIENCE DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Data Science. Courses with an asterisk (*) are required for an Associate of Science in Data Science.

F O U N D A T I O N A L C O U R S E S
CSC102 Introduction to Programming
CSC115* Data Science Now
CSC150 Introduction to AI and Analytics
CSC175 Data Collection, Verification, Transformation and Analysis
CSC202 C# Programming I
CSC203 Java Programming I
CSC215 C/C++ Programming I
CSC235 Python Programming I

S K I L L S D E V E L O P M E N T C O U R S E S
CSC211 Introduction to Databases
CSC230 Internet of Things
CSC262 C# Programming II
CSC263 Java Programming II
CSC275 C++ Programming II
CSC285 Python Programming II

CSC312 Cloud Computing
CSC318 Software Engineering Principles
CSC338 Statistical Data Science
CSC340 Big Data Essentials
CSC372 E.L.K. – Elastic, Logstash, Kibana
CSC377 Machine Learning Utilizing Data Science
CSC382 Data Structures and Algorithms

SYNTHESIS COURSES
CSC370 Artificial Intelligence
CSC409 Statistical Models
CSC436 Data Analytics
CSC449 Time Series
CSC462 Data Visualization
CSC482 Data Visualization Utilizing Data Science
CSC484 Data Mining
CSC488 Deep Learning Utilizing Data Science

DIGITAL MAKER AND FABRICATION

Startup organizations, inventors and innovators rely on Agile approaches to prototype, evaluate and bring creations to market by way of digital fabrication tools. The Digital Maker and Fabrication (DMF) degree prepares graduates to design and build new technology devices by combining design theory, programming, materials, human factors and prototyping with 3D printing and other maker technologies. Students in this program will practice taking design concepts and then modeling, designing and building these objects using 3D design software and rapid prototyping tools. DMF students will learn to inform their designs based on choosing the best materials for each design element. Students will learn how to program the embedded systems driving their devices, using tools such as C++ and Arduino, in ways that support creating smart and internet-enabled devices. Students will learn fundamental tools found in makerspaces that allow for rapid prototyping. These include 3D printers, laser cutters, CNC fabric cutters and rapid forming tools. Framing their design and engineering prototype knowledge, DMF students are exposed to how rapid development works within Agile and MVP iterative development cycles. *The Classification of Instructional Programs (CIP) code for Digital Maker and Fabrication is 50.0402.*

DIGITAL MAKER AND FABRICATION DEGREE OBJECTIVES

1. Using digital and physical tools, engineer and build prototypes that technology patents are then applied for.
2. Build physical products while demonstrating technique and safety competency across commonly accepted prototyping devices and maker tools and techniques.
3. Produce products that balance form and function while reflecting current and future trends in design and human factors.
4. Demonstrate the ability to evaluate material and build technique options during the creation of products and their prototypes.
5. Demonstrate the ability to effectively implement embedded systems and fundamental electronics into product builds.
6. Place prototype and builds within the Agile and MVP development frameworks.

DIGITAL MAKER AND FABRICATION DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Digital Maker and Fabrication. Courses with an asterisk (*) are required for an Associate of Science in Digital Maker and Fabrication.

FOUNDATIONAL COURSES
ART112 Graphic Design Principles
ART121 Beginning Drawing 1
ART233 Concept Art
CSC102 Introduction to Programming
CSC215 C/C++ Programming I
DBM100* 3D Build Tools
DBM150 Introduction to Maker Studio
RBT131 Digital Logic Basic Processor Design
RBT205 Mechanisms and Materials

TCH100 Introduction to Design

SKILLS DEVELOPMENT COURSES
DBM215 Prototyping Tools and Practice
DBM240 Electromechanical Devices
DBM360 Wearable Technologies
DMD220 Principles of Interface Design
RBT173 Introduction to Microcontrollers
RBT211 Embedded Programming
TCH200 Product Development
TCH270 The Design Process

SYNTHESIS COURSES
RBT307 Physical Computing Studio
TCH410 Advanced Topics in Technology Product Design

DIGITAL MARKETING

Marketing has evolved into a world of digital assets and outreach to pinpoint the customers of today. Consumers and businesses spend much of their time online, so the need for developing digital marketing is essential in the business world. The Digital Marketing degree prepares graduates to utilize current marketing trends such as social media, search engine marketing, content creation and targeted digital strategies so they will be relevant in the marketing industry. Graduates will be prepared to enter positions related to and connected with digital marketing, online advertising and social media which are common needs of every organization. *The Classification of Instructional Programs (CIP) code for Digital Marketing is 52.1404.*

DIGITAL MARKETING DEGREE OBJECTIVES

1. Understand inbound marketing and SEO strategies based on evolving trends in the market.
2. Create content that fosters the growth and engagement of a target audience.
3. Design and implement digital marketing strategies that follow branding guidelines.
4. Identify basic key performance indicators (KPIs) through analytics for conversion optimization.
5. Cultivate leadership qualities through the development and management of marketing campaigns.
6. Develop the ability to work with standard and emerging platforms used in the digital advertising industry.

DIGITAL MARKETING DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Digital Marketing. Courses with an asterisk (*) are required for an Associate of Science in Digital Marketing.

FOUNDATIONAL COURSES
ART103* Digital Asset Creation
ART112 Graphic Design Principles
CSC104 Beginning Website Interfaces
DMD150* Digital Tools for Media and Design
MKT120 Survey of Business and Marketing for Industry
MKT220 Brand Management Strategies

SKILLS DEVELOPMENT COURSES
ART255 Visual Communications/Graphics Design
CSC256 Designing Website Interfaces I
DMD230 Personal Branding
DMD235 Marketing for Digital Media
MKT250 Marketing Environments

SYNTHESIS COURSES
BUS420 Data Visualization and Mining
BUS450 ROI Based Decision Making and Negotiation
CSC356 Designing Website Interfaces II
CSC456 Best Practices in Web Production

MKT320 New Media Communication and Marketing
MKT330 SEO and Applied Online Marketing
MKT345 International Web Development and Marketing
MKT415 Advanced Advertising Strategies and Creations
MKT430 Professional Ad Creation for Industry

GAME PROGRAMMING

Courses in Game Programming will emphasize the essential issues and the skills required to develop games for multiple video game platforms such as PC, console, mobile, online and virtual reality. These skills have broader applications in related industries such as entertainment, business, research and training. Game Programming students begin with the programming principles, skills and techniques shared in all programming disciplines, and then focus on game-specific features and techniques. This program emphasizes C++ programming, C# programming, scripting, data handling, gameplay interaction, artificial intelligence, networking and the use of industry standard middleware, game engines, and APIs. Students in the Game Programming major will also develop a critical approach to the study of gameplay, interaction and design. *The Classification of Instructional Programs (CIP) code for Game Programming is 11.0204.*

GAME PROGRAMMING DEGREE OBJECTIVES

1. Implement multiple completed games, including 3D games, using common tools, languages and software for web, console, PC or mobile platforms.
2. Design, develop and implement the architecture and infrastructure needed to support a complete game project.
3. Implement and analyze fundamental data structures and algorithms associated with game applications supporting gameplay mechanics.
4. Use software development processes to analyze a project problem and to design, build and test a corresponding software solution.
5. Demonstrate development skills using multiple programming languages, development environments and platforms, including advanced and/or experimental topics in game programming.
6. Establish collaboration, mentorship and professional leadership skills by working with other disciplines to deliver highly polished and completed projects.

GAME PROGRAMMING DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Game Programming. Courses with an asterisk (*) are required for an Associate of Science in Game Programming.

FOUNDATIONAL COURSES

CSC102* **Introduction to Programming**
GAM125 Introduction to Game Development
Choose from the following:
CSC202 **C# Programming I**
or
CSC203 **Java Programming I**
or
CSC215 C/C++ Programming I

SKILLS DEVELOPMENT COURSES

CSC275 C++ Programming II
CSC382 Data Structures and Algorithms
GPE104* **Introduction to Game Programming**
GPE205 Gameplay Programming Concepts
GPE230 Gameplay Programming Implementation
GPE275 Mobile Game Programming
GPE303 Applied Game AI Concepts
GPE310 Visual Programming for Games
VRT232 Gamification

SYNTHESIS COURSES

GAM465 Game-A-Week

GPE338 Advanced Gameplay Programming
GPE340 Programming for Game Engines
GPE341 Game Tools Development
GPE410 Programming Action Games
GPE425 Programming Strategy Games
GPE440 Programming Roleplaying Games

HUMAN COMPUTER INTERACTION

Humans spend their days interacting with devices that surround and connect us to information, the world and each other. Computers, wearables, smartphones and other connected IoT tools have become so useful to us that the time spent using them and the ways we interact with them increase and diversify each year. This trend will continue well into the future as our connected devices help humans extend our abilities, navigate our days, increase productivity, solve challenges and bolster creativity. Enhancing experiences and abilities through well-designed software interfaces and interactions embedded in the screens, haptics and audio of our technologies is the framework for UAT's Human Computer Interaction (HCI) degree. HCI students study elements of design and human factors that are applied to the creation of device interfaces, interactions and responses that exist and work together. Knowing the unique purpose and strengths of laptops, desktops, mobile and wearable technology platforms will equip students to build interfaces and responses that fit the way humans use these different tools. Device-fit in design is strengthened as students in the HCI program learn about the types of people, professions and applications linked to technology devices and the preferences and expectations of each. While applying prototyping and build skills, students will practice creating interfaces and interactions between humans and technology, designing for target audiences in situations that feel natural and extend our abilities when interacting with a variety of applications. *The Classification of Instructional Programs (CIP) code for Human Computer Interaction is 30.3101.*

HUMAN COMPUTER INTERACTION DEGREE OBJECTIVES

1. Demonstrate effective interfaces and interactions that are appropriate and match user expectations for a variety of application categories (game, professional, consumer, etc.).
2. Implement effective interfaces and interactions across a variety of devices including IoT, mobile, computers and/or wearables.
3. Demonstrate and verify effective visual design concepts and practices within human computer interactions.
4. Analyze, design and apply human factors in the creation of human computer interactions and experiences.
5. Implement and verify sound design and audio cues to create effective user experiences.
6. Implement haptic and tactile cues to create effective user experiences.

HUMAN COMPUTER INTERACTION DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Human Computer Interaction. Courses with an asterisk (*) are required for an Associate of Science in Human Computer Interaction.

F O U N D A T I O N A L C O U R S E S

ART103 Digital Asset Creation
ART112 Graphic Design Principles
ART121 Beginning Drawing I
ART231 Intermediate Drawing
ART234 Storyboarding
ART236 Basic Character Figure Drawing
CSC102* Introduction to Programming
CSC104 Beginning Website Interfaces
CSC202 C# Programming I
CSC203 Java Programming I
DMD220 Principals of Interface Design
HCI101* Introduction to Human Computer Interaction
HCI102 Human Factors
HCI215 Designing Human Computer Interfaces

S K I L L S D E V E L O P M E N T C O U R S E S

ART255 Visual Communications/Graphic Design
CSC211 Introduction to Databases

CSC230 Internet of Things
CSC256 Designing Website Interfaces I
HCI250 User Experience Design and Testing
HCI320 Gender and Technologies

SYNTHESIS COURSES
CSC356 Designing Website Interfaces II
CSC456 Best Practices in Web Production
DBM360 Wearable Technologies
HCI335 Designing Software Interactions
HCI350 Designing Device Interactions
HCI470 Emerging Interface Technologies

NETWORK ENGINEERING

Today's increasingly connected digital world has created an internet and data-dependent society. Highly skilled network engineers are responsible for the design, implementation and maintenance of our networked systems. A strong foundational knowledge of network and systems engineering concepts forms the basis on which the advanced topics are built. Key concepts such as routing, switching, server operating systems, email systems, IP telephony, security concepts, wireless and virtualization are explored in detail. Contemporary topics such as IT mobilization, virtualization, cloud computing and data center design are some of the new and exciting degree focus areas. Graduates demonstrate mastery of secure network architecture and are fluent in multi-platform systems administration. This degree prepares students with the skills required to become successful network engineers, systems engineers and network systems administrators. *The Classification of Instructional Programs (CIP) code for Network Engineering is 15.1204.*

NETWORK ENGINEERING DEGREE OBJECTIVES

1. Analyze the business needs of the organization while applying appropriate tools and frameworks to create solutions.
2. Develop cloud infrastructure using appropriate orchestration tools that focuses on emphasizing the best benefits of remote infrastructure.
3. Integrate software development frameworks designed to exploit the horizontal scaling of cloud computing.
4. Develop communication skills that facilitate the understanding of complex technology-related topics by laymen as well as being able to provide technical writing when appropriate.
5. Design communications environments that incorporate all facets of enterprise needs to include traditional networking but also account for needs and security within IoT, mobile devices, and integration of non-enterprise owned devices.
6. Develop all solutions with a security-first attitude while using best practices such as test-driven development.

NETWORK ENGINEERING DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Network Engineering. Courses with an asterisk (*) are required for an Associate of Science in Network Engineering.

FOUNDATIONAL COURSES
NTS103 Identity Protection and Personal Security
NTS201 Security Essentials
NTS305 Information Governance
NTS336 Cloud Security
NTW102 Foundations of Network Engineering I
NTW103* Foundations of Network Engineering II
NTW216 Systems Administration I
NTW220 Linux I for Technologists
NTW233 IoT Architecture and Security
NTW275* Network Infrastructure Design I
NTW385 Managing Enterprise Networks

SKILLS DEVELOPMENT COURSES
CSC312 Cloud Computing
NTS330 Applied Exploits
NTS370 Shell Scripting for Technologists
NTW245 Applied Mobile Computing and Cloud Collaboration Technologies

NTW342 Unix/Linux Systems Administration

SYNTHESIS COURSES
NTS405 Incident Response
NTS415 Network Defense and Countermeasures
NTS435 International and Federal INFOSEC Standards and Regulations
NTW325 Network Engineering Certification Preparation
NTW428 The Business of Technology
NTW440 Business Continuity/Disaster Recovery
NTW455 Modern Data Center and Cloud Computing Design and Services

NETWORK SECURITY

Network security utilizes proactive techniques, including defense-in-depth and layered security, to mitigate or eliminate vulnerabilities in information systems and to protect against potential exploitation. This may include network and application penetration testing, software and hardware reverse engineering as well as developing exploits for identified vulnerabilities. A network security specialist is a professional who focuses on ensuring information confidentiality, integrity and availability. Security professionals possess intimate knowledge of critical business components. The Network Security degree reflects the application of theory and is aligned with industry standards and guidelines. The program provides students with the opportunity to synthesize and apply the vital skills and knowledge necessary to succeed in the cyber security workforce. *The Classification of Instructional Programs (CIP) code for Network Security is 29.0207.*

NETWORK SECURITY DEGREE OBJECTIVES

1. Create a network infrastructure design communications document that includes identified hardware components, connections to the outside world, identified physical layer connectivity (media) and addressing, including operational and security components in the design.
2. Install, configure and test security hardware and software tools with supporting documentation such as port scanners, vulnerability detection systems, intrusion detection systems, firewalls, system hardening, anti-virus tools, patch management, auditing and assessment.
3. Construct, implement and document a script or a program to automate a security-related process or other tasks such as installation, administration, management, mapping resources, logon scripts, patch management, updates, auditing, analysis and assessment.
4. Create a policy or procedure that addresses events such as: a disaster recovery plan, a business continuity plan, an incident response policy, an acceptable usage document, an information security policy, a physical security policy, assessments or troubleshooting procedures.
5. Develop a research report or implementation plan concerning legal and ethical best practices and mandated requirements that pertain to information security.
6. Research, document, test and evaluate several current industry information security based threats, risks, malicious activities, covert methodology, encryption technologies, mitigation techniques or unconventional tactics to prevent loss of sensitive information and data confidentiality, integrity and availability.

NETWORK SECURITY DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Network Security. Courses with an asterisk (*) are required for an Associate of Science in Network Security. Courses with an obelisk (†) are required for the Certification of Completion of the National Centers of Academic Excellence in Cybersecurity Program.

FOUNDATIONAL COURSES
CFR101† Computer Forensics Essentials
NTS103 Identity Protection and Personal Security
NTS201*† Security Essentials
NTS305 Information Governance
NTS310 Social Engineering
NTS336 Cloud Security
NTW102 Foundations of Network Engineering I
NTW103* Foundations of Network Engineering II
NTW216† Systems Administration I
NTW220 Linux I for Technologists

SKILLS DEVELOPMENT COURSES

NTS330† Applied Exploits
NTS350 Network Security Monitoring
NTS370† Shell Scripting for Technologists
NTS442 Collegiate Cyber Defense Competition
NTW245 Applied Mobile Computing and Cloud Collaboration Technologies
NTW280 Virtualization System Technologies and Administration

SYNTHESIS COURSES

NTS405 Incident Response
NTS415 Network Defense and Countermeasures
NTS435† International and Federal INFOSEC Standards and Regulations
NTS465 Security Evaluation and Assessment Methodology
NTW440 Business Continuity/Disaster Recovery

NSA CYBER DEFENSE PROGRAM OF STUDY

The University of Advancing Technology is a designated Center of Academic Excellence - Cyber Defense (CAE-CD) institution through the National Centers of Academic Excellence in Cybersecurity (NCAE-C). Sponsored by the National Security Agency (NSA), NCAE-C operates under national authority as the national manager for cyber defense education and training relating to national security systems. Its programs assure the very finest preparation of professionals entrusted with securing our critical information. The following are the courses students must take if they decide to pursue this program of study:

CFR101 Computer Forensics Essentials
NTS201 Security Essentials
NTS330 Applied Exploits
NTS370 Shell Scripting for Technologists
NTS435 International and Federal INFOSEC Standards and Regulations
NTW216 System Administration I

ROBOTICS AND EMBEDDED SYSTEMS

Robots and connected embedded digital systems provide smart solutions that extend human capabilities. Powered by artificial intelligence and data generated in real-time by nature, people and the systems that exist within robots and drones, the degrees of autonomy surrounding us increase as they perform valued tasks. University of Advancing Technology's Robotics and Embedded Systems (RES) degree provides students with the foundation for the design, implementation and analysis of embedded systems that make robots, drones and other platforms viable tools. A degree in RES incorporates mechanical design, digital logic design, embedded programming, machine vision, sensing, big data and artificial intelligence into the development and design of robotic systems that solve useful problems. *The Classification of Instructional Programs (CIP) code for Robotics and Embedded Systems is 15.0405.*

ROBOTICS AND EMBEDDED SYSTEMS DEGREE OBJECTIVES

1. Design and complete robotic and embedded systems solutions that address to real-world situations and challenges.
2. Demonstrate embedded microprocessor system skills such as microcontroller selection, digital logic design, schematic creation, printed circuit board layout and construction, electromagnetic compatibility design and manufacturing design.
3. Develop vision and sensing systems for use in robotic applications.
4. Integrate transducers, actuators, feedback and other mechanical systems into robotic platforms.
5. Apply examples of human and autonomous control systems into robotic platforms.
6. Implement artificial intelligence and data systems into robotic platforms.

ROBOTICS AND EMBEDDED SYSTEMS DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Robotics and Embedded Systems. Courses with an asterisk (*) are required for an Associate of Science in Robotics and Embedded Systems.

FOUNDATIONAL COURSES

CSC102 Introduction to Programming
CSC215 C/C++ Programming I

DBM100 3D Build Tools
RBT125* Introduction to Robotics
RBT131 Digital Logic Basic Processor Design
RBT205 Mechanisms and Materials

SKILLS DEVELOPMENT COURSES
CSC211 Introduction to Databases
CSC230 Internet of Things
CSC275 C++ Programming II
CSC340 Big Data Essentials
CSC373 Machine Learning
CSC382 Data Structures and Algorithms
RBT173 Introduction to Microcontrollers
RBT211 Embedded Programming
RBT220 Introduction to Mechanical Concepts

SYNTHESIS COURSES
CSC370 Artificial Intelligence
CSC444 Deep Learning
RBT310 ARM Embedded Programming
RBT337 Digital Vision and Sensor Processing
RBT347 Robot Navigation
RBT353 Robotics Competition
RBT431 Autonomous Aerial Vehicles
RBT441 Autonomous Ground Vehicles
RBT479 Mechatronics

TECHNOLOGY FORENSICS

A technology forensics specialist is an information technology professional who supports the military, corporate, law enforcement and legal communities in the investigation and analysis of digital data. Students in the Technology Forensics degree program will learn methods to obtain and document digital information, determine how information was compromised, trace attribution of malicious code and reverse engineer data to develop mitigations and countermeasures. This program will prepare students to anticipate new and emerging technologies so they can be successful within the rapidly evolving digital forensics environment and the increasingly complete threat landscape. Graduates from the Technology Forensics major will have both the technical skills for recovering evidence and the presentation skills to provide both detailed technical and summary data to interested parties. Above all, this program will focus on learning the highly technical and cutting-edge technologies affecting IT systems today and tomorrow. *The Classification of Instructional Programs (CIP) code for Technology Forensics is 11.1003.*

TECHNOLOGY FORENSICS DEGREE OBJECTIVES

1. Articulate the complexities of network and application infrastructure and apply critical thinking skills to how they affect technology forensics investigations and incident response procedures.
2. Identify and apply in a forensics context the various topologies, standards, technologies and protocols employed in computer systems, including file system formats and their attributes.
3. Evaluate, select and deploy computer forensic measures for the response, mitigation and analysis of a security incident pertaining to digital artifacts and how information was compromised.
4. Analyze and evaluate the current investigative and legal aspects of information and computer forensics including electronic discovery, depositions, litigation and corporate personnel processes.
5. Evaluate and execute the strategies, methodologies, techniques and state-of-the-art forensics tools for the preservation of digital evidence on computer systems, network systems and other electronic devices.
6. Create tracking processes to follow the trail of electronic evidence through digital systems, including documentation, formal reporting and presentation.

TECHNOLOGY FORENSICS DEGREE COURSES

Courses in bold text are required for a Bachelor of Science in Technology Forensics. Courses with an asterisk (*) are required

for an Associate of Science in Technology Forensics.

F O U N D A T I O N A L C O U R S E S

CFR101* **Computer Forensics Essentials**
CFR105 File Systems and Structures
NTS103 Identity Protection and Personal Security
NTS201 **Security Essentials**
NTS305 Information Governance
NTS336 Cloud Security
NTW102 Foundations of Network Engineering I
NTW103* **Foundations of Network Engineering II**
NTW216 Systems Administration I
NTW220 Linux I for Technologists

S K I L L S D E V E L O P M E N T C O U R S E S

CFR225 Operating System Forensics
CFR227 Malware Detection and Analysis
CFR230 Investigative Techniques
CFR235 Mobile Device Forensics
CFR315 Video Forensics
NTS330 Applied Exploits
NTS350 Network Security Monitoring
NTS370 Shell Scripting for Technologists

S Y N T H E S I S C O U R S E S

CFR410 Network Forensics
CFR420 Advanced Forensics
CFR470 Corporate and Business Issues in Digital Forensics
NTS405 Incident Response
NTS415 Network Defense and Countermeasures
NTS435 International and Federal INFOSEC Standards and Regulations

TECHNOLOGY STUDIES

UAT's Technology Studies major provides students with an opportunity to explore and combine technologies in an interdisciplinary way. Using the University core and general education courses as a foundation, students draw from the entire range of technology areas taught at UAT to build a program of study that places technology in the context of entrepreneurship, management and innovation. Students in this program will find new applications for technology as they combine areas such as Cyber Security, Game Studies, Advancing Computer Science, Robotics and Business Technology in their Foundational, Skills Development and Synthesis coursework. Many paths are possible through this degree resulting in graduates with a broad perspective of how technologies can be combined. In turn, the Technology Studies program is a foundation for a wide variety of careers, including entry into design and build roles, management, technology entrepreneurship and startup ventures. *The Classification of Instructional Programs (CIP) code for Technology Studies is 52.0216.*

TECHNOLOGY STUDIES DEGREE OBJECTIVES

1. Analyze and act on the creative and entrepreneurial processes of technological innovation.
2. Forecast and act upon the potential impacts of nascent and emerging technologies in ways that benefit organizations, governments and individuals.
3. Meet four approved objectives from another UAT undergraduate degree program.

TECHNOLOGY STUDIES DEGREE COURSES

Students are given the opportunity to explore courses from various programs to view technology from different perspectives. As an interdisciplinary program, it is recommended that students consult with Student Services to build a program of study conducive to their technology interests.

Students within the Technology Studies major will complete a minimum of 6 credits of production studio coursework drawn from areas of a different technology major.

VIRTUAL REALITY

Technologies and applications that create connected and immersive digital experiences have become viable tools to bridge gaps in location and imagination. The ability to create and deliver interactive simulations that add information to how we perceive the real world and immerse us in simulated ones creates innovative opportunities to increase understanding, take part in experiences and solve problems. This program moves students to consider high-opportunity applications of virtual reality (VR) and augmented reality (AR) emerging in the technology landscape. Students are taught the development tools used to create VR and AR experiences and the gamification techniques that make these experiences engaging when applied to applications such as smart cities, training, medical, engineering, military and education. Virtual Reality degree students will learn to utilize head-mounted displays as well as tactile and tracking systems that deliver immersive experiences. In relation to AR, students will learn to layer and link digital information to live views of the real world. Equipped with these skills, graduates of UAT's Virtual Reality program are prepared to apply established techniques of software development, gamification, human interaction and user experience as experts in the emerging technology fields of VR and AR. *The Classification of Instructional Programs (CIP) code for Virtual Reality is 11.0804.*

VIRTUAL REALITY DEGREE OBJECTIVES

1. Prototype and complete original virtual/augmented reality applications for multiple platforms utilizing a full project development lifecycle from concept to completion.
2. Create and implement immersive user experiences that utilize the interactive approaches unique to virtual/augmented reality hardware and platforms.
3. Design and develop simulations that leverage gamification of virtual/augmented reality platforms to enhance the outcomes of non-entertainment applications such as training, medical, therapeutic, military or learning-based environments.
4. Create the designs, assets, scripting and programming needed to effectively realize fully interactive and engaging virtual reality worlds.
5. Create, implement, evaluate and analyze systems and mechanics that demonstrate visualizations of data relating to real-world entities, events and interactions using written and verbal communication skills.
6. Establish collaboration, mentorship and professional leadership skills by working with other disciplines to deliver highly polished and completed projects in the virtual/augmented reality space.

VIRTUAL REALITY DEGREE COURSES

Courses in bold text are required for a Bachelor of Arts in Virtual Reality. Courses with an asterisk (*) are required for an Associate of Arts in Virtual Reality.

FOUNDATIONAL COURSES

ART103 Digital Asset Creation
GAM101* Introduction to Game Design
GAM113 Introduction to Game Tools
GAM125 Introduction to Game Development
HCI101 Introduction to Human-Computer Interaction
VRT101* Introduction to Virtual and Augmented Reality
VRT215 Serious Applications of VR and AR

SKILLS DEVELOPMENT COURSES

GAM200 Critical Game Studies
GAM218 Game Scripting for Designers
GAM310 Level Design
VRT210 Virtual and Augmented Reality Hardware
VRT232 Gamification
VRT260 Instructional Design
VRT310 Virtual Environments
VRT320 VR/AR User Experience Design
VRT330 Augmented Reality Development

SYNTHESIS COURSES

GAM352 Game Systems Design
VRT380 Serious Game Design

VRT420 Telepresence
VRT456 AR Applications and Ethics
VRT481 Virtual Reality World Build

GRADUATE DEGREE PROGRAMS

MASTER OF SCIENCE MAJORS

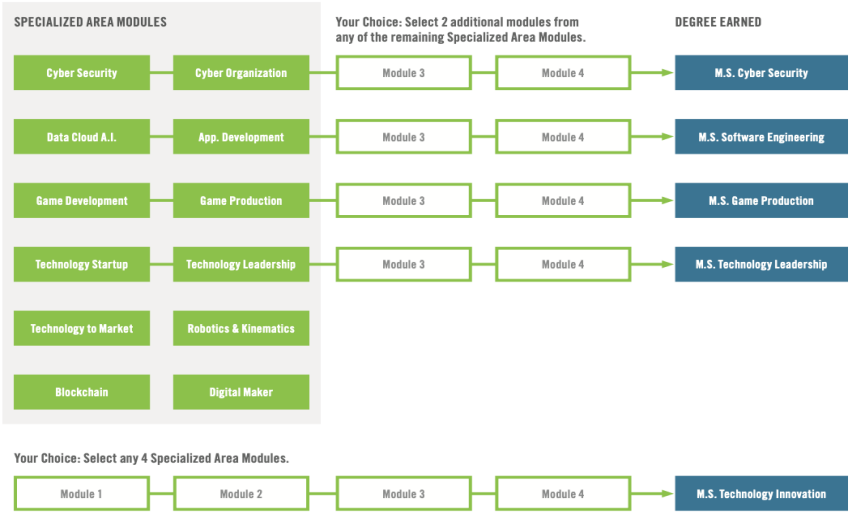
The University provides within its graduate program an intellectual atmosphere in which a wide range of multidisciplinary technology, inquiry and innovative creations can thrive. The program is designed to allow postbaccalaureate students to rapidly acquire technology skills in applied advancing technology disciplines. Students can enter the program without undergraduate and/or professional experience within the discipline being studied.

Within their disciplines, students gain knowledge in a specialty area: Cyber Security, Game Production and Management, Software Engineering, Technology Innovation or Technology Leadership. The graduate degree program is comprised of four, nine-credit modules. In addition to two degree-specific modules, graduate students select two additional modules based on their areas of interest and career objectives. Students are granted a Certificate of Completion upon successful completion of each module.

All graduate programs are offered in-person, online or through hybrid modalities. The flexible schedules and options make it easy to graduate in a timely manner. Students will have the convenience to interact with professors and other students. Graduate students can earn their degree, with certificates, while working or keeping other commitments.

MASTER OF SCIENCE (MS)
DEGREE REQUIREMENTS

Required Specialized Area Modules (degree specific)	2
Additional Specialized Area Modules	2
Semester Credits per Module	9
Minimum Total Semester Credits	36



GRADUATION REQUIREMENTS

1. Successful completion of an approved program of study, including the minimum number of required modules.
2. Successful completion of the minimum credits required by UAT's accrediting body for the desired degree.
3. Meet minimum cumulative GPA of at least 3.0.
4. Submittal of a completed and approved Application for Degree with the Office of the Registrar.

Upon successfully completing the above requirements and meeting all University graduation requirements put forth in the graduation policy, a Master of Science degree will be awarded.

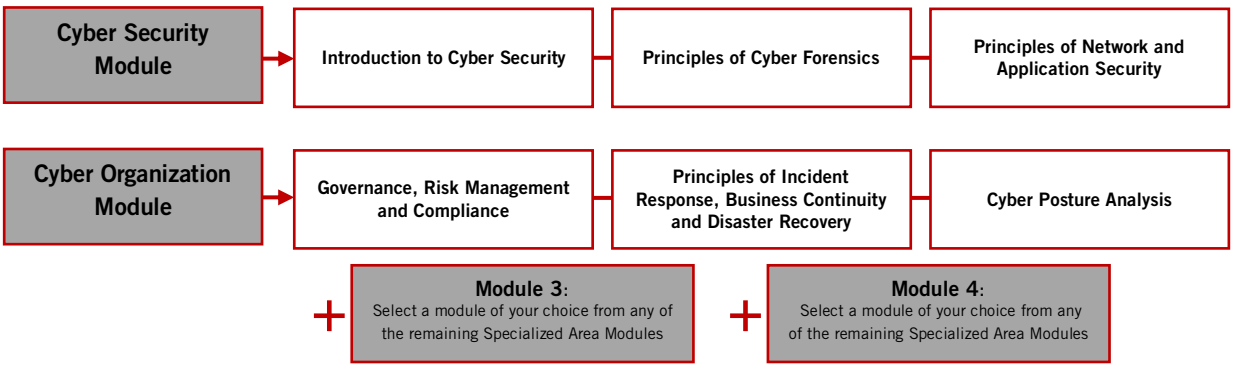
DEGREES

CYBER SECURITY

UAT's Cyber Security Master's Degree program focuses on skillsets that will enable students to design, secure, document and lead information technology networks and other vital resources. Students will learn and practice principles of secure network and information operations such as cyber posture assessment and development, incident response and forensics. Prior knowledge of networks and information systems is not required. Cyber concepts will begin with a foundational introduction to cyber security and advance to prepare students to lead comprehensive information security approaches that ensure organizational system designs, infrastructure and procedures all protect the security of information. *The Classification of Instructional Programs (CIP) code for Cyber Security is 43.0403.*

CYBER SECURITY DEGREE OBJECTIVES

1. Understand an organization's security strategy through the design, appraisal and management of an organization's global security strategies and systems to mitigate risk, maintain continuity of operations, and protect organizational assets.
2. Develop, coordinate and manage all information security-related policies, practices and processes, including information technology, physical security, regulations, initiatives and standards consistent with a global business strategic plan and corporate governance requirements.
3. Implement technology and processes to effectively capture evidence and perform cyber forensic analysis in support of organizational needs.
4. Consider business strategies and potential attackers (hacker) approaches and manage safeguards for organizational assets, systems and facilities including information security audits, business continuity and incident response plans and the investigation of security breaches in accordance with regulations and legal matters.
5. Research and deploy technology solutions and security management techniques to safeguard an organization's intellectual and physical assets while assuring that all information systems are functional and secure.
6. Anticipate the integration of future trends and technologies into cybersecurity frameworks.



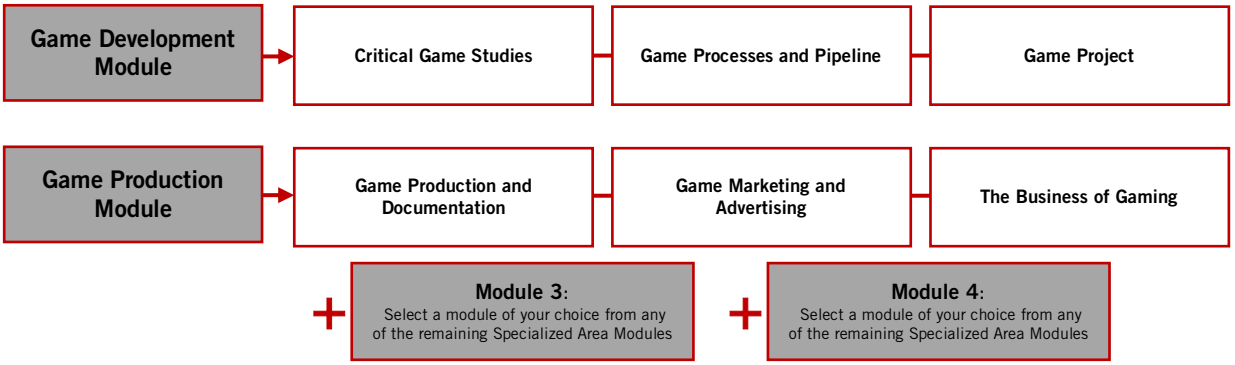
GAME PRODUCTION AND MANAGEMENT

The Game Production and Management Master's Degree at UAT offers students the opportunity to develop skills to analyze and produce complete works in the electronic gaming arena. Utilizing the production studio experience, students will move through curriculum designed to build leadership and production skills applicable to the gaming industry allowing them to implement and maintain complete production pipelines. In addition, students will have the opportunity to evaluate recent trends in game technology, from critical studies to emerging genres and platforms. The curriculum will provide students with the background and experience needed to navigate the game industry and lead an effective production team in entertainment or game development. *The Classification of Instructional Programs (CIP) code for Game Production and Management is 52.0299.*

GAME PRODUCTION AND MANAGEMENT DEGREE OBJECTIVES

1. Lead a project team in implementing design, documentation, development, testing, Q/A and deployment.
2. Develop the analytical and management skills needed to successfully complete game projects.
3. Analyze and critique game design and game technology trends, as well as their impact on game projects.
4. Develop all of the materials needed to market a game project including advertising, marketing, branding and social media.

5. Create an innovative work that adds to the field of game design and development.
6. Establish collaboration, mentorship and professional leadership skills by working with other disciplines to deliver highly polished and completed projects.

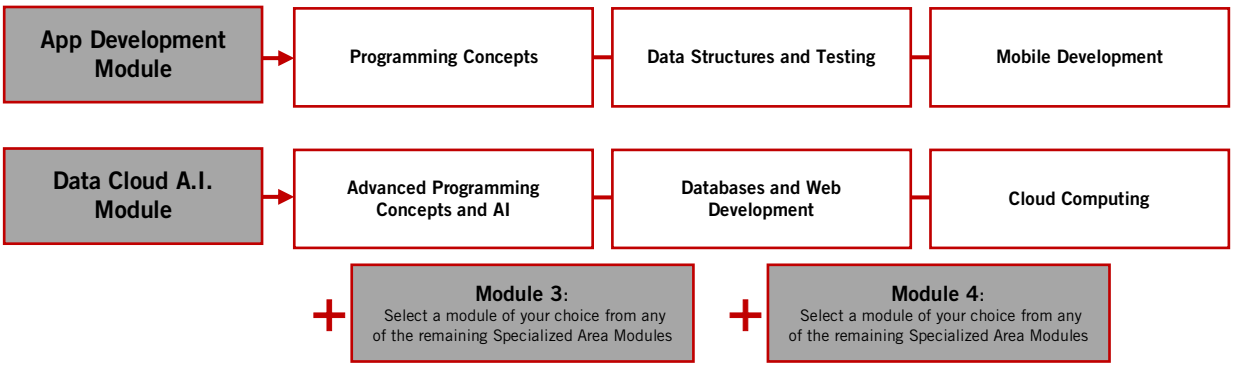


SOFTWARE ENGINEERING

UAT's Software Engineering Master's degree prepares students to identify and build secure market-ready applications and software solutions using leading development environments, databases, platforms and approaches. Students experience evolving software, from mobile applications and cloud resources to secure coding and Agile practices. This program requires intelligence and commitment, starting with baseline knowledge and accelerating to a high-level through both guided and self-directed practice. Students with and without prior development experience will learn how to develop, test and deploy software applications. *The Classification of Instructional Programs (CIP) code for Software Engineering is 14.0903.*

SOFTWARE ENGINEERING DEGREE OBJECTIVES

1. Develop and test algorithms, strategies and methodologies to design, develop, and test software systems.
2. Leverage the strengths of multiple programming languages and database integration in software development.
3. Apply advanced development tools and methods to create software solutions for multiple platforms.
4. Analyze, select and implement appropriate professional software development paradigms such as Agile and unit testing for software projects.
5. Utilize professional software development tools and libraries for application and app development.
6. Design, implement and possess the knowledge to publish mobile applications.

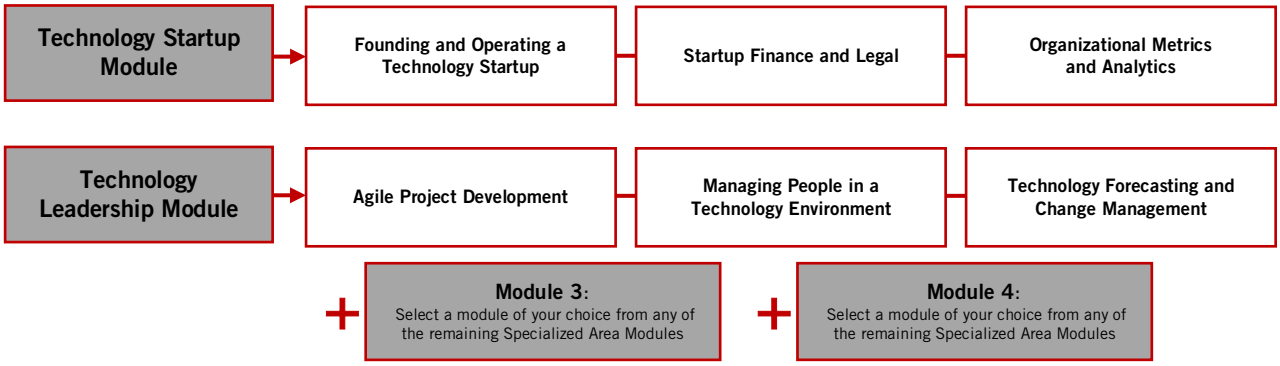


TECHNOLOGY LEADERSHIP

Knowing how to launch a new technology enterprise is a skillset that takes advantage of the current technology landscape where startup companies are the norm. UAT's Technology Leadership Master's Degree offers the skills needed by startup founders and engineers as they create, resource and grow entrepreneurial entities that deliver technology products. Students will train as startup leaders who learn the growth stage, legal, operational, finance, sales, development and crowdsourcing tools used by small companies launching their ideas. These concepts are learned in real-world scenarios as students go through the steps and interact with startup communities while preparing their ideas to go to market. *The Classification of Instructional Programs (CIP) code for Technology Leadership is 52.0701.*

TECHNOLOGY LEADERSHIP DEGREE OBJECTIVES

1. Cultivate the personal leadership capacity needed to guide technology startups.
2. Demonstrate the ability to assemble and resource a mission-aligned startup organization capable of delivering and growing new technologies.
3. Apply lean and Agile approaches towards market analysis and product development within evolving technology landscapes.
4. Demonstrate knowledge of operational elements (finance, funding, legal, operations, resources, marketing, engineering, etc.) within technology startups.
5. Demonstrate competency in building and leading technology and entrepreneurial teams.
6. Generate metrics and visuals using analytical data for use in decision-making.



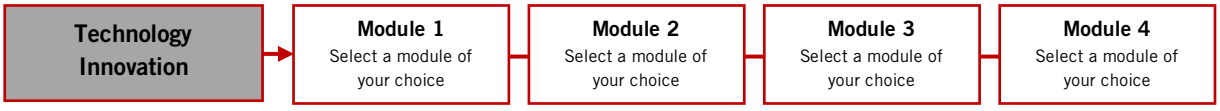
TECHNOLOGY INNOVATION

Innovation frequently involves an interdisciplinary perspective that uses the intersections between different areas as the conceptual beginning of new technologies. Software Engineering, Cyber Security, Game Production, Digital Maker, Blockchain, Technology Leadership, Innovation Startup and Technology-to-Market provide a broad palette of technology topics to be combined while seeking opportunities and solutions to global and business challenges. UAT's Master of Science in Technology Innovation allows students to pursue an academic path blending the topic modules of other UAT graduate programs, leading to the creation of an innovative capstone solution. Students studying Technology Leadership select any four graduate modules to create a cross-discipline degree. *The Classification of Instructional Programs (CIP) code for Technology Innovation is 11.0199.*

TECHNOLOGY INNOVATION DEGREE OBJECTIVES

1. Analyze and act on creating an entrepreneurial venture harnessing technological innovation by assembling resources, performing market research and utilizing expert opinions.
2. Cultivate innovation by establishing a clear vision statement and applying leadership practices.
3. Forecast potential innovations in existing and emerging technology fields and demonstrate how they will benefit organizations, governments and individuals.

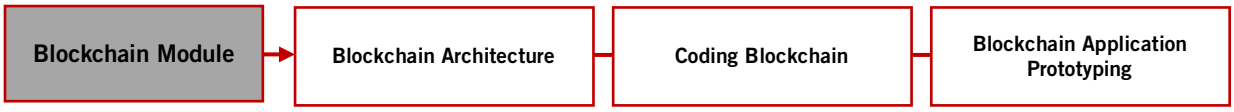
Program objectives for the Technology Innovation graduate degree are derived from the other UAT graduate degree modules. Objectives are determined based upon the coursework that graduate students complete within their selected modules. Students in this program will identify three (3) of the published objectives associated with UAT graduate program modules that they have completed and are assessed on their attainment of these objectives.



ADDITIONAL SPECIALIZED AREA MODULES

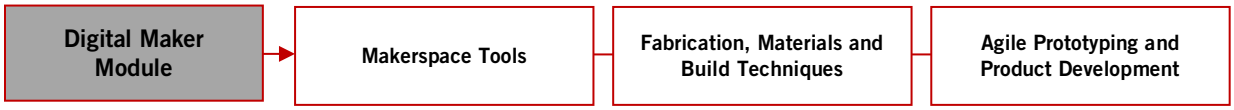
BLOCKCHAIN

Blockchain represents a compelling technological approach toward providing secure records and transactions in a global world. At a genetic level, Blockchain approaches are designed to be highly distributed, encrypted and based upon open-source technologies with transparent verification of ledgers. These elements make Blockchain a compelling approach for applications such as digital contracts, transactions, currency, identification, records and voting. As a solution to complex applications, Blockchain technology is in a rapidly evolving state. Coursework in this module presents the Blockchain architecture, principles and algorithms. Students learn to code Blockchain applications while studying its advancing trends and working within sandboxes to create prototype solutions. Requires successful completion of the App Development module.



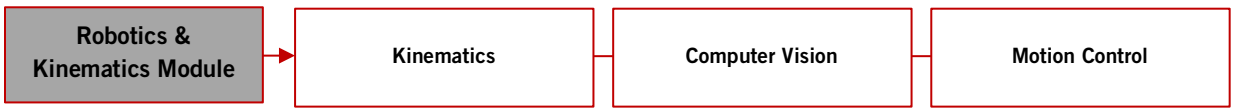
DIGITAL MAKER

Maker tools create the capacity for technology product designers to convert ideas into designs and subsequently rapidly evolve them. In an accelerating manner, these tools provide more diverse capacities while simultaneously becoming more accessible to product designers, technology organizations and manufacturing entities. The Digital Maker module trains on the applications of the current slate of tools associated with maker-style prototyping and provides students with direct exposure to using them. Students will create prototypes while learning Agile approaches to technology product design. By the repeated practice of building, students will hone their ability to make material choices along with properly matching makerspace tools to prototype applications.



ROBOTICS AND KINEMATICS

Robotics at University of Advancing Technology is designed to provide graduate students with the opportunity to develop a highly technical expertise in an innovative field with a focus on robotic system development and technical leadership. Students will be applying multiple engineering disciplines to robotics and mechatronics technology for the enhancement of their tool belt for areas of industry that include aspects of innovation and applied systems of control, electronic and mechanical engineering. Students can expect to apply hands-on creation and programming to build a robotic system that uses artificial intelligence to complete a task and write technical papers that showcases the applications of their system. In the Robotics and Kinematics module, students will learn team building, intellectual property, developing technical business cases, implementing innovations and working with integrators. In technical expertise, students will design systems that utilize fundamentals learned from hardware to software inclusive of system kinematics.



TECHNOLOGY TO MARKET

Technology-to-Market provides the knowledge and skills associated with taking startup concepts and products within technology spaces and bringing them to market. Key areas covered include Agile and lean development processes, leading startup entities, accessing startup ecosystems, finance strategies for new enterprises and startup development cycles.

UNIVERSITY POLICIES FOR ALL STUDENTS

The University recognizes that all policies, procedures and programs are dynamic. Policies in this catalog represent the University's approved student policies and definitions. University of Advancing Technology (UAT) makes every effort to be consistent in its policies, procedures, documents and actions. The policies outlined in this catalog supersede policies listed in any previous catalog. In any case where conflicting statements occur between the official University catalog and another official publication, such as a previous year's catalog, the catalog statement in the most recent version will take precedence. The only exception to this rule is the publication of a special supplement or addendum to the catalog. The electronic version of the catalog at www.uat.edu/uat-catalogs incorporates the most recent supplement or catalog addendum within the body of the electronic catalog.

For each student entering a program at the University, graduation requirements are determined by the catalog under which the student enrolled. Policies governing the University and its student population are published in the catalog in its printed and electronic versions.

DEFINITIONS

ACADEMIC BREAKS

An academic break is a natural break in classes. During an approved academic break, students are considered to be in a continuously enrolled status with no negative effects to their good standing or their satisfactory academic progress. Students receiving Veterans Education Benefits should contact the Office of Financial Aid for further information regarding potential impact of funding.

ACCEPTANCE

Upon review of the UAT application for admission, the Acceptance Office reviews all items submitted and evaluates for acceptance into the University.

APPLICATION

UAT's application for admission. Prospective students should fill out the application and any essays in their entirety. Applications will be reviewed and students will be either Accepted or Denied. The UAT application for admission can be found online at www.uat.edu/apply

ATTENDANCE

UAT does not take student attendance; however, for live classes, faculty may require students to be present and actively engaged in all class activities. Participation requirements may be outlined in each course syllabi.

COMPLETION RATE

The completion rate measures the total number of students who began their studies as full-time, first time degree- or certificate-seeking students and completed their degree within 150% of "normal time" for completing the program in which they enrolled. The UAT reported completion rate and other student achievement data can be found at the following website: https://learn.uat.edu/student-achievement

CREDIT AWARDS VIA SYNCHRONIC LEARNING

Delivery – UAT's environment, its instructors, technology and resources are tailored to each student's individual learning style. UAT's diverse delivery model promotes optimal lifelong learning habits and enhances student learning by having every student become actively involved in the learning process. Within UAT's delivery, students experience direct learning from their professors along with learning and research using digital tools. Production studios allow student teams to engage in peer learning and teaching while building projects. Professors design learning moments using these types of experiences with a recognition that learning occurs best when students are engaged in ways that match their development within topics and their learning style preferences. This is why UAT courses include a balance of learning approaches that fall within seven major categories:

> **Modified Lecture** – Instructor-facilitated presentation of new material uses technology tools and high levels of student interaction techniques to create active learning (15 hours = 1 credit).

- **Tutorial Learning** - The step-by-step presentation of new material, either lead by the instructor or with a student's self-directed learning using interactive instructional tools. The goal is to reinforce the cumulative success of all participants in a hands-on skill-building experience (15 hours = 1 credit).
- **Team Learning** - Modeling lifelong work skills and team ethics that parallel what is expected in the technology workplace, student teams create technologies, solve problems and complete projects by putting previously covered material into practice (30 hours = 1 credit).
- **Student Standup** - Culminating in presentation to peers, student standup promotes mastery of program topics by challenging students to prepare learning activities and delivering presentations and conducting project post-mortems (30 hours = 1 credit).
- **Individual Discovery** - Under self-direction, students research, organize and apply information. The earning and practice that occur during individual discovery become the steps leading toward synthesis and innovation (30 hours = 1 credit).
- **Production** - Leading toward the creation of market ready, professional applications of technology, students will take on the roles and procedures of teams working in production pipelines that mirror the workplace (45 hours = 1 credit).
- **Internship** - Time spent in the workplace practicing applying the knowledge and skills developed in other classes (45 hours = 1 credit).

ENROLLMENT

After the student has been accepted into the University, he or she confirm their intent to attend by enrolling. Enrollment occurs when the student signs an official enrollment agreement and pay their non-refundable seat deposit.

GRADING

Students will be awarded a grade for each course according to the following system:

A = Excellent (4.0) passing
B = Above Average (3.0) passing
C = Average (2.0) passing
D = Below Average (1.0) passing
F = Failure (0) not passing
I = Incomplete (I)
W = Withdrawal (not included in GPA)
TR = Transfer Credit (TR)
AU = Audit (not included in GPA; no credit awarded)
P = Passing (not included in GPA)
NP = Not Passing (not included in GPA)
PA = Passed by Assessment (not included in GPA; no credit awarded)

The semester grade is a weighted composite of the course grades. A passing grade of D (1.0) or higher is required for courses to be considered as satisfying a prerequisite requirement.

a. Course and Instructor Evaluations

Course and instructor evaluations are conducted near the completion of each course at UAT. Evaluations are completed electronically by each student and are utilized as an important resource for curriculum refinement and instructor training. Students are expected to complete evaluations for each course.

b. Grade Discrepancies

If a student believes his/her grade recorded on the transcript may be incorrect the student should contact the instructor by email. The instructor shall respond within 48 hours to the question during the semester or prior to the beginning of classes if the question is submitted during the semester break. The instructor will notify the student of the results of the grade verification request via email. If the student does not hear back from the instructor, the student should directly email Student Services at studentaffairsteam@uat.edu. Students with questions regarding transfer credit grades (TR) should contact the Office of the Registrar at registrar@uat.edu.

c. Grade Point Averages (GPA)

Each student, at the completion of each semester, will have attained both a Cumulative Grade Point Average (CGPA) and a semester Grade Point Average. Grade Point Averages are computed using a 4.0 scale as indicated in the University grading policy. Each course's credits are multiplied by the grade received in the course with the result being noted as quality points on the transcript. The CGPA is the result of the total quality points divided by the total attempted credit hours. The semester

GPA is the result of each semester's quality points divided by its attempted credit hours. In the case of repeated courses, the University will use the highest grade received in the computation of the student's CGPA.

d. Incomplete

A student who, for documented reasons beyond their control, has been unable to complete all work for a course(s) may be granted the grade of incomplete (I). A student must have earned a grade of at least 50% in the course in order to request an incomplete. Incomplete requests must be submitted no later than 5 p.m. MST on the last day of the class in order to be considered. Incompletes may stay on a student's academic record a maximum of five weeks, during which time the student may coordinate the submission of work designed to finalize the course with the instructor. Students can request additional information from Student Services. Incompletes not resolved by the end of five weeks will be reversed to the original computed grade. Incomplete grades are not applicable in a student's final semester.

e. Student Classification (Academic Level)

UAT equates undergraduate class standing in the following manner:

Freshman	0–23 Credit Hours earned or accepted
Sophomore	24–47 Credit Hours earned or accepted
Junior	48–89 Credit Hours earned or accepted
Senior	90 or more Credit Hours earned or accepted

GRADUATE EMPLOYMENT

UAT does not guarantee student employment and does not place students in positions. UAT's curriculum, including internships, is designed to provide a natural entry into the workforce. UAT's Career Services department is designed to assist students in their job search.

INTERNSHIPS

UAT's educational experience prepares graduates with tools and perspectives that foster a successful life in a dynamic world. Prior to graduation, students prove and demonstrate their career readiness through regular team project success, internships and apprenticeships. Internships are a graduation requirement of undergraduate, on-campus majors. Online students can elect to complete an internship as elective credit.

MILITARY STATEMENT

UAT recognizes the service, dedication and sacrifices made by the men and women serving our nation in the United States armed forces.

As a military friendly university, UAT extends all courtesy and cooperation as US servicemen and women are deployed for duty. UAT Student Services and Financial Aid coordinators assist our US military students through the process of obtaining the time away from classes and options to resolve any account balance on a case-by-case basis.

RESIDENCE LIFE COMMUNITY

The Residence Life experience includes on-campus housing in Founder's Hall. The Residence Life Community has the convenience of individual leases, access to washers and dryers, common spaces, basic furnishings (beds, dressers, desks), basic utilities, and support of the community from the Resident Assistants (RAs) and Residence Life activities.

All first-year undergraduate students are required to live in the Residence Life Community during their first year at UAT. When living in the Residence Life Community, UAT expects residents to adhere to the Code of Conduct, the Residence Life housing contract and the Residence Life Community Policies.

ACADEMIC POLICIES

1. COURSE REGISTRATION

Students may register for classes during any University-sponsored registration period for which they are eligible. Changes to course registration must be completed by 5 p.m. MST on the last day of drop/add period.

1.1. UAT-Online Students' Course Registration

Online students are automatically registered for their coursework each term by his/her Student Services Coordinator. Students may request a change to the schedule by scheduling an appointment with the Student Services Coordinator.

1.2. SyncFlex Course Registration

Students enrolled in a SyncFlex major are automatically registered for their coursework each term by his/her Student Services Coordinator. Students may request a change to the schedule by scheduling an appointment with the Student Services Coordinator.

1.3. Graduate Course Registration

Graduate students are automatically registered for their coursework each term by his/her Student Services Coordinator. Students may request a change to the schedule by scheduling an appointment with the Student Services Coordinator.

1.4. Course Audit

Alumni who are in good standing with the University may audit one UAT course at a time, course availability and capacity permitting. Those auditing courses are expected to participate fully in each course and comply with the student code of conduct. Alumni may be charged a pro-rated resource fee for each course; however, their Financial Aid status may not be affected. Course credit and transcripts for completed audited courses will not be awarded.

1.5. Course Loading

Students enrolled at UAT are required to meet credit requirements each semester. The Provost or designee must approve exceptions to the course loading requirements listed below. However, students may take a less than required course load if it is their final semester. Reduction in credits may impact funding, including Financial Aid, Veteran's benefits, etc. and will be the responsibility of the student to verify and make funding arrangements.

1.5.1. On-Campus and SyncFlex Course Loading

Undergraduate students enrolled at UAT are required to maintain full-time status. Undergraduate students registering for courses in a single semester are limited to a maximum of 18 credit hours. Overrides are available for students wishing to take up to 21 credit hours in a single semester. Overrides are granted for those students whose UAT academic record reflects their academic ability and success. However, if a student attempting more than 18 credits in a single semester should fail or withdraw from a course during that semester, he or she may not be eligible for an override on course load in future semesters.

1.5.2. UAT-Online Course Loading

Undergraduate, online students enrolled at UAT are required to maintain a minimum of nine credits per semester (3/4 time) and may take up to 12 credits (full-time) per semester if courses are available. Overrides for additional credit needs may be granted for those students whose UAT academic record reflects their academic ability and success. However, if a student attempting more than 15 credits in a single semester should fail or withdraw from a course during that semester, he or she may not be eligible for an override on course load in future semesters. Students may take less than nine credits per term if it is their final semester.

1.5.3. Graduate Course Loading

Graduate students enrolled at UAT are required to maintain full-time status. Full-time status for a graduate student is defined as a minimum of 6 credit hours per semester. Graduate students being registered for courses in a single semester are limited to a maximum of 12 credit hours.

1.6. Drop/Add

Students may drop and/or add courses within the first five (5) business days of the course in order to meet academic requirements and ensure successful completion of a program of study. A student who wishes to drop or add a course may schedule an appointment with Student Services. Students who are not registered for courses by the end of the drop/add

period will be withdrawn from the University. Additions to the semester load may not exceed the maximum course load allowed. A student may not use this process to register for less than what is outlined in the undergraduate degree requirements. If a course is dropped prior to the fifth-class day, the course will be deleted from the student's permanent record. Students may not drop all classes in order to withdraw from the University. Students wishing to withdraw from the University must follow the University's withdrawal procedures. Tuition and refunds for withdrawing students are based on the withdrawal policy and not based within the drop/add policy.

1.7. Individual Course Cancellation

Courses are occasionally canceled at the University for a variety of reasons including minimal enrollments, faculty availability or resource needs. If a course is canceled, academic advisement is provided to students on how to amend their program of study to meet academic goals. Although UAT will provide notifications of closures or time changes as far in advance of a course start date as possible, it is the student's responsibility each semester to verify their course schedule in preparation for the first day of class.

1.8. Individual Course Withdrawal

Students can request individual course withdrawal from 15-week courses after the drop/add period and by 5pm MST on the last day of week 10 of the semester. Students can request individual course withdrawal from 7.5-week courses after the drop/add period and by 5pm MST on the last day of week 5. Students can request individual course withdrawal from 5-week courses after the drop/add period and by 5pm MST on the last day of week 3. Undergraduate on-campus students may not withdraw to less than 6.0 active credits within a semester.

Students who withdraw from a course will receive a 'W' grade on their transcripts. This grade does not impact a student's GPA but could impact his/her Satisfactory Academic Progress. Reduction in credits may impact any tuition funding, including but not limited to Financial Aid, Veteran's benefits, etc. and will be the responsibility of the student to verify and make funding arrangements.

1.9. Repeated Courses

With repeated courses, the University will use the highest grade achieved by the student in the computation of the grade point average. Both the original attempt and the repeated attempt's grade will remain on the student transcript. The University will count a repeated course toward their enrollment status and certain funding sources when a student is repeating a previously passed course for the first time only (i.e., one repetition per course). It is the student's responsibility to confirm financial aid eligibility or VA educational benefits to cover the cost of a repeated course.

2. HONORS AT UAT

2.1. Honors Program

UAT Honors program provides a path for students to pursue and achieve at a higher academic level. Students undertaking honors studies at UAT will:

> Take certain at more rigorous levels that include a focus on higher academic performance, technology completion and the creation of market-ready works
> Participate in sponsored extracurricular enrichment and leadership activities
> Take part in honors activities
> Be mentored by an honors chairperson
> Be recognized during Commencement

Prospective and current UAT students are invited to apply for the UAT honors program. Application forms for the UAT honors program can be found at www.uat.edu/honors-program.

In order to graduate with honors, UAT students will be required to:

> Complete 21 credits of honors coursework
> Earn a cumulative grade point average of at least 3.2

Honors students enroll into advanced courses as a part of their studies. Honors courses replace their standard counterparts in the program of study. Students must earn a grade of 'C' or higher in each of their honors courses. Honors courses will be offered each semester with registration being reserved only for honors students.

In order to remain within honors, students are expected to maintain strong academic performance and be models of engagement and leadership for the UAT community.

2.2. Honors Society

UAT confers three levels of Undergraduate Cumulative Grade Point Average (CGPA) based honors to students upon graduation. At the time of their graduation:

- A student with a cumulative GPA of 3.5–3.74 graduates Cum Laude.
- A student with a cumulative GPA of 3.75–3.89 graduates Magna Cum Laude.
- A student with a cumulative GPA of 3.9 or above graduates Summa Cum Laude.

Students who have earned a cumulative GPA of 3.5 or higher at the time of their graduation are eligible for induction into the Alpha Beta Kappa National Honor Society.

3. LEAVE OF ABSENCE (LOA)

This policy provides the basis for a defined interruption in a student's program of study and the terms of his/her return. Any LOA that does not qualify as an Approved LOA may be treated for Title IV purposes as a withdrawal requiring that the institution perform a Return of Funds calculation.

3.1. Approved Leave of Absence

In order for an LOA to qualify as an approved LOA the following requirements must be met:

1. The request for LOA must be made in writing and include the valid, documented reason for the request.
2. The student must indicate a reasonable expectation of returning to attendance.
3. The institution may not assess the student any additional charges for the student's completion of the prior term's course material upon his/her return.
4. The LOA together with any additional leaves of absence must not exceed a total of 180 days in any 12-month period.
5. An LOA will not be approved for students in their first semester.
6. A student shall resume attendance at the same point in the academic program that he or she began the LOA. If the student returns earlier, the period of the approved LOA does not terminate until the point in the semester that he or she began the LOA.
7. The institution must explain to the student the effect that a non-return may have on the student's repayment terms for all Title IV disbursements.

If a student does not return to the school at the expiration of an approved LOA, the student's withdrawal date is the date the student began the approved LOA.

3.2. Military Leave

A student who is a member of the U.S. military, National Guard or other armed forces reserve unit who is called or ordered to active duty may be granted a Military Leave from the University for the period of active duty and up to one year after returning from active duty.

In order to qualify for an approved Military Leave, the following requirements must be met:

1. The request for Military Leave must be made in writing.
2. The student must indicate a reasonable expectation of returning to attendance.
3. If a student does not return to the school at the expiration of the approved Military Leave, the student's withdrawal date is the date the student began the approved Leave.
4. The student must communicate with the Financial Aid and Housing departments.
5. It is the responsibility of the student to understand their military education benefits and keeping track of their tuition and fees, University of Advancing Technology (UAT) account balance and VA payments and understanding how a Military Leave impacts the aforementioned.

4. MULTIPLE DEGREES

Pursuit of a second degree can increase breadth of knowledge and specialization. Students pursuing a concurrent second degree must officially declare their intent to do so with Student Services to plan their program of study for both degrees. A student must submit appropriate documentation after consulting with Student Services and fulfill the graduation requirements for each degree. At a minimum, an additional 15 credits that meet the requirements of the subsequent degree

will be required. Students will also be required to to meet the objectives and board requirements of each degree; whereas, only one SIP and Internship are required.

4.1. Changing Degrees

The University understands that students may discover that the degree program they originally began may not truly address the student's desire for lifetime career goals and future endeavors. Therefore, the University will allow students to change degrees.

The Degree Change Form, as well as academic advisement, will be provided by Student Services. Students may submit the Degree Change Form at any point during their program. However, depending on course availability, the effective date on the change may be aligned with the next semester period. Students must consult with Student Services regarding the impact of a degree change on their program of study before, or in conjunction with, submission of a Degree Change application form. Students should also consult with financial aid regarding impact on funding eligibility. Students will remain under the original catalog year they enrolled, provided they remain continuously enrolled at University of Advancing Technology (UAT). Students who wish to change to a degree that was not offered during their original catalog year must change their catalog year to the most current catalog in order to make the change. Students who have been awarded transfer credit from a previous institution should also refer to the Transfer Credit for Previous Education Policy.

5. WITHDRAWAL FROM THE UNIVERSITY

5.1. Student-Initiated Withdrawal

A student may initiate a withdrawal from the University at any time by beginning the school's official withdrawal process or by providing official notification to the University of his/her intent to withdraw

5.2. School-initiated Withdrawal

If official notification is not provided to the University and it is determined that the student does not intend to return to the University either because of circumstances beyond his or her control or due to non-attendance, UAT may initiate the withdrawal process.

5.3. Date of Determination

The Date of Determination for students that initiate the official withdrawal process (student-initiated withdrawal) is the student's requested withdrawal date or the date of notification, whichever is later.

For a student that is withdrawn by the University (school-initiated) without providing notification to the institution, the date of determination is the date the institution becomes aware of that the student has ceased attendance.

5.4. Withdrawal Date

A student's withdrawal date for Return of Title IV funds (R2T4) purposes is:

a. The date the student began the institution's official withdrawal process or the date the student otherwise provides notification; or
b. The date the institution determines is related to the circumstance beyond the student's control or the midpoint of the term for a student who leaves without notifying the institution; or
c. The date of the student's last documented academically related activity.

In place of the dates listed, UAT may use the student's last date of attendance at an academically related activity as the student's withdrawal date if there is evidence the student attended the activity.

5.5. Involuntary Withdrawal

Students may be involuntarily withdrawn for financial, academic or other reason on a case-by-case basis. UAT reserves the right to involuntarily withdraw students for any reason. If a student is involuntarily withdrawn or suspended, the normal refund policy applies. If the student is living in university-sponsored housing, they may be required to vacate housing.

In extraordinary circumstances, if a student's actions or statements indicate a threat to the student's own health and/or safety, a threat to the health and/or safety of others or has acted in a manner against the Code of Conduct, the University reserves the right to involuntarily withdraw the student.

There may be situations in which both the Involuntary Withdrawal Policy and a Code of Conduct violation apply. In all cases, the University shall have final authority regarding the decision and enforcement of the involuntary withdrawal of a student.

5.5.1. Suspension

The University may take action to suspend a student pending a final decision on whether the student will be involuntarily withdrawn, in situations in which (1) there is imminent danger of serious physical harm to the student or others, (2) there is imminent danger of significant property damage, (3) the student is unable or unwilling to meet with Student Services, (4) the student refuses to complete the mandatory evaluation, if applicable. In the event action is taken to suspend the student on a temporary basis, the student shall be given notice of the suspension and an initial opportunity to address the circumstances on which the suspension is based with Student Services.

The University reserves the right to suspend a student for reasons listed above or for any violation to the Code of Conduct.

6. SATISFACTORY ACADEMIC PROGRESS (SAP)

Federal regulations (34 CFR 668.34) require all students receiving Federal Title IV Financial Aid funds maintain standards of reasonable academic progress in the completion of their degree. UAT has developed a standard of SAP to monitor a student's academic progress in accordance to the most recent federal and state regulations. These standards require students to achieve a cumulative grade point average (CGPA) that is consistent with meeting graduation requirements, demonstrate they are progressing through their program at a pace that will ensure graduation within the maximum timeframe and complete their degree within a specified maximum timeframe. A student's entire academic history is considered whether or not the student received federal financial aid.

SAP will be evaluated at the end of each student's semester. For a student to meet the standards of SAP, the student must meet the CGPA, completion and maximum time frame criteria below. Failure to meet any of these standards may result in suspension of eligibility for financial aid and/or VA educational benefits.

6.1. Undergraduate Students

Total Credits Attempted	Minimum CGPA	Pace of Completion
< 15	1.5	50%
16 - 30	1.75	55%
31 - 45	1.9	60%
46 +	2.0	67%

6.2. Graduate Students

Total Credits Attempted	Minimum CGPA	Pace of Completion
Semester 1	2.0	50%
Semester 2 +	3.0	67%

6.3. Grade Point Average (GPA) Standard

Students must maintain a minimum cumulative GPA (CGPA) to remain eligible for financial aid.

- Undergraduate students must meet the minimum CGPA per the standards above and maintain at least a 2.0 CGPA once they've attempted 46 credits and beyond.
- Graduate students must maintain a CGPA of 2.0 their first semester and a 3.0 for all semesters thereafter.

Transfer credits that are accepted by the University and applied to the student's program of study will be treated as both credits attempted and credits earned. Incompletes will be treated for Satisfactory Academic Progress (SAP) in accordance with the University's policy on incompletes but may not be used in the calculation until a final grade is entered. Repeated course work will be treated under the repeated course work policy, however the University will use the highest grade achieved by the student in the computation of the GPA. Both the original attempt and the repeated attempt(s) grade will remain on the student's transcript. Classes from which the student withdraws under the University individual course withdrawal policy will be treated as credits attempted but not earned.

6.4. Pace of Completion

All students must progress at a pace that allows the student to complete their program within the maximum allotted timeframe. The pace is calculated by dividing the number of successfully earned credits by the number of attempted credits. Students must pass at least 67% of all attempted credit hours with a grade of D- or better.

- Undergraduate students must demonstrate a 67% or greater pace of completion of cumulative credit hours attempted each semester once they have attempted 46 credits and beyond.
- Graduate students must meet a completion percentage of 50% their first semester and 67% for all subsequent evaluation points.

All students must also meet or be able to meet both the qualitative and quantitative measures at a pace that insures graduation prior to reaching the Maximum Time Frame threshold to graduate.

6.5. Maximum Time Frame

To remain eligible for Financial Aid at University of Advancing Technology (UAT), students must complete their degree program requirements within 150 percent of the published length of their degree program. All attempted credit hours are counted, including transfer hours, whether or not financial aid was received.

- Undergraduate Example: If a student's Undergraduate program requires 120 credit hours to complete, then a student is eligible for financial aid during the first 180 attempted credit hours as an Undergraduate student.
  120 x 150% = 180 maximum attempted credit hours for financial aid eligibility
- Graduate Example: Graduate programs require 36 credits hours to complete, therefore a Graduate student would be eligible for financial aid during the first 54 attempted credit hours as a Graduate student.
  36 x 150% = 54 maximum attempted credit hours for financial aid eligibility

6.6. Satisfactory Academic Progress (SAP) Warning

Students who have not met one or more of the SAP standards for the first time will be placed on Financial Aid Warning. Students under Financial Aid Warning can receive student financial aid and/or VA educational benefits for one semester without submitting an appeal. At the end of the following semester, the student must meet the criteria for SAP. If not, the student is considered SAP Non-Compliant.

6.7. Satisfactory Academic Progress (SAP) Non-Compliant

Students that are SAP Non-Compliant are ineligible for student financial aid and/or VA educational benefits unless they submit an appeal, in writing, and the appeal is granted. SAP appeals must be submitted to Student Services within 30 days of the SAP Non-Compliant notice sent to the student's official school email address. To be considered, an appeal must explain why the student failed to make SAP and what has changed in their situation that may allow them to make SAP at the next evaluation. Students who have filed an appeal must still have a financial plan in place (i.e. private loans, cash payments, etc.) while the student's appeal is being considered.

6.8. Satisfactory Academic Progress (SAP) Non-Compliant – on an Approved Appeal

If a student's appeal is granted and it is reasonable for the student to meet SAP standards in one semester, they are placed in a probationary status and can receive student financial aid and/or VA educational benefits for one semester. At the end of the semester, the student must meet the criteria SAP. If not, the student is once again SAP Non-Compliant and is ineligible for aid. The student can appeal again, but the latter appeal must be based on a different reason from the first appeal.

6.9. Academic Plan

If it is not mathematically possible for a student who is appealing to reach SAP by the end of the next semester, the student can be placed on an Academic Plan for a specific number of semesters. The Academic Plan may be used to evaluate the student's SAP until it expires.

6.10. Regaining Financial Aid Eligibility

A student can regain financial aid eligibility and/ or VA educational benefits by meeting the SAP standards or the conditions set forth in their academic plan.

Summary of Financial Aid Terms and Statuses		Eligible to receive Financial Aid?
Meeting Satisfactory Progress	A student is meeting Satisfactory Academic Progress when they maintain the cumulative GPA and pace of completion within maximum timeframe standards, per the requirements listed above.	Yes
Satisfactory Academic Progress (SAP) Warning	A warning semester is given to every student the first time they violate minimum GPA or completion rate requirements. Students are still eligible to receive financial aid and/or VA educational benefits while in warning status.	Yes
Satisfactory Academic Progress (SAP) Non-Compliant	Students who do not maintain SAP will be placed on SAP Non-Compliant financial aid status. The student is no longer eligible for financial aid and/or VA educational benefits and his or her aid is terminated immediately. The status will remain until the student has an approved appeal or enrolls in a future semester(s), without financial aid and/or VA educational benefits, and regains satisfactory academic progress.	No
Satisfactory Academic Progress (SAP) Non-Compliant on an Approved Appeal	Students are placed on Financial Aid Probation status when the SAP Non-Compliant status is appealed and approved. Financial aid and/or VA educational benefits will be reinstated during the probationary term. Students that do not meet the GPA and completion rate standards in the probationary term will return to a SAP Non-Compliant status, unless the minimum SAP standards are regained.	Yes
Academic Plan	If a student appeals their SAP Non-Compliant status and is approved, but the student needs longer than one semester to achieve SAP standards, the student will be assigned an academic plan detailing the academic performance and necessary measures required to maintain financial aid and/or VA educational benefits eligibility until meeting SAP.	Yes

ADMISSIONS POLICIES

PRE-DISPUTE ARBITRATION AND CLASS ACTION WAIVER DISCLOSURE

University of Advancing Technology (UAT) seeks to resolve disputes or claims between any student and the school in a manner that addresses an individual student's complaint in an efficient, cost-effective, and quicker manner than traditional litigation. A student who enrolls at UAT agrees, as a condition of his/her enrollment, to resolve any dispute through mandatory arbitration that shall not be adjudicated as a class action or a consolidated class arbitration proceeding. However, the school cannot require a student loan borrower to participate in arbitration or any internal dispute resolution process offered by the institution prior to filing a borrower defense to repayment application with the U.S. Department of Education pursuant to 34 CFR 685.206(e); the school cannot, in any way, require students to limit, relinquish, or waive their ability to pursue filing a borrower defense claim, pursuant to 34 CFR 685.206(e) at any time; and any arbitration, required by a pre-dispute arbitration agreement, tolls the limitations period for filing a borrower defense to repayment application pursuant to 34 CFR 685.206(e)(6)(ii).

START DATES

All UAT applicants are strongly encouraged to complete the application/enrollment process well in advance of class start dates. Visit www.uat.edu/academic-calendar-undergrad and www.uat.edu/academic-calendar-graduate for a complete list of start dates.

1. APPLICATION & ACCEPTANCE

An application for admission must be completed and submitted to the UAT Office of Admissions prior to consideration. Contact the UAT Office of Admissions for the necessary form or complete the online application at www.uat.edu/apply.

1.1 Steps to Apply for Acceptance:

1. Complete the application and send it to University of Advancing Technology, 2625 West Baseline Road, Tempe, AZ, 85283-1056, USA, fax it to (602) 383-8222 or submit it electronically through our website at www.uat.edu/apply.
2. To determine if applicants meet the requirements set forth by the University's acceptance criteria, completed applications are forwarded to the Office of Acceptance.
3. Applicants are granted Acceptance or applicants are Denied.
4. Acceptance to the University does not guarantee admission. Please refer to admissions requirements.

1.2 Acceptance

Acceptance is awarded to qualified applicants who have successfully completed a UAT application acceptance office review. UAT will admit qualified individuals regardless of race, color, creed, age, marital status, gender, religion, sexual orientation, gender identity, gender expression, national origin, veteran status or disability. As a requirement of institutions of higher education and students receiving federal financial aid, accepted students must provide sufficient evidence of high school graduation or equivalent to the Office of Admissions, such as through official High School transcripts, GED battery score and/or ACT/SAT scores that have all been verified.

Students are eligible to apply beginning in their sophomore year of high school, and for those applicants that are still enrolled in high school, they can submit their unofficial high school transcripts for verification. Acceptance does not mean that the student is enrolled to start courses. After acceptance, students must sign a UAT Enrollment Agreement and pay the seat deposit. Furthermore, those accepted while attending high school, must still complete their studies and provide UAT official high school transcripts.

1.3 Denied Applicants

Denied applicants who did not meet the University's acceptance requirements may or may not be eligible to re-apply depending on the condition of denial. The university reserves the right to deny any applicant.

1.4 Cancellation of Enrollment

An applicant who provides written notice of cancellation within three business days of signing an enrollment agreement is entitled to a refund of the seat deposit. No later than 30 days of receiving the notice of cancellation, the school shall provide the 100% refund. Students who cancel their enrollment after this 3-business day period are not eligible to have their seat deposits refunded.

2. ADMISSIONS REQUIREMENTS

Applicants in the following categories must meet the requirements detailed below in order to be eligible for consideration of acceptance to UAT.

2.1 Home Schooled Students

UAT welcomes students from all types of educational backgrounds and encourages home schooled students to apply. Due to the diverse nature of home school requirements from state to state, UAT requires the following materials in order to evaluate a student's academic history for acceptance:

- Transcripts from a nationally recognized and accredited home school program
  OR
- Detailed home school transcripts (course titles, brief description of each course content, a grade or performance assessment for each course, details on duration of study and expected graduation date) and a second academic indicator such as the SAT, ACT, GED or College GPA (Where 12 or more credits were completed at a single institution)

Please keep in mind that in order to attend at the University, applicants need to demonstrate completion of the equivalent of high school. Home schooled students need to submit documents indicating that they've followed the regulations determined by their state. Other forms of proof of high-school equivalency will be considered on a case-by-case basis but should be approved in advance by contacting the Office of Admissions at admissions@uat.edu.

2.2 Admissions Requirements – United States Citizen

2.2.1 Undergraduate

UAT strives to admit students who embody our passion for technology, are a cultural match to our University, demonstrate adequate academic achievement and have a dedication to lifelong learning. All undergraduate applicants are evaluated based on these criteria: academic history and achievements, personal expression, desire to attend UAT, how they might fit within UAT's geek-friendly culture, passion and aptitude for technology and the supportiveness of applicant's network of family, friends and peers to achieve their educational goals (for UAT-Online applicants, employer support is also evaluated).

All applicants are required to submit high school transcripts, ACT and/or SAT, Advanced Placement scores and college transcripts so that UAT's Office of Admissions may thoroughly review the applicant's academic history.

Prior to matriculating to UAT, an official high school diploma from an accredited institution recognized by the US Department of Education or equivalent must have been earned and on file with the University. In addition, all required enrollment forms must be completed and a deposit on file with the University.

2.2.2 Graduate

UAT strives to admit students who embody our passion for technology, demonstrate adequate academic achievement and have a dedication to lifelong learning. All Graduate students must have a bachelor's degree from an accredited institution. The Graduate Admissions Committee evaluates the student as a whole and strives to admit students who embody the university vision and values. The committee evaluates all applicants based on their academic achievement, leadership, experience, research aspirations, professional accomplishments and community involvement. The committee may identify deficiencies that an applicant should remedy, including training on specific software or additional undergraduate coursework. The Graduate Admissions Committee may waive one or more of the required materials or standards based on the strength of an applicant's preparation.

Prior to matriculating to UAT, a bachelor's degree from an accredited institution recognized by the US Department of Education or equivalent must have been earned and on file with the University. In addition, all required enrollment forms must be completed and a deposit on file with the University.

2.3 Admissions Requirements – Non-United States Citizen

2.3.1 Undergraduate

If an applicant is not a citizen of a nation where English is the official language, then he or she must provide proof of English proficiency. Documentation of any of the following will show proficiency:

1. Test of English as a Foreign Language (TOEFL) with a score of:
   a. 550 or higher on paper-based test
   b. 80 or higher on Internet-based test
c. 213 or higher on computer-based test
2. Pearson Test of English (PTE) score of 53 or higher.
3. Successful completion of Level 112 from an ELS Center.
4. Attendance for one year at an accredited US college or university and completion of English 101 (or equivalent) with a grade of C or better.
5. International English Language Testing System (IELTS) score of 6.0.
6. Test of English for International Communication (TOEIC) score of 760.

One of the above must be satisfied for consideration. Proof of English proficiency is not required if English is the applicant's native language.

All Official transcripts must be submitted with an English translation. In order to determine that a student has received the equivalent of a US High School Diploma or a US Bachelor's degree, UAT may request that official transcripts be evaluated by Educational Credential Evaluators, Inc., P.O. Box 17499, Milwaukee, WI, 53217-0499, USA (www.ece.org) or another outside agency.

Federal law requires mandatory health insurance coverage for all eligible immigrants studying in the United States. All eligible immigrants will be automatically enrolled into a university-sponsored health insurance plan during the matriculation phase. A $550 health insurance deposit is required and assessed for each student to cover the initial coverage period and enrollment. Students will be billed accordingly for insurance fees each semester and are required pay in full. UAT reserves the right to rescind or adjust coverage at any time.

If a student has pre-existing or third-party coverage consistent with University requirements, they are exempt from this policy. UAT reserves the right to verify benefits and coverage periods with each student and/or sponsor.

2.3.2 Graduate

If an applicant is not a citizen of a nation where English is the official language, then he or she must provide proof of English proficiency. Documentation of any of the following will show proficiency:

1. Test of English as a Foreign Language (TOEFL) with a score of:
   a. 600 or higher on paper-based test
   b. 92 or higher on Internet-based test
   c. 213 or higher on computer-based test
2. Pearson Test of English (PTE) score of 60 or higher.
3. Successful completion of Level 112 from an ELS Center.
4. Attendance for one year at an accredited US college or university and completion of English 101 (or equivalent) with a grade of C or better.
5. International English Language Testing System (IELTS) score of 6.5.
6. Test of English for International Communication (TOEIC) score of 760.
7. Completion of a bachelor's degree or equivalent from an institution where the medium of instruction was English.

One of the above must be satisfied for consideration. Proof of English proficiency is not required if English is the applicant's native language.

All official transcripts must be submitted with an English translation. In order to determine that a student has received the equivalent of a US High School Diploma or a US Bachelor's degree, UAT may request that official transcripts be evaluated the Educational Credential Evaluators, Inc., P.O. Box 17499, Milwaukee, WI, 53217-0499, USA (http://www.ece.org) or another outside agency.

Federal law requires mandatory health insurance coverage for all eligible immigrants studying in the United States. All eligible immigrants will be automatically enrolled into a university-sponsored health insurance plan during the matriculation

phase. A $550 health insurance deposit is required and assessed for each student to cover the initial coverage period and enrollment. Students will be billed accordingly for insurance fees each semester and are required pay in full. UAT reserves the right to rescind or adjust coverage at any time.

If a student has pre-existing or third-party coverage consistent with University requirements, they are exempt from this policy. UAT reserves the right to verify benefits and coverage periods with each student and/or sponsor.

2.3.3 Eligible Immigrant Course Expectation

Eligible immigrants seeking to attend UAT on-campus indicate a desire during their visa application process to experience the interpersonal interactions that are found within on-site learning. UAT values the benefits that eligible immigrants receive when interacting directly with other students and faculty during their education. UAT requires that eligible immigrants attend all courses on-campus. Eligible immigrants may not take online courses.

2.3.4 Eligible Immigrant Scholarships

Eligible immigrants who meet the requirements for admissions may be awarded a scholarship in the amount of up to $3,000 per semester for undergraduate degrees and $1,500 per semester for graduate degrees, applied directly towards tuition and non-redeemable for cash.

2.3.5 Eligible Immigrant Visa

UAT takes no responsibility for managing eligible immigrant visas. This responsibility falls to the eligible immigrants.

3. RE-ENTRY

Withdrawn individuals wishing to return to the University may do so by re-applying for acceptance. Re-entry students (students who have previously withdrawn or been withdrawn from the University) are subject to meeting all admissions criteria prior to being accepted. Additionally, all re-entry applicants must have met Satisfactory Academic Progress at the time of their withdrawal from the University and must also be in good financial standing with the University to be considered for re-entry. Applicable admission fees, including but not limited to the enrollment seat deposit, are charged if more than one year has passed since the students last date of attendance. All initial transfer credit evaluations must be completed by the first semester of an applicant's first enrollment at UAT. Any credits earned between enrollments may be submitted to the University for evaluation of transfer credit and will be awarded at the University's discretion. All transcripts must be submitted for evaluation prior to re-entry in order to receive consideration of transfer credit.

Students choosing to re-enter, who have had more than one year pass since their last day of attendance at UAT, will be charged the published tuition rate at the time of their most recent enrollment agreement. Students choosing to re-enter on or within one year their last day of attendance at UAT will be charged the tuition rate of their previous enrollment.

3.1 Re-Entry after Involuntary Withdrawal

Because the Involuntary Withdrawal Policy applies to cases in which there is a concern about the safety of the student or others, Student Services may require a student who has been involuntarily withdrawn, suspended, placed on leave of absence or has chosen to withdraw to be re-evaluated before they are readmitted in order to assure that he/ she presents no direct threat to himself/ herself or others. This is in addition to all regular re-entry policies and procedures.

3.2 Re-Enrollment Seat Deposit

Any student that plans to reenroll at UAT through the re-entry process will not be required to pay an additional seat deposit if they re-enroll within one year of their last date of attendance. Students who re-enroll after one year, will be responsible for the seat deposit fee.

3.3 Alumni Advancing Degree

UAT Alumni wishing to advance into their next degree program are not required to pay a seat deposit prior to enrolling. This applies to students who have received an associate degree and are enrolling into a bachelor's program, students who have received a bachelor's degree and are enrolling into a master's program, students who have received a bachelor's degree and are enrolling into another bachelor's program, as well as students who have received a master's degree and are enrolling into an additional master's program.

4. TRANSFER CREDIT

Transfer credits are college-level credits hours that were earned at an institution other than the one a student is applying for.

4.1 Other Transfer Credits

Transfer credit can be obtained from:

- Advanced Placement (AP) exams with a score of 3.0 or better
- International Baccalaureate (IB) exams with a score of 5 or better
- ACE-approved military coursework
- College Level Examination Program (CLEP) exams
- Defense Activity for Non-Traditional Education Support (DANTES) or DANTES Subject Standardized Tests (DSST) exams
- Most industry certifications (i.e., Microsoft Corp., Cisco Systems Inc and Computing Industry Technology Association (CompTIA))

4.2 Study Abroad

Students who arrange for and receive prior approval from the UAT Registrar's Office may enroll in a program of study abroad and will be considered as enrollment at the home institution or UAT for the purpose of applying for Title IV and HEA programs.

4.3 Transfer Credit Evaluation for Early Determination

Prospective students may request a complimentary evaluation of his/her transcripts by submitting unofficial transcripts to the Office of the Registrar or requesting an evaluation by visiting www.learn.uat.edu/transfers. Credits will not be made official until the student has enrolled, submitted official transcripts and paid the one-time transfer credit fee of $100. The complimentary evaluation is meant to help student envision what their future will be like after transferring to UAT.

4.4 Transferring Credits in From Other Institutions

The University actively seeks to recognize college-level academic work completed by its enrolling students at Department of Education-recognized accredited institutions and Council for Higher Education Accreditation (CHEA)-recognized accredited institutions. All previous coursework must be completed prior to attending UAT to be considered for possible transfer credit. Transfer credit may be awarded for previous college-level courses that a student has successfully completed up to sixty (60) undergraduate credit hours toward a bachelor's degree from a two-year institution, up to ninety (90) undergraduate credit hours toward a bachelor's degree from a four-year institution, thirty (30) undergraduate credit hours toward an associate's degree and fifteen (15) graduate credit hours toward a master's degree.

The following restrictions apply: A maximum of 90 credits may be transferred from any combination of two- and four-year institutions. Transfer credit will only be approved for courses that apply to a student's program of study. Students must have attained a grade of C (2.0) or better in undergraduate coursework for credits to be awarded. Graduate-level coursework will be evaluated on an individual basis; credit for electives is limited but direct equivalents will be maximized. No credit will be awarded for any course's worth less than one credit hour or courses with sub-100-level course codes.

The University is willing to review credit for all courses previously taken that qualify, based on the policy restrictions and requirements. However, core courses over ten years old undergo a more in-depth analysis due to changes in current technology to ensure the prior coursework is still relevant and applicable to the current program.

Previous academic coursework and test scores are evaluated by the University upon submittal of unofficial or official college transcripts. It is the student's responsibility to request official transcripts to be sent to the Registrar. Students may use the College Transcript Request document, which can be downloaded in PDF form on the Intranet or requested from the Office of Admissions. Although unofficial transcripts may be used to generate a Transcript Credit Evaluation, official transcripts from all previously attended institutions from which credit was awarded must be on file with the Registrar prior to the end of the student's first semester at UAT. Students will be notified via email of the results of their evaluations. Credits will not be made official until the student has enrolled. A one-time transfer credit fee of $100.00 will be charged to the student's account. Students who switch to another degree program or re-enroll may have a re-evaluation of previously awarded transfer credits if the credits were earned prior to the student's original start date. Please refer to the Re- Entry and Degree Change sections for more information.

Grade point averages will be computed based only on grades received for courses completed at University of Advancing Technology. Transfer credits will be awarded at the discretion of the University.

4.5 Transferring Credits to Other Institutions

In order to transfer college credit to another institution, a student must submit an application to that institution and follow its guidelines. Each institution has its own rules and standards governing the transfer of credit; thus, University of Advancing Technology cannot make any assurances that any other institution will accept its credits or degrees.

4.6 US Military Friendly Transfer Credits

Every veteran who applies for educational benefits through the University must provide official copies of academic transcripts from all previously attended institutions for evaluation. Veterans must follow the guidelines for applying for transfer credit outlined in the Transfer Credit for Previous Education section. Enrollment certification will not be completed and sent to the US Veterans Affairs (VA) until this step is accomplished. The VA has ruled that all prior education at the post-secondary level must be evaluated by the University and transfer credit granted for applicable courses. University of Advancing Technology will follow the regulations regarding the certification of veterans in compliance with the VA.

FINANCIAL AID AND TUITION POLICIES

University of Advancing Technology's (UAT's) Office of Financial Aid is committed to helping students through the entire financial aid process and assisting students in developing a financial plan that best suits their family's needs. The University has Financial Aid Administrators and School Certifiying Officials that assit students in certifying their Veterans Education Benefits and applying for the following federal Title IV student aid programs: Pell Grant, Supplemental Educational Opportunity Grant, Work Study, Direct Subsidized and Unsubsidized Loans (for students) and PLUS Loans (for parents). The University also works with private loan lenders to assist students in meeting their educational expenses.

Questions concerning financial assistance programs, consumer information and requests for financial aid forms may be addressed to the Office of Financial Aid by calling (480) 351-7857 or (800) 658-5744, or emailing FA@uat.edu. Financial aid forms and related information are also available at uat.edu/fa.

1. PAYMENT

1.1 Payment From US Citizens

Arrangements for payment of tuition, housing, resources and fees must be made before the first day of class. For charges of tuition and fees not covered by Federal Title IV Student Financial Assistance, or Veterans Affairs funding, payment must be made to the Office of the Bursar no later than 10 calendar days after the start of the semester. A student with a balance at the end of a semester may be subject to withdrawal. Payment can be made on the UAT Intranet by credit or debit card, by check, money order or by calling (480) 351-7885. Degrees, diplomas, certificates, and transcripts will be withheld until all tuition/fees are paid in full.

1.2 Payment From Eligible Immigrants

Arrangements for the non-refundable seat deposit of $250, non-refundable deposit of $550 towards the cost of insurance and the $1,000 refundable advanced tuition deposit are due by the 15th day of the month prior to the semester start date. Arrangement for payment of all remaining balances for tuition, housing, resources and fees must be made before the first day of class. Students failing to do so are subject to the termination of their student I-20. Payment can be made on the UAT Intranet by credit or debit card, check, money order or by calling (480) 351-7885. Degrees, diplomas, certificates and transcripts will be withheld until all tuition/fees are paid in full.

2. REFUND

Upon a student's withdrawal from UAT, tuition is refunded according to the number of days attended after the start of classes. Students may not use drop/add to withdraw from school. Students must fill out withdrawal paperwork in order to withdraw from the University. Students should make an appointment with Student Services to obtain the University withdrawal form.

Students withdrawing from school receive a refund as follows:

Withdrawal Date After the Start	Tuition Refund
1 through 7 calendar days from the beginning of term	100%
8 through 13 calendar days from the beginning of term	86%
14 through 20 calendar days from the beginning of term	73%
21 through 26 calendar days from the beginning of term	60%
27 through 32 calendar days from the beginning of term	46%
33 through 38 calendar days from the beginning of term	33%
39 through 44 calendar days from the beginning of term	20%
45 through 49 calendar days from the beginning of term	6%
After the 49th calendar day from the beginning of term	No refund

The Withdrawal Date is defined by the withdrawal policy. All refunds are calculated on the basis of a fifteen (15) week semester regardless of individual course length or course start date. Additionally, students will be billed by the Office of the Bursar for any balance remaining after earned financial aid is applied to tuition charges.

For all students that fail to complete the official withdrawal process, or notify the institution of their intent to withdraw, the student's withdrawal date will be the midpoint of the term/semester or last documented academically related activity, whichever is later.

3. TITLE IV FUNDS

3.1 Disbursement of Title IV Funds

In accordance with the Higher Education Act (HEA) as amended, any Title IV or HEA program funds received by UAT will be disbursed to the eligible student's tuition account by the third business day following the receipt of funds. Should a student be deemed ineligible for said funds, those monies will be returned promptly to the source program or lender.

In accordance to U.S. Department of Education requirements, Title IV, HEA loan information for students and parents will be submitted to the National Student Loan Data System (NSLDS) which is accessible by guaranty agencies, lenders, and schools determined to be authorized users of the data system.

3.2 Return of Title IV Funds

Title IV is a term that refers to federal financial aid funds and is awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws, the student may no longer be eligible for the full amount of Title IV (financial aid funds) that the student was originally scheduled to receive.

If a recipient of Title IV grant or loan funds withdraws from the school after beginning attendance, the amount of Title IV earned by the student must be determined. If the amount disbursed to the student is greater than the amount the student earned, unearned funds must be returned.

Up through the 60% point in each payment period, a pro-rata schedule is used to determine the amount of Title IV funds the student has earned at the time of withdrawal. After the 60% point in the payment period, a student has earned 100% of the Title IV funds he or she was scheduled to receive during the period. For a student who withdraws after the 60% point-in-time, there are no unearned funds.

4. TUITION POLICIES

Tuition is subject to change at any time. Current tuition fees can be found at www.uat.edu/tuition

4.1 Military/Veteran Tuition

In order to support its military/veteran students, UAT allows Veteran students utilizing related federal benefits special consideration relating to tuition charges when a military student requests a leave of absence (LOA) or student-initiated withdrawal. This consideration will eliminate, prorate or postpone their tuition according to VA money received.

Veterans are responsible for understanding their military education benefits and keeping track of their tuition and fees, UAT account balance and VA payments.

4.1.1 Department of Defense (DoD) Tuition Assistance

UAT is a proud military friendly university. As an expression of the University's admiration and appreciation of a student's service, active-duty military students participating in the DoD Tuition Assistance (TA) Program that choose to pursue their degree online, may earn up to nine credits per semester, at a discounted tuition rate of $5,450 per semester.

4.2 Tuition and Other Fees

4.2.1 Housing

UAT provides University Housing for students; however, it is separate from the total tuition costs. Students wishing to use financial aid for housing should make arrangements with the Office of Financial Aid. Visit www.uat.edu/housing for updated information.

The housing cost for the 2022 - 2023 housing costs are $10,500 (private bath) or $8,940 (shared bath) for a one-year (12-month) license agreement.

The Residence Life housing deposit is $550 (with a guarantor), or $750 (without a guarantor) and covers the following costs:

> $400 security deposit with a guarantor or $600 without a guarantor (refundable)
> $150 administrative fee (non-refundable)

4.2.2 Parking Permit

Parking Permit fees for students choosing to park on-campus are $75 per semester for a car and $35 per semester for a motorcycle.

4.2.3 Resource

The Resource Fee for all students is $375 per semester, effective September 6, 2022. When required, use of textbooks and electronic textbooks for the duration of a course is provided at no cost. If students wish to permanently own the textbooks, he or she may purchase them on their own. Due to copyright infringements, there may be times where a student will be required to obtain a resource for a class on his/her own as it cannot be provided to the student directly.

4.2.4 Seat Deposit

The non-refundable seat deposit to accompany the enrollment agreement for all students:

> US Citizens $250
> Eligible Immigrants $250

In addition to the non-refundable seat deposit, Non-US Citizen students enrolling as an Eligible Immagrant students will also need to remit the following deposits:

> A tuition deposit (See the Refund Policy for more details) of $1,000.

4.2.5 Student Meal Plan

Student Meal Plans effective September 2022:

> Rookie Plan: 180 meals per semester with $250 in Café Credit included will cost $2,275
> Expert Plan: 220 meals per semester with $300 in Cafe Credit included will cost $2,375
> Grand Master Plan: Unlimited access with $350 in Cafe Credit included will cost $2,450

First year residents living in Founder's Hall will be required to subscribe to one of these plans.

4.2.6 Transfer Credit

The transfer credit fee is $100. This is a one-time fee for all transcripts evaluated during the admissions process.

4.2.7 Tuition Fees – On-Campus

The rate of tuition for on-campus undergraduate students is $12,950, effective May 1, 2022.

4.2.8 Tuition Fees – Online

The rate of tuition for online undergraduate students for students enrolling after May 1, 2022 is $6,950 for students enrolled in nine credits and $8,950 for students enrolled in 12 credits.

4.2.9 Tuition Fees – Graduate

The current rate of tuition for graduate students enrolling after May 1, 2022 is $9,100.

4.2.10 Tuition Lock

UAT has a tuition lock to assist students and their families with the planning of their tuition investment. Prospective students will establish their tuition rate at the time of he/she signs their enrollment agreement and pays the seat deposit and will not be subject to any subsequent increases in tuition as long as they remain continuously enrolled at the University. Changes of start date may forfeit tuition lock.

5. UNIVERSITY SCHOLARSHIPS

5.1 Scholarships – On-Campus

UAT seeks to award scholarships to on-campus, undergraduate students who have demonstrated achievement and potential for success. UAT students are accepted for admission based on a range of qualifications that express the student's vision for the college experience, the value of technology innovation in the world and their desire to attend a tech-centric university; these same attributes are used in determining and awarding UAT's Merit scholarships.

All scholarship recipients must meet the full admission requirements and be enrolled for a program of study within UAT prior to applying scholarship funds toward tuition charges. Scholarship awards and eligibility depend upon the particular scholarship the student is awarded. Living, transportation, resource expenses are the responsibility of the student. The award is applied to the overall tuition amount and is not a cash award. This award is not transferable to another university.

Announcement of scholarship awards will be in the form of letters to the applicant's home address. Eligibility for each type of scholarship is outlined within the following information. Many UAT scholarships have associated deadlines for a) the submission of documentation supporting the award of the scholarship and b) enrollment following notification of a scholarship award. UAT scholarships are for undergraduate and on-campus students only. The only UAT scholarship that this does not apply to is the Continuation Scholarship.

Scholarship recipients are an integral part of the UAT community and should be proud of the award received. Therefore, recipients may be asked to:

> Participate in on-campus events.
> Attend tutoring sessions, as needed.
> Write blog posts based on their experiences at UAT.
> Mentor other students.
> Serve as an ambassador to other students.

When a student transfers from a UAT-Online to an on-campus or SyncFlex major, the student's tuition rate will change to the published rate at the time the student enrolled.

UAT Executive Officers or Directors of the Board may create special circumstance UAT scholarships from time to time. Approval of these scholarships, and the length of time they are available to students, will be at the discretion of the Officers and/or Board.

Unless otherwise stated, these special circumstance scholarships will follow the same requirements as all other UAT scholarships: Scholarship recipients must maintain Satisfactory Academic Progress (SAP) at UAT, stay continuously enrolled at the University, abide by the University Code of Conduct and act with ethics above reproach. The recipients must make satisfactory progress towards completion of UAT degree objectives.

5.1.1 Alma Matter Pride Scholarship

University of Advancing Technology (UAT) offers an Alma Mater Pride Scholarship to students recommended to the University through our alumni network.

Eligibility:
A UAT Alumnus, prior to a submission of an inquiry request, must recommend the applicant.

Award Amount:
$1,000 per semester for a maximum of eight (8) semesters. $8,000 scholarship maximum.

Terms and Conditions:
The recipient(s) must maintain at least Satisfactory Academic Progress (SAP) at UAT, stay continuously enrolled at the University and abide by the University Code of Conduct and act with ethics above reproach. The recipient(s) must make satisfactory progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if recipient is not meeting expectations and requirements outlined in the university catalog.

Renewal:
Scholarship recipients who meet award maintenance requirements will receive the scholarship for up to eight semesters for on-campus undergraduate programs.

5.1.2 Boys & Girls Clubs of Greater Scottsdale Community Scholarship

University of Advancing Technology (UAT) has had a culture-rich history since its inception. Founded in 1983, UAT is committed to supporting and educating young people of all cultures, backgrounds and orientations, to prepare them for an innovative career in technology. For more than three decades, our University has held true to these values and will continue to do so as we grow and advance with the times.

Eligibility:
Any high school junior or senior, who has attended one of the Boys & Girls Clubs of Greater Scottsdale clubs, with proof of high school graduation or GED and having been accepted via UAT's acceptance process is eligible to receive this scholarship. Recipients must attend on campus.

Award Amount:
The BGCGS scholarship award amount is a one-half tuition scholarship to be credited evenly over eight consecutive semesters or four academic years, for a total amount of approximately $50,000.

Terms and Conditions:
The recipient(s) must maintain at least Satisfactory Academic Progress (SAP) at UAT, stay continuously enrolled at the University, and abide by the University Code of Conduct and act with ethics above reproach. The recipient(s) must make satisfactory progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if recipient is not meeting expectations and requirements outlined in the university catalog. The recipient(s) may not receive this scholarship in addition to an academic scholarship.

Renewal:
Scholarship recipients who meet award maintenance requirements will receive the scholarship for up to eight semesters for on-campus undergraduate programs.

5.1.3 Dancers of Ballet Arizona Scholarship

A half-tuition scholarship to attend University of Advancing Technology (UAT) will be awarded to dancers from Ballet Arizona. The relief effort provides retiring dancers an opportunity to pursue higher education outside of ballet.

Eligibility:
We are seeking current and retired Ballet Arizona dancers. Students who have retired from the company must begin classes on campus within one year of retiring and must meet all UAT acceptance requirements.

Award Amount:
The Dancers of Ballet Arizona Scholarship award amount is a half tuition scholarship to be disbursed evenly over eight consecutive semesters or four academic years, for a total amount of approximately $48,500.

Terms and Conditions:
The recipient(s) must maintain at least Satisfactory Academic Progress (SAP) at UAT, stay continuously enrolled at the University and abide by the University Code of Conduct and act with ethics above reproach. The recipient(s) must make satisfactory progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if recipient is not meeting expectations and requirements outlined in the university catalog. The recipient(s) may not receive this scholarship in addition to an academic scholarship.

Renewal:
Scholarship recipient(s) who meet award maintenance requirements will receive the scholarship for up to eight academic semesters.

5.1.4 Honorary Doctorate Scholarship

University of Advancing Technology (UAT) is offering an Honorary Doctorate Scholarship to students recommended to the University by an Honorary Doctorate recipient.

Eligibility:
A recipient(s) of a Honorary Doctorate of Science in Technology, prior to submission of an application, must recommend the applicant. The Honorary Doctorate degree recipient(s) from each calendar year will be allowed one Honorary Doctorate Scholarship to be awarded to the qualified applicant of his/her choosing.

Award Amount:
The Honorary Doctorate Scholarship award amount is a half tuition scholarship to be disbursed evenly over eight consecutive semesters or four academic years, for a total amount of approximately $48,500.

Terms and Conditions:
The recipient must maintain at least a 3.0 CGPA at UAT, stay continuously enrolled at the University, uphold any and all stipulations of the UAT Code of Conduct, and act with ethics above reproach. Recipients must make satisfactory academic progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if the recipient is not meeting expectations and requirements outlined in the University catalog.

Renewal:
Scholarship recipients who meet award maintenance requirements will receive the scholarship for up to eight semesters for on-campus undergraduate programs.

5.1.5 Merit Scholarship

The University is seeking students who demonstrate both strong academic success, a commitment to technology and a deep passion for learning and technology.

Award Amount:
Amounts vary and range from $500/per semester to $5,000/per semester and are determined during the acceptance process.

- Innovator Scholarship: for a total amount of approximately $40,000
- Futurist Scholarship: for a total amount of approximately $32,000
- Premier Thinker Scholarship: for a total amount of approximately $24,000
- Learning Scholarship: for a total amount of approximately $12,000
- Excellence Scholarship: for a total amount of approximately $8,000
- UAT Experience Scholarship: for a total amount of approximately $4,000

Terms and Conditions:
The recipient must maintain at least a 3.0 CGPA at UAT, stay continuously enrolled at the University, uphold any and all stipulations of the UAT Code of Conduct and act with ethics above reproach. Recipients must make satisfactory academic progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if the recipient is not meeting expectations and requirements outlined in the University catalog.

Renewal:
Scholarship recipients who meet award maintenance requirements will receive the scholarship for up to eight semesters for on-campus undergraduate programs.

5.1.6 Murphy's Robotics Scholarship

The University of Advancing Technology (UAT) Murphy Robotics Scholarship is awarded to active participants in the FIRST Robotics Competition, the FIRST Tech Challenge, the VEX Robotics Competition, the TSA-VEX Competition, or the BEST Robotics Competition for their academic success and continued participation in programs related to science, technology, engineering and mathematics. The student must have been a part of a competing team. The mission of each organization clearly aligns with our mission, vision, and core values.

First (For Inspiration and Recognition of Science and Technology) is an organization driven to engage students in science and technology through a mentor- based program that involves leadership, technology skills, engineering, mathematics and teamwork.

Vex is a Robotics Design System that sponsors competitions in order to inspire creativity and innovation in designing and building robots. The competition requires leadership, technology skills, engineering, mathematics, and teamwork.

Best (Boosting Engineering Science and Technology) is an organization driven to engage students in science and technology through a sports-like competition that involves leadership, technology skills, engineering, mathematics and teamwork. The scholarship is for one $40,000 scholarship per Robotics team and is awarded to one student on the team who is participating in the FIRST Robotics Competition (divided as a $5,000 tuition scholarship each semester for eight semester).

Eligibility:
- Be a high school senior.
- Be recommended by their adult sponsor of the student's Robotics team.
- High School CGPA of a 3.5 or higher.

Award Amount:
$5,000 per semester for up to eight (8) semesters for a maximum total award amount of $40,000.

Terms and Conditions:
Eligible students must enroll at the University within one month of the date on the award letter in order to receive the scholarship. The recipient(s) must maintain at least Satisfactory Academic Progress (SAP) at UAT, stay continuously enrolled

at the University and abide by the University Code of Conduct and act with ethics above reproach. The recipient(s) must make satisfactory progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if recipient is not meeting expectations and requirements outlined in the university catalog. The recipient(s) may not receive this scholarship in addition to an academic scholarship.

Renewal:
Scholarship recipients who meet award maintenance requirements will receive the scholarship for up to eight semesters for on-campus undergraduate programs.

5.1.7 UAT Yellow Ribbon Scholarship

As part of the Yellow Ribbon GI Education Enhancement Program, University of Advancing Technology (UAT) will award scholarship funds to eligible on-campus and online undergraduate and graduate students. GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA).

Eligibility:
To be eligible for the UAT Yellow Ribbon Scholarship, students must be eligible for the maximum benefit rate under the Post-911 GI Bill® (Based on service requirements). Therefore, students may be eligible if they:

> Served an aggregate period of active duty after September 10, 2001, of at least 36 months.
> Were honorable discharged from active duty for a service-connected disability and served 30 continuous days after September 10, 2001.
> Are a dependent eligible for Transfer of Entitlement under the Post-911 GI Bill® based on a veteran's service under the eligibility criteria listed above.

Award Amount:
Award amount, a combination of UAT's contribution and a matching contribution from the Veteran's Administration, is determined on an annual basis every August.

5.1.8 Warriors Heart Veteran Scholarship

In 1983, University of Advancing Technology (UAT) was founded by a veteran of the United States Air Force. For more than three decades, the family owned and operated University has been committed to supporting and educating our active military and veterans. UAT has been designated a Military Friendly Institution and offers U.S. veterans a dedicated military finance advisor. Warriors Heart and UAT have a partnership to encourage U.S. veterans to take the next steps towards their future once they are ready to leave the healing community at Warriors Heart.

Eligibility:
Any retired first responder or U.S. veteran coming out of any Warriors Heart healing program with a DD214 stating an Honorable or General, Under Honorable Conditions discharge, with proof of high school graduation is eligible to receive this scholarship. Warriors Heart recipients may attend on campus or online and will go through an expedited application process that UAT has set up.

Award Amount:
The Warriors Heart Veteran Scholarship award amount is a half tuition scholarship to be disbursed evenly over eight consecutive semesters or four academic years, for a total amount of approximately $48,500. Additionally, UAT accepts up to 90 qualifying transfer college credits and can evaluate earned DANTES credits.

Terms and Conditions:
The recipient(s) must maintain at least Satisfactory Academic Progress (SAP) at UAT, stay continuously enrolled at the University and abide by the University Code of Conduct and act with ethics above reproach. The recipient(s) must make satisfactory progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if recipient is not meeting expectations and requirements outlined in the university catalog. The recipient(s) may not receive this scholarship in addition to an academic scholarship.

Renewal:
Scholarship recipient(s) who meet award maintenance requirements will receive the scholarship for up to eight academic semesters.

5.2 Scholarships – Graduate

5.2.1 Continuation Scholarship

University of Advancing Technology (UAT) offers a scholarship to students electing to continue their education at UAT in pursuit of a master's degree.

Eligibility:
All UAT graduates who enroll in one of UAT's master degree programs within one year of graduation.

Award Amount:
The student will receive a scholarship in the amount of $4,400, spread out evenly over the student's first academic year, or two semesters.

Terms and Conditions:
The award is not redeemable for cash. The scholarship can only be applied to tuition and will not apply to housing, meal plans or the Resource fee. The recipient(s) must maintain at least Satisfactory Academic Progress (SAP) at UAT, stay continuously enrolled at the University and abide by the University Code of Conduct and act with ethics above reproach. The recipient(s) must make satisfactory progress towards completion of UAT degree objectives. Progress will be monitored by UAT and the award may be revoked if recipient is not meeting expectations and requirements outlined in the university catalog.

Renewal:
This is a one-time award that will be applied to the student's account.

6. VETERANS CERTIFICATION OF ENROLLMENT

The University's School Certifying Official (SCO) will certify student Veterans' attendance with the Veteran's Administration (VA) for all eligible VA students once they've completed their Request of Benefits (ROB) and the School Certifiying Official has confirmed their entitlement. The ROB is a document the SCO sends to the student confirming the student understands their responsibilities in regards to their Veterans education benefits. All subsequent semesters will be auto-certified by the SCO unless otherwise stated by the student, University withdrawal, graduation or benefit exhaustion. This certification process is designed to satisfy the VA's objective of paying benefits only to eligible student Veterans in an acceptable enrollment status. It is the student's responsibility to understand their entitlement, provisions such as; time attended, course schedule, and/or degree progress, relating to Veterans education benefit they are electing to use.

GENERAL POLICIES

1. AMERICANS WITH DISABILITIES ACT (ADA)

The Americans with Disabilities Act (ADA) was enacted to extend to otherwise qualified individuals' full access to all aspects of public accommodation, including education. The ADA became effective in July 1992 and prohibits discrimination on the basis of disability. Univeristy of Advancing Technology (UAT) does not illegally discriminate on any basis and, in fact, welcomes students with disabilities. The University's facilities have been designed with many special accommodations for people with disabilities and the University inventories many special devices for students which are useful in helping accommodate a variety of physical disabilities.

The ADA is a positive piece of legislation, and the University readily complies with its provisions. The University's ADA policies cover two distinct areas: employment of Americans with disabilities and the servicing (education/enrollment) of these persons.

To prevent discrimination, educational services must:

> Be provided in an integrated setting if possible.
> Make reasonable accommodations unless a modification would result in an undue hardship to the institution, or a fundamental alteration of the services provided.
> Furnish auxiliary aids and services, when necessary.
> Remove architectural and structural communication barriers in existing facilities when readily achievable.
> Provide readers, note-takers and tutors as required.

The University is not required to provide:

> Personal devices such as wheelchairs.
> Individually prescribed devices (e.g., glasses, hearing aids).
> Services of a personal nature (e.g., assistance in eating, dressing or toileting).

Extra charges to cover accommodation may not be made. Auxiliary aids are not required if they would result in an undue burden (significant difficulty or expense) being placed on the school.

Physical barriers must be removed; however, the University has an ADA-compliant facility at this time and significant effort has already been made to make the facility fully accessible. All individuals involved in recruiting, training and serving students must ensure that students be admitted, trained and serviced equally with no discrimination for disabilities. All efforts should be made to find cost effective ways of accommodating students with disabilities. Student Services should be contacted in all cases of disabled applicants, in order that proper attention is paid to finding suitable and reasonable accommodations.

1.1 Procedure

Individuals requesting accommodation for a specific disability, must provide a written request to the Student Services department (adagroup@uat.edu) listing the requested accommodations, along with documentation by their qualified healthcare provider or disability specialist (of their disability) when they apply to the University.

Requests for accommodations will be accepted at any time in a student's program of study; however, students must realize that it may take the University a longer time to comply with certain accommodations than others, so alerting the University at the time of admission provides the best service for the student. A student who is currently enrolled in the school should provide the above materials to Student Services when requesting accommodations.

A University accommodation committee will be formed for each request, and will determine whether the documentation provided is appropriate and adequate to establish covered disability under the ADA. Student Services will maintain the request and supporting documentation on the student. The University will enter into an interaction with an otherwise qualified individual who has a covered disability with the stated purpose of ascertaining whether there is a reasonable accommodation that is both available and appropriate to enable the student to pursue a fully integrated educational experience. It is not the responsibility or duty of the University under the ADA to reduce or change its academic standards in connection with a request for accommodation, but rather to ensure that an otherwise qualified person with a covered

disability receives an opportunity to receive a fully integrated educational experience through the use of reasonable accommodation.

Students who have requested an accommodation from the school and feel that they are being discriminated against should immediately report this to Student Services.

2. CAMPUS SAFETY POLICY

Campus safety is promoted and maintained through diligent observation by the entire community supported by trained safety personnel and deployed safety technology.

UAT is an open campus for all active students and alum to use resources for academic purposes. Students and alum are expected to use the campus resources and spaces appropriately and as intended. The University is committed to maintaining this safe and secure learning and working environment for all students, employees and guests. All University students, employees and guests are ultimately responsible for their own personal safety and the security of their belongings. The following safety and security principles are in place to aid the University community in maintaining the safe and secure campus that we enjoy today.

2.1 University Safety Philosophy

In addition to the express role of each member of the University community, the University has established an Office of Campus Safety which has as its primary Key Responsibility Area, the coordination and promotion of the safest environment possible for all students, faculty and staff. The University sees itself as a unique community of technologically sophisticated students and staff that have learned to collaborate and team together to address a myriad of challenges both educationally and professionally. The commitment to safety at the University is based upon a philosophy that the institutional capacities to team and use technology produce results that are superior to simple individualistic approaches. Consequently, the safety philosophy is based upon three key elements:

1. Everyone is responsible to be on alert and to identify safety issues.
2. Timely warning and communication must be accomplished by well-designed solutions.
3. Each member of the University community needs to feel empowered to take appropriate action to maximize safety for themselves and for other members of the community.

These principles are set forth to create a foundation of safety systems that may be designed and employed by the Office of Campus Safety as well as all of the institutional departments of the University. These principles may find expression in the interactions with students, faculty and staff, and ultimately be strengthened by the coordinated efforts of the Office of Campus Safety.

2.2 Personal Safety and Community Awareness

Campus safety requires that students and employees assume reasonable responsibility for their own personal safety. In this regard all students and employees must take common sense precautions to assure the safety of themselves and other members of the University community. Students and employees are encouraged to attend safety and security related events to learn more about personal responsibility and protection. Students and staff should email safety concerns to safety@uat.edu.

2.2.1 If You Witness an Emergency Situation

If a student witnesses emergencies involving personal safety or property call 9-1-1 immediately and then report the incident to Student Services or the Office of Campus Safety. All other suspicious activity and hazardous conditions should be reported to a designated safety officer on duty. It may also be prudent to contact the Tempe Police by calling the non-emergency phone number: (480) 350-8311.

2.2.2 Timely Warning

Integral to the University's Safety Philosophy is the principle that any imminent or sustained danger to the safety of our community must be communicated as quickly and broadly as feasible to give necessary information that will enable students and employees to take reasonable steps to ensure their own individual and collective safety. Warnings must utilize multiple communication paths such as emails, text message and person-to-person communication. In addition to the aforementioned, the University, through the Office of Campus Safety, will provide students and employees notice of any sustained or prolonged danger through technological communication channels. The warning by the Office of Campus Safety will contain information necessary to employ all appropriate steps for each member of the community to maximize his/her safety. All

incidents must be recorded immediately in the system of record to allow for easy access for review of pertinent information regarding a reported incident.

In the event of an imminent threat to the safety of students or employees all members of the community are expected to utilize the emergency@uat.edu email group to communicate the nature and extent of the threat throughout the University email system.

2.3 Flammable Material

The University intends to maintain a safe environment for both students and employees. Flammable liquids and gases pose a particular hazard when stored or used in living areas. It is our intention to provide information and procedures to the UAT community on how to deal with and handle flammable liquids. The procedures will also address issues concerning open fires and the use of fire pits. UAT works closely with the Tempe Fire Department to ensure we adhere to the city and state fire codes.

2.3.1 Combustible Hazardous Materials

Flammable liquids, gases, solids and explosives, including fireworks, may not be possessed or used on University property. The Office of Campus Safety may have the authority to approve the use of flammable liquids to be used by employees of UAT This may include but not limited to the Café and Founders Hall (outside grills), welding and the use of gasoline powered tools.

For information concerning the fire code visit: www.iccsafe.org.

Issues that may be of concern are:

1. Permits for open flames, bonfires
2. Hot ashes and spontaneous ignition sources
3. Deliberate of negligent burning
4. Location for open burning
5. Bonfires
6. Recreational fires
7. Open flames
8. People attending events
9. Location of storage outside of building

2.3.2 Explosives and Improvised Explosive Devices

Explosives are extremely hazardous and it is illegal and against University policy to possess either manufactured or improvised explosives on the University campus and University buildings. Use and storage of explosives is strictly controlled by local, state and federal laws and are not allowed on campus. The Bureau of Alcohol, Tobacco, and Firearms (BATF) regulates types of explosives from fireworks to dynamite. See www.gpo.gov/fdsys/pkg/FR-2013-10-28/pdf/2013-25370.pdf for the latest list of such materials.

2.3.3 Flammable Liquids and Gases

The hazard of flammable liquids and gases are typically created by the evaporation of fuels or solvents in confined spaces, mixing with air to form a flammable region and ignition by an open flame, pilot lamps, stove, cigarette lighter or faulty wiring. Gasoline, acetone, camping stove fuel (white gas or butane), lighter fuel and propane torch canisters are common items that can supply the fuel. These materials must not be used or stored in student living areas. Certain household combustibles such as hair spray and nail polish are exempt from this requirement and may be possessed by students in their living areas. Mopeds, motorcycles and scooters must not be stored inside residences or parked outside next to an exit, since the gas shut-off valves can leak or not be properly used, creating a flammable vapor hazard. UAT provides our community with approved parking on the west side of the campus for mopeds, motorcycles and scooters.

2.4 Jeanne Cleary Disclosure of Campus Security Policy and Campus Crime Statistics Act

In compliance with Federal law, Title 34 CFR part 668.46 the University makes available to students, employees and prospective students campus crime statistics as required by the Department of Education regulations. Crime Statistics are available at: www.uat.edu/crimestatistics.

For more information, the University's current Annual Security Report is available at: www.uat.edu/annualsecurityreport. Interested parties may print a paper version of the Annual Security/Fire Report from this link or contact the Office of Campus Safety or a member of Student Services to obtain a paper copy. If a student or parent would like a copy of the Annual Security Report, he or she may request a copy by emailing safety@uat.edu with their full name and mailing address.

Questions, concerns and comments regarding campus safety should be directed to the Campus Safety Manager at (480) 351-7896 or emailed to safety@uat.edu.

2.5 Missing Person

All reports of students missing from UAT housing, including both on and off-campus, UAT housing (hereinafter Residence Life), shall be directed to the Office of Campus Safety. Upon an official report of a missing Residence Life student, the Office of Campus Safety may conduct an investigation to determine whether the Residence Life student is a missing person in accordance with this policy. A Residence Life student will be deemed and is therefore determined to be a missing person if he or she has been missing for more than 24 hours, after the official report, without any known reason and contrary to known patterns of behavior.

2.5.1 Notification Procedures

The Office of Campus Safety must notify Tempe Police within 24 hours of a determination that a Residence Life student is a missing person. Also within 24 hours of the missing person determination, the University must initiate emergency contact procedures in accordance with the Residence Life student's designation, this policy and legal obligations.

All Residence Life students shall have the opportunity to designate an individual and/or to provide confidential contact information to be used for notification, if the student is determined to be a missing person. If a Residence Life student is under 18 years of age and not emancipated, however, the University will notify the student's parent or guardian as soon practicable, but in no case later than 24 hours from the time the student is determined by the Office of Campus Safety to be a missing person.

2.6 Weapons

The possession, display or storage of weapons is prohibited on all land and buildings owned, leased or under the control of UAT or its affiliated or related entities, in all UAT owned or leased vehicles on or off campus and at all UAT or UAT affiliate-sponsored events and activities, except as provided in Arizona Revised Statutes 12-781. Any person found in violation may be subject to all applicable state and federal laws, University policy and the Student Conduct Code. UAT students and employees are required to report violations and suspected violations of this policy to UAT Office of Campus Safety, immediately.

Exceptions:

1. A certified peace officer performing his/her official duties.
2. Any other exception to this policy must be approved by a UAT Executive Officer.

3. CODE OF CONDUCT

The UAT community consists of students, faculty and staff, all of whom are expected to maintain a high standard of ethics, behavior and purpose. UAT students are important and vital members of this community because they represent the University in all of their personal and public endeavors, both on and off campus. Students carry the obligation to conduct themselves in a manner that is responsible, professional, ethical and beneficial to themselves and other members of the University community. These expectations hold true on campus, in the UAT Residence Life Community and wherever they represent the University in any capacity.

In carrying forth the culture, traditions and values of the greater world community, UAT students shall:

1. Promote and exemplify good digital citizenship and high ethical standards. Infractions of this order include, but are not limited to, illegal hacking, downloading/uploading of offensive material, digital theft or other actions which contradict UAT policies and values, good ethical standards or local, state and federal laws.
2. Respect differences. The health, welfare, beliefs and intentions of others are not always our own, but we must protect them as if they were.
3. Respect the institutional values of UAT and understand that positive change at UAT occurs through considered, balanced dialogue between students, faculty and staff, as well as the community at large.
4. Respect and engage in different learning and teaching styles and value the pursuit of a lifetime of learning.

5. Promote and embody thinking skills.
6. Promote and embody teamwork.
7. Act with honesty and diligence with respect to their responsibilities to the University and its facilities, including registration, completion of course materials and observance of UAT email policies, which prohibit the sending of mass emails.
8. Abide by UAT's policies related to possession of weapons, illegal drugs or alcohol on school premises or in the UAT Residence Life Community.
9. Prevent or report behavior creating a safety hazard to other persons at the school.
10. Create an environment that is free from disobedient or disrespectful behavior toward UAT staff, students and faculty. Engaging in intimidating, abusive or harassing language or behavior toward fellow students and UAT faculty and staff diminishes the growth and community of others and is therefore prohibited.
11. Exemplify the best forms of citizenship. Criminal activity, including physical or intellectual theft of any type, larceny, fraud, cheating and violations of any local, state and federal laws, will not be tolerated at UAT.
12. Avoid classroom disruption or any type of unwarranted interruption of other students' learning experience.
13. Respect UAT equipment and facilities so that they will be available to other learners. Legal infractions will be referred for prosecution to appropriate law enforcement authorities.
14. Maintain the highest levels of academic integrity. UAT students are part of a diverse learning community. Therefore, students who engage in actions that are academically dishonest are in violation of the Code of Conduct. These actions include but are not limited to cheating, deceit and plagiarism. The University defines plagiarism as a willful assertion that the work being submitted is of their own individual thought and does not credit work contributed by another party.

3.1 Student Responsibility

In addition to the codes of student conduct, students who attend UAT are expected to embody the following responsibilities that are closely associated with excellence in collegiate education:

1. Timely attendance, due preparation and active engagement in classes and related learning activities.
2. Timely and regular completion of assigned homework to the best of their individual abilities.
3. Taking personal responsibility, while working closely with the University, for fulfilling all requirements toward graduating in their program of study.
4. Promoting good and timely communication by monitoring and promptly answering all communication from the University, including phone messages, email, personal notification or written communications.
5. Promoting collegiate collaboration by engaging in conversations with instructors in areas of learning, academic difficulty and future goals.
6. Taking personal responsibility for their educational progress by keeping track of grades and assignments and ensuring that all paperwork required by the University is completed on time and turned in to the proper department.
7. Participating promptly in University information gathering systems such as evaluations, surveys and other feedback mechanisms.
8. Taking an active role in the UAT community.
9. Reading and adhering to the Code of Conduct.
10. Observing all policies of UAT as stated in this catalog.

3.2 Consequences

Students who are found to be in breach of the Code of Conduct Policy are subject to consequences set forth through a University Disciplinary Committee. These consequences may vary based on the type and severity of the Code of Conduct breach. Examples of consequences include mandated counseling, temporary suspension, expulsion from the University or any other action as deemed appropriate by the Committee. The Dean of Students and Academic Operations will form the Committee of at least four University representatives from various departments and each infraction will be considered on a case-by-case basis.

Instructors, staff and fellow students are empowered to document and report instances of academic dishonesty. Failure in this area includes, but is not limited to, cheating, deceit and assisting others in the act of performing academic dishonesty and plagiarism. Fraudulent behavior on the part of students with respect to registering for courses or engaging in activities related to completing coursework (tests, assignments, etc.) will not be tolerated. The following process may be followed in instances of academic dishonesty:

1. Instructors must notify Student Services of a potential violation of academic dishonesty providing specifics on the violation and evidence.
2. Student Services will review the evidence and speak with the student to determine if an actual violation has occurred.
3. Student Services will advise the instructor and the student if the violation will proceed to the Disciplinary Committee or if the student will be resubmitting the assignment.
4. Instructors may enforce individual academic integrity policies through the course syllabi.
5. If the violation progresses to the Committee, Student Services will counsel students on academic dishonesty and begin the investigation by obtaining a written statement from the student.
6. Once the statement is received, the academic integrity violation will be presented to the Committee for review.
7. Consequences for a violation of academic integrity will depend upon severity and the student's academic history. Consequences may result in temporary suspension or expulsion from the University.

If the student is dissatisfied with the outcome of the investigation and determination made by the Disciplinary Committee, the student has the right to file an appeal with the Dean of Students and Academic Operations. The appeal must be submitted in writing within one (1) week of the Committee decision being delivered to the student. The appeal letter must state the reason for appeal and provide supporting evidence. If the appeal is granted, the student may request to be present at the Committee review of the appeal and a new outcome determined as necessary.

4. COMPUTER DISCLAIMER

Neither UAT nor our learning management system provider is responsible for lost files, data, homework, email, computer generated graphics or computer projects loaded on the UAT campus network or personal computers. Students are responsible for maintaining current and viable backup material of all of their work on their own media. In addition, the student is responsible for making sure that all assignments are delivered to instructors in a timely fashion regardless of whether the computer network, email or Intranet is functioning properly.

UAT is not responsible for events or conditions, either natural or man-made, occurring externally to the immediate UAT campus environment or as a result of externally produced actions.

5. COPYRIGHT

In accordance with the Higher Education Opportunity Act of 2008, UAT is committed to informing the public about U.S. Copyright Law.

5.1 Responsibilities

The University provides resources for University- related duties and responsibilities. The improper or unethical use of these resources is strictly prohibited. Unauthorized copying, downloading, uploading, sharing, installing or distributing of copyrighted material for which University of Advancing Technology (UAT) or the end user does not have express permission to use or does not fall within Fair Use guidelines is strictly prohibited.

5.2 Consequences

Disciplinary action may include referral to the Disciplinary Committee, and in cases of repeat offenses, action may also include loss of access to UAT networks. In addition to any University action, the copyright owner may also take further legal action against the individual concerned.

5.3 Summary of Civil and Criminal Penalties

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or statutory damages affixed at not less than $750 and not more than $30,000 per work infringed. For willful infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense. For more information, please see the website of the U.S. Copyright Office at www.copyright.gov.

5.4 Notifications

Under the terms of the Digital Millennium Copyright Act (DMCA), the University has filed a designation of agent for notifications of claims of infringement pursuant to Section 512(c) of the Copyright Act. Any take down notices or notices of copyright infringement should be sent to the designated agent on file.

6. DRESS CODE

Appropriate dress and footwear for the collegiate environment are expected at all times.

7. DRUGS AND ALCOHOL

The Drug-Free Workplace Act of 1988 and the Drug Free Schools and Communities Act Amendments require UAT to adopt and put into effect a program to prevent the unlawful manufacture, distribution, dispensation, possession or use of illegal drugs or alcohol by students and employees on University property or in University facilities or at University events and to offer an anti- drug and alcohol abuse program. UAT is committed to maintaining an environment free of illegal drugs and alcohol abuse. The Drug-Free Schools and Communities Act Amendments of 1989 (effective 9-1-90) require the distribution of the following information to all students and employees.

7.1 College Policy on Drugs

Sale, use, possession or distribution of illicit drugs or controlled substances is prohibited in college buildings or grounds, at college sponsored events or in university-sponsored housing. The term drug covers all controlled substances defined by Federal Law. As stewards of federal funds, the University defers to federal Law over state law.

Offenders are subject to college discipline, up to and including dismissal from the college or termination of employment and referral for prosecution. An employee convicted of any violation of the criminal drug statutes for activities in or on property owned or controlled by the University, at activities sponsored by the University or in University-sponsored housing must notify his/her manager or dean of the conviction, in writing, within five calendar days of conviction.

7.2 Obligations of the College

The University must notify the appropriate federal agency (e.g., Department of Education) of the conviction of any employee or student worker paid in whole or in part by agency funds within ten days of receipt of the notice of conviction. The University must also make a good faith effort to maintain a drug-free workplace, offer drug awareness education, assist students and employees seeking treatment or rehabilitation, notify employees and students of its policy and implement and enforce the policy.

7.3 College Policy on Alcohol

The sale, dispensation or consumption of alcoholic beverages is prohibited on campus or in the UAT Residence Life Community unless specifically authorized at an event approved by the President of the University. In all other cases possession, consumption or distribution of alcoholic beverages is prohibited.

7.4 Students

Compliance with the provisions of the University drug and alcohol policies is a condition of attendance at the University. Violators of these policies are subject to discipline, up to and including expulsion from college, eviction from University-sponsored housing and referral for prosecution.

7.5 Student Workers

Student workers are subject to discipline, up to and including termination of employment, referral for prosecution or corrective action as the college deems appropriate.

7.6 LOCAL, STATE AND FEDERAL LAWS

7.6.1 Campus Open Container Policy

Permission to consume alcohol on University property at a specific event must be requested in writing and granted in writing by the President of the University. For the dispenser of alcoholic beverages, the following provision of the Arizona state law pertains:

7.6.2 Minimum Purchase Age

No person shall sell, deliver, give away, cause, permit or procure to be sold, delivered or given away any alcoholic beverage to someone under, or appearing to be under, the age of 21 years.

The dispenser is obligated to demand proof of legal age whenever in doubt. For the consumer of alcoholic beverages, the following provision of Arizona state law pertains:

7.6.3 False Identification
In Arizona, anyone under the age of 21 years who presents false or fraudulent written identification in order to secure alcoholic beverages is guilty of a criminal offense.

7.6.4 Possession of Marijuana
Possession of illegal drugs defined under federal law are not allowed on Campus. This Includes medical marijuana and recreational use of marijuana.

7.6.5 Drinking and Driving
All states prohibit drinking and driving. In Arizona, it is unlawful to operate a motor vehicle if the operator or person in control of the vehicle is impaired in the slightest degree. A person convicted may serve ten days in jail or more and pay a fine of not less than $250.00.

7.6.6 Arizona State Motor Vehicle Law
The rules and penalties for drinking and driving apply to driving a motor vehicle while under the influence of illicit drugs.

7.7 Counseling, Rehabilitation and Re-Entry Services
Students seeking counseling in college or referral to community services for drug and alcohol abuse should call or visit Student Services.

For additional assistance or counseling, students can contact the following agencies and programs

Banner Behavioral Health Services
(602) 254-HELP (4357)
7575 East Earll Dr., Scottsdale, AZ 85251

Saint Luke's Behavioral Health Center
(602) 251-8535/(800) 821-4193
1800 E. Van Buren St., Phoenix, AZ 85006

Terros
(602)-685-6000, 1-800-631-1314
www.terroshealth.org

Valley Wise Behavioral Health Center
(602) 344-5011
570 W. Brown Rd., Mesa, AZ 85201

La Frontera EMPACT Suicide Prevention Center
(480) 784-1514
618 S Madison Dr., Tempe 85281

East Valley Substance Abuse Center
(480) 833-8122
1550 E. University Dr., Mesa, AZ 85203

Alcoholics Anonymous/Salt River Intergroup
(602) 264-1341
3215 E Thunderbird Rd., Phoenix 85032

24-Hour Crisis Hotlines:
988—Suicide and Crisis Lifeline (National Text Line)
741741—Crisis Text Line (National)
(800) 656-HOPE—RAINN Sexual Assault Hotline (National)
(800) SUICIDE—HopeLine Suicide Hotline (National)
(480) 784-1500—Suicide/Crisis Hotline (Maricopa County)
(866) 205-5229— Suicide Prevention Hotline (Arizona)
(480) 736-4949—Sexual Assault Hotline (Maricopa County)

8. FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are "eligible students."

> Parents or eligible students have the right to inspect and review the student's education records maintained by the University. The University is not required to provide copies of records unless, for reasons such as great distance, it is impossible for parents or eligible students to review the records. UAT may charge a fee for copies.

- Parents or eligible students have the right to request that the University correct a record which they believe to be inaccurate or misleading. If the University decides not to amend the record, the parent or eligible student then has the right to a formal hearing. After the hearing, if the school still decides not to amend the record, the parent or eligible student has the right to place a statement with the record setting forth his or her view about the contested information.
- Generally, the University must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows the University to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):

    - School officials with legitimate educational interest;
    - Other institutions to which a student is transferring;
    - Specified officials for audit or evaluation purposes;
    - Appropriate parties in connection with financial aid to a student;
    - Organizations conducting certain studies for or on behalf of the University;
    - Accrediting organizations;
    - To comply with a judicial order or lawfully issued subpoena;
    - Appropriate officials in cases of health and safety emergencies; and
    - State and local authorities, within a juvenile justice system, pursuant to specific State law.

UAT may disclose, without consent, "directory" information such as a student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, the University must tell parents and eligible students about directory information and allow parents and eligible students a reasonable amount of time to request that the University not disclose directory information about them. The University must notify parents and eligible students annually of their rights under FERPA.

8.1 Definitions

8.1.1 School Official

A School official can be a person:

- Employed by the college in an administrative, supervisory, academic, research or support staff position (including law enforcement and health staff personnel),
- Elected to the Board of Directors,
- Serving as a student representative on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his/her tasks,
- Or a company employed by or under contract to the college to perform a specific task, such as, an agent, an attorney, an auditor, housing, resident life or an outsourced service provider.

8.1.2 Legitimate Educational Interest

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his/her professional responsibility.

8.1.3 Educational (Student) Records

These are records that are directly related to a student and are maintained by the educational agency or institute. These records can include, but are not limited to, academic records, financial aid records and placement records.

8.1.4 Directory Information

Directory Information is defined as information contained in an educational record of the student that is not generally considered harmful or an invasion of privacy if disclosed.

UAT has designated the following items as directory information in alignment with FERPA guidelines:

- Student name
- Address
- Personal email address
- Phone number
- Date and place of birth
- Hometown
- Degrees, certifications, awards and scholarships received and dates
- Dates of attendance (current and past)
- Enrollment status
- Participation in officially recognized activities, clubs or sports

- > Most recently attended educational institution
- > Major field of study
- > Academic levels
- > Photographs and videos
- > Academic Awards and honors
- > Scholarship Awards

Students wishing that no directory information be released must submit written notification to the Office of the Registrar at the University campus in Tempe, Arizona: registrar@uat.edu.

9. INDEPENDENT HOUSING

Residence Life Community costs are allocated to each student's account and housing deposit is required at the time of move-in. Financial aid may be used to cover the Residence Life Community costs, but all paperwork must be completed and approved prior to moving in.

There are limited exceptions to this policy (for example, if a student is married or living with parents or guardians within a designated mileage from campus). A student who wishes to reside outside of the Residence Life Community must submit this application to the University and furnish appropriate documentation or other written information supportive of the request 30 days prior to the semester the student wishes to commence residing outside the Residence Life Community.

A student should inquire in advance about requesting permission from the University for independent housing in order to avoid inconvenience for the student and the University.

Prior to entering into any type of off-site rental or lease agreement, a student should secure written authorization for independent housing. Any questions should be directed to the Director of Founder's Hall (Founders@uat.edu). It is the student's responsibility to follow-up and maintain communication with the New Student Advisor to ensure that the Application for Independent Housing was received and that determination of final decision was made.

Students can obtain an electronic Application for Independent Housing from his/her New Student Advisor or it can be mailed to the following address:

University of Advancing Technology
ATTN: New Student Advisory Team
2625 W. Baseline Rd.
Tempe, AZ 85283-1056

10. LIBRARY

Being successful as a technologist requires competency and comfort in searching wide ranges of resources, evaluating what is found and making decisions that guide and shape creations. The library is not a physical space, but a virtual environment that supports this growth by providing a range of resources supporting academic and technology inquiry. Library further guides students on effectively searching, retrieving, and analyzing information needed to build technology solutions. Students are provided access to resources to support him or her as they pursue their degrees. The library further provides students guidance in applying effective research and inquiry techniques.

10.1 Library Collection

UAT's library collection consists of items and resources supporting student study for courses outside of class or lab. Library resources support projects, competitions and creations that UAT students undertake. The library collection can consist of items and resources available for check out, download or viewing.

UAT's library collection evolves to match its majors and the trajectories that technology takes. The collection also supports the conceptual, business, design, aesthetic and human topics that complement programs through general education and core curriculum.

10.2 Equipment Lending

UAT is committed to ensuring resources are available for learning. All equipment that can be borrowed and taken from the library by community members must be borrowed equitably and responsibly by all knowledgeable students and employees regardless of degree or job duties. All University students and employees may be held responsible for any damage to equipment in their care. Ramifications for damage done to equipment may include fines up to the entire replacement cost of the item(s). All University students and employees may also be held responsible for disruptions caused by failure to return equipment in a timely manner. Ramifications for failure to return equipment in a timely manner may include loss of lending

privileges for up to one semester. Equipment is to be used for educational purposes and is not intended for commercial purposes.

11. MASS COMMUNICATION

In order to ensure that communications between UAT, its students and employees are consistent and complete, all communication that is to be distributed to students or employees must adhere to all University policies and procedures.

In order to increase the effectiveness of communication, various communication tools and services are available to both staff and students. Anyone who needs to communicate with staff or students may make requests through the Intranet:

> Text Messaging: University wide text messaging is reserved for marketing purposes and safety concerns only. Marketing is the only department that may send out non-emergency text messages.
> Emergency Communications: E-mail-mass mailing is reserved for the UAT President, Provost or their designee, Human Resources and the Office of Campus Safety. In an Emergency, any student or staff member may email emergency@uat.edu which will be evaluated for further distribution and may be sent to every UAT e-mail address. Emergency text messages may only be sent out by the UAT President, Provost or their designee, regarding any emergency concerns.
> Non-emergency safety issues: any student or staff may e-mail safety@uat.edu to report a non-emergency safety issue.

All other communication tools not listed here should go through the work order system or other proper channels.

12. PARKING

The Office of Campus Safety (OCS) is responsible for monitoring and controlling parking on campus. University students, guests and employees are expected to park as directed in authorized parking areas and to take responsibility for their vehicle and property.

Unauthorized vehicles on campus that do not display a UAT parking decal or visitor permit may be subject to the University's parking sanctions. Vehicle owners are responsible for their own personal property and are advised that any fees resulting from unauthorized parking are the vehicle owner's personal responsibility.

Parking permits are sold on a semester basis and are required for parking on campus. Parking on the UAT campus and other authorized parking areas may be used at ones own risk. UAT is not liable for any theft or damage to a vehicle or to the personal property within a vehicle.

Parking may be open to all UAT community members for special occasions determined by the office of Organizational Development.

Per the Jeanne Clery Act, all universities must report certain crimes which occur on campus or properties owned/rented by a university. Vehicle theft, burglary/attempted burglary from vehicles are included in this reporting. Any crimes should be reported to OCS as soon as possible.

13. PUBLICITY AND INTELLECTUAL PROPERTY

UAT provides substantial University resources to its students for educational and creative uses. Students create but grant the University a non-exclusive, royalty-free license to use, copy, display, describe, mark-on, modify, retain or make other use of the student's work. The University may also use both the student's likeness and the student's work in its marketing, promotional and instructional materials.

14. STUDENT GRIEVANCE

Students who have concerns dispute or complaints about an experience at University of Advancing Technology (UAT) must follow the UAT grievance procedure. Students have the right to file criminal complaints immediately and anytime during the process.

14.1 General Grievances

Students who have concerns, disputes or complaints about an experience at University of Advancing Technology (UAT) must follow this procedure:

14.2 Informal resolution process:

1. The first stage of the University's grievance process is for the student to bring thier concerns to the attention of the individual most directly associated with the concern. Through email and face-to-face discussions, most matters can be resolved.
2. If discussions fail to resolve or answer the concern to the student's satisfaction, the student shall then contact Student Services. Student Services will seek to answer and/or resolve the student's concerns.

If informal discussions with Student Services are not sufficient, the formal process will be applied as follows:

1. The student must document and provide specific evidence supporting their grievance in writing to Student Services. Using this information, Student Services will work to resolve concerns through investigation, advocacy and any other methods they may deem appropriate.
2. If the student is dissatisfied with the resolution provided by Student Services and wishes to seek further resolution of their concerns, they must then submit a formal grievance to a Student Services Coordinator who will record the date of the submitted document and deliver it to the Student Grievance Committee. Any additional documentation can be submitted at this time and must be submitted in writing. The Student Grievance Committee will meet as needed to review submitted concerns. A result of the committee's review may include a period of investigation, but in any case, the Student Grievance Committee will notify a student who has submitted a complaint of its decision within three (3) business weeks of the meeting when the formal complaint was officially submitted. Formal complaints to be considered must contain all of the following elements:

    a. Be addressed to the Student Grievance Committee, UAT, c/o Student Services;
    b. A statement that the document is a formal complaint or grievance;
    c. The specific concerns to be addressed;
    d. Description of all the actions already taken;
    e. Specific evidence supporting the listed concerns;
    f. The student's name, signature, address, phone number and actual date submitted to the committee;
    g. Be submitted in a timely fashion, normally within forty-five (45) days of the occurrence.

3. A student may request a rehearing of the decision of the Student Grievance Committee and appear in person to present his/her grievance. A student desiring a rehearing must file the request for rehearing within thirty (30) days of the committee's original decision.
4. If the student complaint cannot be resolved after exhausting the University's grievance procedure, the student may file a complaint with the Arizona State Board for Private Post-Secondary Education. The student must contact the State Board for further details.
5. The State Board address is:
   1740 W. Adams
   Phoenix, AZ 85007
   Phone: (602) 542-5709
   Website: https://ppse.az.gov
   Complaint Link: https://ppse.az.gov/resources/complaint-forms.
6. UAT-Online (distance education) students, who have completed the internal institutional grievance process and the Arizona State Board for Private Post-Secondary Education complaint process, may submit non-instructional complaints to the AZ SARA council. Complaints to AZ SARA can be made at https://azsara.arizona.edu/complaints.
7. If, after exhausting these procedures, a controversy still exists, it shall be settled by arbitration of the Better Business Bureau in Phoenix, Arizona, or under the rules of the American Arbitration Association and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

TITLE IX POLICIES

1. POLICY STATEMENT

1.1 Nondiscrimination

The University of Advancing Technology (UAT) is committed to providing equal opportunity to its students and employees, and to eliminating discrimination when it occurs. In furtherance of this commitment, UAT strictly prohibits discrimination or harassment on the basis of race, color, religion, religious creed, genetic information, sex, gender identity, sexual orientation, age, national origin, ancestry, veteran status or disability status.

UAT Title IX policy articulates how the University will respond to reported allegations of sexual misconduct involving students, including sexual assault and provides a consolidated statement of the rights and responsibilities under University policies and Title IX, as amended by the Violence Against Women Reauthorization Act of 2013. The policy describes how areas within the University will coordinate the provision of interim remedies and the prompt and effective investigation of allegations of Prohibited Offenses.

This policy applies to all members of the University community, including students, employees, faculty, staff and groups using the University facilities. It further applies to on- or off-campus behavior involving students. The University does not discriminate on the basis of sex in its educational programs and activities. (Implementing Title IX of the Education Amendments of 1972, 20 U.S.C. §§ 1681 et seq.)

Questions regarding Title IX may be referred to the Title IX Coordinators:
Brandi Beals and/or Renee Price
University of Advancing Technology
2625 W. Baseline Road Tempe, AZ 85283
TitleIX@uat.edu
(480) 351-7879

1.2 Sexual Misconduct

UAT is proud of its tradition of having an environment in which all individuals are treated with courtesy, dignity and respect. Every student, instructor and employee has the right to experience a professional atmosphere that promotes equal opportunities and prohibits discriminatory practices, including sexual harassment as defined and otherwise prohibited by state and federal law. Sexual harassment in any form by and between employees, students and campus visitors is prohibited at UAT. These expectations hold true on campus, in the UAT Residence Life Community and wherever they represent the University in any capacity or when conduct is sufficiently serious to limit or deny a student's ability to participate on or benefit from UAT's educational program.

Upon receiving a complaint of Sexual Misconduct (see definition below), UAT will take prompt, reasonable, and timely steps to stop any such conduct, prevent its recurrence, determine what occurred and remedy any subsequent effects. UAT provides all parties with opportunities to present facts, identify witnesses and will reach reasonable conclusions based on the evidence collected.

UAT will take appropriate action against those engaging in Sexual Misconduct, including disciplinary measures when warranted, up to and including termination of employment, and up to and including suspension or expulsion of students.

2. POLICY SCOPE

This Policy applies to all current and prospective students, employees, volunteers, interns, vendors (including their employees), independent contractors, visitors and institution-affiliated organizations.

This Policy jurisdiction applies to Sexual Misconduct that occurs within the United States:

- On institution-controlled property,
- At institution-sponsored events;
- School programs or activities on or off-campus;
- Where the conduct has continuing adverse effects on any member of the UAT community in any UAT program or activity, even if it occurs outside of an academic term or when the student is not currently enrolled at the UAT.

Members of the UAT community are encouraged to promptly report Sexual Misconduct to UAT, regardless of where the incident occurred or who committed it. An individual who has experienced Sexual Misconduct is encouraged to immediately seek assistance from a medical provider and report the incident to local law enforcement. Reports to UAT and law enforcement may be pursued simultaneously.

Even if UAT does not have jurisdiction over the person accused of Sexual Misconduct, UAT will still take prompt action to provide for the safety and well-being of the individual reporting and the campus community. Measures include taking reasonable steps to stop and remedy the effects of the Sexual Misconduct and to prevent recurrence of the behavior.

3. SEXUAL HARASSMENT

When used in this Policy and accompanying procedures, "Complainant" refers to the individual who is alleged to be the victim of conduct that could constitute as sexual harassment or misconduct and "Respondent" refers to the individual who is reported to be the perpetrator of conduct that could constitute sexual harassment or misconduct.

Sex and gender-based harassment, sexual misconduct, sexual assault and retaliation ("Sexual Harassment") violate:

- Title IX of the Educational Amendments Act of 1972
- Violence Against Women Reauthorization Act of 2013
- the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act ("Clery Act")

All forms of conduct are prohibited under this Policy, as are attempts or threats to commit Sexual Misconduct. Reported behavior that does not constitute Sexual Misconduct under this Policy but is determined to be inappropriate according to another applicable UAT policy or code of conduct, may be subject to disciplinary action.

All individuals are protected against Sexual Misconduct regardless of sex, gender, sexual orientation, gender identity or gender expression. Sexual Misconduct can be committed by any individual regardless of an individual's sex, gender, gender identity and expression, or sexual orientation and can occur between individuals of the same or different sex, strangers or acquaintances, as well as people involved in intimate or sexual relationships. Organizations affiliated with the institution or that use UAT property or resources in connection with their activities are also prohibited from engaging in Sexual Misconduct.

Below are definitions and descriptions of the various forms of Sexual Harassment:

3.1 Unlawful Harassment

a. Quid Pro Quo - is an UAT employee conditioning the provision of an aid, benefit, or service on an individual's participation in unwelcomed conduct.
b. Hostile Academic Environment - is unwelcomed conduct determined by a reasonable person to be so severe, pervasive, and objectively offensive that it effectively denies a person equal access to an education program or activity. An individual may experience unlawful harassment even if the offensive conduct was not aimed directly at them. Unlawful harassment also includes misconduct based on the individual's gender expression, gender identity, transgender status, gender transition, or nonconformity with sex stereotypes. Inappropriate behavior that does not rise to the level of unlawful harassment under this Policy may still subject the offender to disciplinary action up to and including permanent separation from UAT.

The following is a non-exhaustive list of examples of conduct that, depending on the nature, frequency, and severity, may constitute behavior that is severe or pervasive and unreasonably interferes with an individual's work or academic performance:

- Sending unwanted sexually oriented jokes to a student or work group email list, text, or other social media platforms.
- Displaying explicit sexual pictures in common areas of institution property or on a work computer station where others can view it.
- Making or using derogatory comments, names, slurs, or jokes of a sexual nature.
- Unwelcomed graphic comments about an individual's body or using sexually degrading words to describe an individual.
- Unwanted suggestive or obscene communications.
- Unwelcomed touching of the intimate parts of one's body.
- Unwelcomed touching of <u>any</u> part of the body.

> Unwelcomed sexual advances.
> Promising a benefit in exchange for engaging in sexual activity.

Even when relationships are consensual, care must be taken to eliminate the potential for harassment or other conflicts. UAT's practice, as well as more general ethical principles, prohibits individuals from participating in evaluating the academic performance of those with whom they have amorous and/or sexual relationships. Upon learning of the existence of such a relationship, Responsible Employees (as defined below) have an obligation to report it to the Title IX Coordinators, Brandi Beals or Renee Price.

3.2 Sexual Misconduct

Sexual Misconduct is generally defined as sexual conduct that occurs by force or threat of force or without affirmative consent, including where the person is incapacitated. This definition encompasses a range of sexual conduct that could also fall within the definition of unlawful harassment. The Title IX Coordinator will determine whether allegations should be treated as sexual harassment or misconduct under Title IX, based on the specific conduct alleged and the totality of the circumstances. Prohibited forms of sexual misconduct include, but are not limited to: non-consensual sexual intercourse, non-consensual sexual contact, sexual exploitation, relationship violence, and stalking. Below are terms that are relevant to the understanding of sexual misconduct.

a. Non-consensual sexual intercourse is defined as having or attempting to have sexual intercourse with another individual by force or threat of force, without affirmative consent, including where the person is incapacitated. Sexual intercourse includes the penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person.
b. Non-consensual sexual contact is defined as having sexual contact with another individual by force or threat of force, or without affirmative consent, including where the person is incapacitated. Sexual contact includes intentional contact with the intimate body parts of another (whether directly or through clothing), touching any part of the body of another in a sexual manner, or disrobing or exposure of another.
c. Sexual exploitation occurs when an individual takes non-consensual or abusive sexual advantage of another for their own or another's benefit or advantage. The following are examples of conduct that could constitute sexual exploitation:

    > Unauthorized sharing or posting sexually explicit photos of another, including a current or former partner.
    > Secretly taking pictures or videos of individuals, especially of private or intimate areas of their body.
    > Observing, recording, viewing, distributing, or allowing another to observe, record, view or distribute, intimate or sexual images of another individual without that individual's consent.
    > Surveillance and other types of observations, whether by physical proximity or electronic means.

d. Affirmative Consent is the affirmative, conscious, and voluntary agreement to engage in sexual activity. It is the responsibility of each person involved in the sexual activity to ensure that they have the affirmative consent of the other or others to engage in the sexual activity. Lack of protest or resistance does not mean consent, nor does silence mean consent. Affirmative consent must be ongoing through a sexual activity and can be revoked at any time. The existence of a dating relationship between the persons involved, or the fact of past sexual relationship between them, should never by itself be assumed to be an indicator of consent. It is not a valid excuse to alleged lack of affirmative consent that the Respondent believed that the Complainant consented to the sexual activity under either of the following circumstances:

        i. The Respondent's belief of consent arose from their own intoxication or recklessness.
        ii. The Respondent did not take reasonable steps, in the circumstances known to the Respondent at the time, to ascertain whether the Complainant affirmatively consented.

    It is not a valid excuse that the Respondent believed that the Complainant affirmatively consented to the sexual activity if the Respondent knew, or reasonably should have known, that the Complainant was unable to consent to the sexual activity under any of the following circumstances:

        iii. The Complainant was asleep or unconscious.
        iv. The Complainant was incapacitated due to the influence of drugs, alcohol, or medication, so that the Complainant could not understand the fact, nature, or extent of the sexual activity.
        v. The Complainant was unable to communicate due to mental or physical condition.

A person who is incapacitated is not capable of giving effective consent to sexual activity. A person may be incapacitated by a temporary or permanent mental or physical condition, sleep, unconsciousness, or be incapacitated as a result of consumption of alcohol or drugs. Incapacitation is a state beyond mere intoxication or "drunkenness." Impairment must be significant enough to render a person unable to understand the fact, nature, or extent of the sexual activity. In evaluating affirmative consent in cases involving incapacitation, UAT considers the state of incapacitation of the Complainant and the knowledge of the Respondent.

e. Relationship Violence is dating violence or domestic violence.

    a. Dating Violence means violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with a Complainant. The existence of such a relationship shall be determined by the Complainant's statement and consideration of the length of the relationship, type of relationship, and the frequency of interaction between persons involved in the relationship.
        i. Domestic Violence means use of physical, sexual or emotional abuse or threats to control another person who is a spouse or former spouse, a cohabitant or former cohabitant, a person with whom they have a child, by person similarly situated to a spouse under the law of the state where the violence occurred, and by any other person against an adult or youth victim who is protected from that person's acts under the laws of the state where the violence occurred (or as defined 34 U.S.C. 12291(a)(10)).

f. Stalking is a course of conduct of a sexual or romantic nature or motivation directed at an individual that would cause a reasonable person to fear for their safety or the safety of others, or to suffer substantial emotional distress (or as defined in 34 U.S.C 12291(a)(30)). Course of conduct means two or more acts, including, but not limited to, acts in which the stalker directly, indirectly, or through third parties, by any action, method, device or means, follows, monitors, observes, surveils, threatens, or communicates to or about a person or interferes with the person or their property.

    Reasonable person means a reasonable person under similar circumstances and with similar identities to the victim. Stalking that is not sex or gender-based should be reported to the Student Services team and will be handled pursuant to that responsible policy. Similarly, any incident(s) of stalking in which the stalker and victim are both employees, will be governed under provisions of the employer policies and practices. The following are examples of conduct that depending on the frequency and severity may constitute stalking:

    a. Repeated unwanted communication, including face-to-face contact, telephone calls, voice messages, emails, text messages, postings on social networking sites, written letters, or gifts.
    b. Posting picture(s) or information of a sexual nature on social networking sites or other websites.
    c. Gathering information about the person using public records, online searches, going through the garbage, or contacting the person's family, friends, or coworkers.
    d. Posting private pictures or videos on school bulletin boards or internet sites.
    e. Installing spyware on another person's personal devices, including phones or computers.
    f. Surveillance or other types of observation, including staring or peeping.
    g. Pursuing, following, or showing up uninvited at or near places like classrooms, residence, workplace, or other places frequented by an individual.
    h. Directly or indirectly making threats to the person.

4. RETALIATION

Retaliation against an employee or student for filing a grievance or participating in the investigation of a complaint is strictly prohibited. No recipient may intimidate, threaten, coerce, or discriminate against any individual for the purpose of interfering with any right or privilege secured by Title IX. Additionally, they may not retaliate because the individual has made a report or complaint, testified, assisted, or participated or refused to participate in any manner in an investigation, proceeding, or hearing.

UAT will take appropriate disciplinary action, up to and including employment termination or academic dismissal, if evidence of retaliation exists. Likewise, if UAT learns that the complaint is not bona fide or that an employee or student has provided false information regarding the complaint, disciplinary action may be taken against the individual who provided the false information.

5. PRIVACY

UAT will maintain the privacy of all individuals involved in a report of Sexual Misconduct, to the extent possible. All UAT employees who are involved in the institution's response, including the Title IX Coordinator, Title IX Investigators, Hearing Officers, and Appeal Officers receive specific instruction about respecting and safeguarding private information. Throughout the process, every effort is made to protect the privacy interests of all individuals involved, in a manner consistent with the need for a thorough review of the matter. This includes shielding private, confidential (including but not limited to medical) information unrelated to the facts and circumstances of the case pursuant to FERPA, federal and state privacy protections, as well as the UAT's Policy. UAT will inform all individuals involved in the investigation and/or hearing process, in writing, of the critical importance and expectation that, while the processes are ongoing, they maintain the confidentiality of the process and any information shared with them as a result of their participation. Further, all documents provided in preparation for or related to the hearing proceedings may not be disclosed to any other party under FERPA, as such documents constitute education records which may not be disclosed outside of the proceedings, except as may be required or authorized by law.

Privacy generally means that Privileged Information related to a report of Sexual Misconduct will only be shared with those individuals who have a "need to know." These individuals will be instructed to be discreet and respect the privacy of all individuals involved.

6. PRESERVATION OF EVIDENCE

Because sexual harassment may involve physical trauma and is a crime, individuals who have experienced sexual violence are urged to seek medical treatment as soon as possible. They are strongly encouraged to preserve all physical and digital evidence of the violence. This may be needed to prove criminal sexual violence, or for obtaining a protective order. Individuals who have experienced sexual violence should not shower, bathe, eat, drink, wash their hands, or brush their teeth until after they have had a medical examination. They should save all the clothing they were wearing at the time of the incident. Each item of clothing should be placed in a separate paper bag (not plastic). They should not clean or disturb anything in the area where the sexual violence occurred. Digital evidence relating to the incident, such as texts, emails, and social media posts, should be also be preserved.

7. RESOURCES

UAT encourages individuals who have experienced sexual harassment to seek immediate support and advocacy services provided by UAT or community services. The Title IX Coordinator or other campus officials will provide information regarding off-campus resources for support and advocacy.

7.1 Off-Campus Resources

UAT encourages individuals who have experienced sexual harassment to seek immediate support and services through the following organizations:

National Sexual Assault Hotline
(800) 656-HOPE
www.rainn.org

National Domestic Violance Hotline
(800) 799-7233
www.thehotline.org

National Suicide Prevention Lifeline
(800) 273-8255
www.suicidepreventionlifeline.org

Banner Behavioral Health Services
(602) 254-4357
7575 E. Earll Dr., Scottsdale, AZ 85251

Terros
(602) 685-6000
www.terroshealth.org

24-Hour Crisis Line
Sexual Assault Hotline (Maricopa County)
(480) 736-4949

8. REPORTING

A victim of Sexual Misconduct has a right to file a formal complaint against anyone engaging in Sexual Misconduct. A formal complaint is defined as a document filed by a complainant or signed by the Title IX Coordinator alleging sexual harassment or misconduct against a respondent and requesting the recipient investigate the allegation of sexual misconduct.

To initiate a complaint, a Complainant must submit a document alleging Sexual Misconduct against a Respondent and requesting that UAT investigate the allegation. A formal complaint may be initiated with the Title IX Coordinator (see below)

under §106.8(a), in person, mail, or email. The complaint must indicate that the Complainant is the person filing the formal complaint. A Complainant may, at any time, request a dismissal of the Complaint. All requests for dismissal must be sent to the Title IX Coordinator and be in writing.

At the time of filing a formal complaint, a complainant must be participating in or attempting to participate in the education program or activity of the recipient with which the formal complaint is filed.

Additionally, anyone who witnesses, experiences, or is otherwise aware of conduct that the individual believes to be in violation of this Policy, including retaliation, is urged to contact the Title IX Coordinator.

Upon receipt of a Formal Complaint, the Title IX Coordinator will assess the complaint for a Title IX violation and, if appropriate, refer the matter for investigation and a hearing pursuant to the procedures set forth in this Policy.

8.1 Title IX Coordinator and Designee

The Title IX Coordinator is responsible for coordinating UAT's compliance with Title IX and for UAT's overall response to conduct falling under Title IX. The Title IX Coordinator oversees all Title IX complaints, monitors outcomes, identifies and addresses any patterns of systemic problems that arise, and assesses effects on the campus climate. The Title IX Coordinator will also discuss with both parties the offering of any "supportive measures," which are non-disciplinary, non-punitive individualized services that are designed to restore or preserve equal access to the education program or activity without unreasonably burdening the other party. The Title IX Coordinator also oversees the implementation and application of UAT's Title IX-related policies within the scope of Title IX. The Title IX Coordinator coordinates UAT's response to all complaints of Sexual Misconduct to ensure consistent treatment of parties involved, and prompt and equitable resolution of complaints. The contact information for the Title IX Coordinators can be found below:

Brandi Beals
Dean of Students and Academic Operations
2625 W Baseline Road
Tempe, AZ 85283
BBeals@uat.edu or TitleIX@uat.edu
(480) 351-7879

Renee Price
Employee Relations Manager
2625 W Baseline Road
Tempe, AZ 85283
RPrice@uat.edu or TitleIX@uat.edu
(480) 351-7908

If a Complainant believes that the campus Title IX Coordinator has a conflict of interest or is biased, the Complainant may contact any other Title IX Coordinator listed above or request the appointment of a designee.

8.2 Responsible Employees

If an individual discloses Sexual Misconduct to any Responsible Employee the responsible employee must report to the Title IX Coordinator all relevant details about the alleged conduct. The following are Responsible Employees:

- Title IX Coordinators/Investigators
- Student Services Coordinators
- UAT Leadership Group
- Resident Assistants (RAs) and Founder's Hall Management Team
- Campus Safety Staff

To the extent possible, UAT is committed to protecting the privacy of all individuals involved in a report of Sexual Misconduct. All employees involved in the response to a report of Sexual Misconduct must understand the importance of properly safeguarding private information. UAT will make every effort to protect individuals' privacy interests consistent with UAT's obligation to investigate reports made to UAT.

If a member of the UAT community would like support and guidance in filing a complaint, they may contact the Title IX Coordinator or the designee if the Complainant does not feel comfortable contacting the listed Title IX Coordinators for any reason.

8.3 Notification of Law Enforcement

Individuals who have experienced sexual misconduct are encouraged to notify local law enforcement. UAT will provide assistance in notifying law enforcement if the individual so chooses. An individual who has experienced sexual violence also has the right to decline to notify law enforcement or UAT.

UAT has an obligation under applicable state law to report incidents of sexual violence to law enforcement. However, UAT will not report identifying information about the Complainant without the Complainant's consent after being notified of their right to have personally identifying information withheld.

9. CONFIDENTIALITY

If a Complainant discloses an incident to the Title IX Coordinator or a Responsible Employee, but requests that their name not be used, that the institution not pursue an investigation, or that no disciplinary action be taken, UAT must weigh the request against its obligation to provide a safe, non-discriminatory environment. The Title IX Coordinator will weigh the request for confidentiality against factors including, but not limited to:

- the seriousness of the misconduct;
- circumstances that suggest there is a significant risk that the accused will commit further acts of Sexual Misconduct;
- whether UAT can undertake any action without the participation of the Complainant;
- the existence of independent evidence;
- the extent of prior remedial methods taken with the Respondent; and
- any legal obligation to proceed based on the nature of the conduct, whether there was a weapon involved, and the age of a student victim.

The Title IX Coordinator will determine the appropriate manner of resolution in accordance with Title IX. The Title IX Coordinator will attempt to address the conduct consistent with the Complainant's request not to use their name or their request not to pursue an investigation or that no disciplinary action be taken, while also protecting the health and safety of the Complainant and the UAT community.

UAT's ability to fully investigate and respond may be limited if the Complainant requests anonymity or declines to participate in an investigation. For example, if a Complainant requests that their name or other identifiable information not be shared with the Respondent or that no formal action be taken, UAT may be limited in its ability to fully respond to the complaint. UAT will, however, take other action to limit the effects of the Sexual Misconduct and prevent its recurrence.

In instances where the Title IX Coordinator determines that UAT must proceed with an investigation despite the request of the Complainant, the Title IX Coordinator will inform the Complainant of UAT's intention to initiate an investigation.

In all cases, the final decision on whether, how, and to what extent UAT will conduct an investigation, and whether other measures will be taken in connection with the report of Sexual Misconduct, rests solely with the Title IX Coordinator and UAT.

10. GOVERNMENT AGENCIES

Employees, students and others participating in UAT's educational programs or activities may direct questions regarding Title IX or file complaints with the U.S. Department of Education Office for Civil Rights, (800) 421-3481, www2.ed.gov/about/offices/list/ocr/index.html. Filing a complaint with a federal agency under Title IX must be done within 180 days after an alleged discriminatory or harassing event and there is no requirement to exhaust remedies through UAT's internal procedures before filing directly with a federal agency. Participants in programs funded by other federal agencies providing federal financial assistance to UAT may file directly with those agencies. Complaints can also be directed to the AZ State Board for Private Postsecondary Education, (602) 542-5709, www.ppse.az.gov or https://ppse.az.gov/complaint.

11. INFORMATIONAL RESOURCES

Information on Sexual Misconduct, as well as copies of this Policy and procedures are available from UAT's Title IX Coordinator, the Academic Catalog, and in the UAT Policies online.

12. PROCEDURES FOR INVESTIGATING AND RESOLVING COMPLAINTS

12.1 Introduction and Scope of Procedures

University of Advancing Technology (UAT) will take prompt and appropriate action to address all reports of Sexual Misconduct in a fair and impartial manner. UAT's policy reflects its commitment to support and encourage individuals who have been subjected to Sexual Misconduct to come forward. UAT takes all allegations of Sexual Misconduct seriously and responds appropriately. UAT's policy is also intended to ensure that individuals accused of engaging in Sexual Misconduct are not prejudged; that they have notice and a full and fair opportunity to respond to allegations before findings and conclusions are reached; and that decisions are based on the evidence gathered in a process that is fair to both Reporting Parties and Responding Parties. All Respondents are presumed not responsible. UAT will conduct a fair, impartial, timely and thorough investigation.

These procedures are for the benefit of current members of the UAT community. However, these procedures do not apply in cases in which the Reporting Parties and Responding Parties are current employees. If an employee is alleged to have engaged in any misconduct affecting another employee, then the provisions of institution's employee policies and employment agreement and employer practices shall control.

When a complaint involves a third party who is not affiliated with the institution, UAT's ability to investigate and take action against the person accused of Sexual Misconduct may be limited. However, in all cases, UAT will conduct an inquiry into what occurred and take prompt action as is practicable to provide for the protection and well-being of the Complainant and the campus community.

12.2 Reporting to UAT

A member of the UAT community who wishes to report Sexual Misconduct should file a complaint as soon as possible after the incident, although complaints may be made at any time. Complaints can be made in writing and should be brought to the attention of the Title IX Coordinator or a Responsible Employee.

12.3 Initial Assessment, Supportive Measures, and Dismissals

For reports of Sexual Misconduct covered by Title IX, UAT's Title IX Coordinator will make an initial assessment of the complaint which will include:

- an immediate assessment of any risk of harm to individuals or to the campus community;
- taking steps necessary to address those risks; and
- an assessment whether the allegations meet the definition of "Sexual Harassment" under the Policy and applicable Title IX regulations. These steps may include interim protective measures to provide for the safety of the Complainant and the campus community as described in the Policy.

The Complainant will be provided with information on the Complainant's rights and options under the Policy and these procedures, written materials about the availability of, and contact information for, resources and services, and coordination with law enforcement. The need for, and types of, interim measures also will be discussed. The Title IX Coordinator may also meet with the Respondent and other relevant parties as part of the initial assessment. If the Title IX Coordinator meets with the Respondent, the individual will be provided with information on the Respondent's rights under the Policy and these procedures, and written materials about the availability of, and contact information for campus resources and services.

UAT's Title IX Coordinator will also determine whether the complaint contains sufficient facts to pursue a claim under the Policy and Title IX regulations. To conform to applicable law, the Title IX Coordinator is required to dismiss a complaint if the alleged misconduct does not constitute sexual harassment, the alleged sexual misconduct did not occur in UAT's education program or activity, or did not occur against a person in the United States.

The Title IX Coordinator has the discretion to dismiss the complaint if:

- the Complainant submits a written request to withdraw the complaint or specific allegations;
- the Respondent is no longer enrolled or employed by UAT; or
- there is insufficient evidence available to make a determination.

For all dismissals, the Title IX Coordinator will provide the parties with a written notice explaining their decision. Thereafter, if the complaint is not dismissed, the investigation process the Title IX Investigator will begin the investigation to reach a formal resolution.

12.3.1 Alternative Resolution

After an initial assessment of the alleged facts, the Title IX Coordinator may—if both parties agree—begin an Alternative Resolution process. Alternative Resolution is not available for incidents in which an employee is accused of sexually harassing a student.

Alternative Resolution may include, among other responses:

> Referral for disciplinary action;
> An agreement between the parties;
> Referring the Respondent to targeted preventive educational and training programs; and
> Conducting a follow-up review to ensure that the resolution has been carried out effectively.

Except for the limitations stated above, the Title IX Coordinator has sole discretion to determine whether the complaint is appropriate for Alternative Resolution, to determine the type of resolution to pursue, and to stop the process at any time before its conclusion and move to a Formal Investigation. Participation in Alternative Resolution is voluntary, meaning both the Reporting and the Responding Parties must mutually agree, in writing, to participate. If Alternative Resolution is selected, the Title IX Coordinator will provide timely written notice to both parties that that discloses the allegations and that:

> The Title IX Coordinator has begun the process;
> The process is voluntary and will end upon either party's request;
> Termination of Alternative Resolution may result in Formal Investigation;
> They may be accompanied by an advisor throughout the process; and
> The Title IX Coordinator will notify both parties of the process's outcome
> Conclusion of the Alternative Resolution process will preclude the parties from resuming a formal complaint arising from the same allegations unless the parties failed to satisfy the terms of the agreement; and
> Records of the process will be maintained and shared.

The Title IX Coordinator will conduct the Alternative Resolution process unless good cause requires another individual. The Title IX Coordinator will endeavor to complete the Alternative Resolution process promptly, typically within 30 to 60 business days of notifying the parties in writing of starting the process. However, the Title IX Coordinator may extend the Alternative Resolution process past 60 days for good cause. The Title IX Coordinator will notify the parties in writing of the reason for any extension and the projected new timeline. The actual time required will depend on the specific circumstances, including the complexity of the allegations and the nature of the alleged conduct.

Once the parties have agreed to the terms of an Alternative Resolution, UAT will not conduct a formal investigation unless the Title IX Coordinator determines that the Respondent failed to satisfy the terms of the Alternative Resolution.

The Title IX Coordinator will keep records of all reports and conduct addressed through Alternative Resolution.

12.3.2 Supportive Measures

As described in the Policy, supportive measures are actions taken by UAT in response to a report of Sexual Misconduct and will be made available to both parties as appropriate. These steps may include, but are not limited to, interim safety measures, which may be made at any time, to provide for the safety of individuals and the campus community. Appropriate administrative changes and/or academic changes may be made, if requested and reasonably available, at any stage in the process to protect the rights of either party. Interim measures will be made by the Title IX Coordinator in coordination with responsible administrators. These changes include, but are not limited to:

> counseling services;
> academic accommodations up to or including changes to classes;
> mutual "no contact" orders between individuals;
> restrictions to be on campus completely or to specific campus areas or activities;
> limitations on extracurricular clubs or events;

> changes in work schedules or locations;
> a leave of absence; and/or
> any other remedy that can be tailored to the involved individuals to achieve the goals of the Policy.

Changes specifically affecting faculty and staff might include, but are not limited to:

> transfer of supervisory roles;
> evaluative responsibility regarding grading;
> supervision;
> changes to job assignments up to or including changes to working location; and/or
> administrative leave.

When taking steps to separate a Complainant and Respondent, UAT will engage in an individualized and appropriate evaluation based on the information gathered by the Title IX Coordinator, making every effort to avoid depriving any student of their education. Care will be taken to protect both parties with the greatest degree of privacy possible. If a Complainant wishes to seek a temporary restraining order or similar judicial order, UAT will provide the Complainant with information to initiate that process.

The imposition of interim measures is not indicative of a determination of responsibility or any other outcome. These measures may be modified at any time and may be kept in place after a final decision is reached.

All parties are expected to comply with any interim measures that may be imposed until the formal resolution process concludes. Failure to comply with interim measures may be separate grounds for disciplinary action.

12.4 Investigation Procedures

For complaints that have not been dismissed or resolved informally, the Title IX Coordinator will begin to initiate the investigation process. For complaints against parties outside the institution, the Title IX Coordinator will make reasonable efforts to prevent future incidents. The purpose of the investigation is to determine the facts relating to the complaint; decisions are based on the evidence. Evidence may include the testimony of any involved parties and/or witnesses, and any documents relating to the complaint. UAT's policy and procedures are intended to ensure that individuals reported for Sexual Misconduct are not prejudged and are provided with adequate notice and an opportunity to be heard regarding the allegations made against them. Consistent with federal and state law, the investigators will ask questions or seek evidence that is relevant and not protected by law. Furthermore, evidence of a prior consensual sexual, romantic, or intimate relationship between the Complainant and Respondent itself does not by itself imply consent or preclude a finding of Sexual Misconduct. UAT's investigation will occur independently from any legal/criminal proceedings that may take place. UAT may defer fact-gathering for an appropriate time during a criminal investigation.

Investigators will be trained on issues related to Sexual Misconduct, trauma-informed responses, and investigation processes that protect the safety of all involved and promote accountability. The investigators must be impartial and free of any conflict of interest.

Below are the procedures and processes related to Title IX investigations:

1. The investigation begins when the Complainant files a complaint and the Title IX Coordinator provides notification that the investigation has begun.
2. Within a reasonable length of time after the complaint has been filed, the Title IX Coordinator will notify both parties in writing that the investigation has commenced. This notification will: summarize the allegations and underlying reported behavior; identify the assigned investigator; identify the parties involved, the specific section of the Policy allegedly violated, the precise conduct allegedly constituting the potential violation, and the date and location of the alleged incident; warnings against any retaliation; advise the parties to review the Policy and these procedures and where each are located; and set forth any supportive measures and other directives.
3. Either party may object to an investigator if they believe that investigator has a conflict or cannot be impartial. A conflict of interest occurs where an individual's personal interests or relationships conflict with their ability to be a neutral fact finder in a particular case. The objection must be in writing, explain the bias or conflict of interest, and be sent to the Title IX Coordinator no later than five (5) calendar days after the date of the notice of investigation.

The Title IX Coordinator will consider any objections and notify the parties of the decision related to the assigned investigator.

4. After a reasonable amount of time to review the notice of investigation and applicable policies, the parties will be given equal opportunity to meet with the investigator. In those meetings, the investigator will gather evidence about the allegations, including any documents or written statements submitted by either party. The Complainant and Respondent must have an advisor accompany them throughout the investigation and hearing process. An advisor can be chosen by each party and may be a family member, friend, or attorney, but cannot be a university employee. If a party does not select an advisor, the university will appoint one for them. If a party refuses to work with the appointed advisor, they forfeit the right to cross-examination in the hearing process. The advisor may attend, but shall not participate in, meetings with Complainant or Respondent. This includes speaking on behalf of a party.
5. The parties may suggest witnesses and documents to the investigator, as well as questions for the investigator to ask the other party and any witnesses. The investigator will determine whether the suggestions are relevant and appropriate. UAT asks the parties to keep the investigation private but cannot prohibit the parties from discussing the investigation with others in connection with identifying evidence for the investigator to gather.
6. The investigator will interview relevant witnesses and gather other evidence related to the allegations. Witnesses may also submit documents or written statements to the investigator(s).
7. The investigator will investigate any allegations that alcohol or drugs were involved in the incident.
8. The investigator will use the *preponderance of evidence* as the standard of evidence in determining whether Sexual Misconduct occurred. A preponderance of the evidence means that it is more likely than not that the incident occurred. When the investigator is presented with two different but plausible versions of the incident, credibility determinations may affect the outcome. The same standard of evidence is used for formal complaints against students as it is for formal complaints against employees, including faculty, and apply the same standard of evidence to all formal complaints of sexual harassment.
9. The Complainant and Respondent will be given equal opportunity to review and respond to all the evidence gathered by the investigator.
10. The investigator will prepare a written report that includes: the factual allegations; the alleged policy violations; statements of the parties; a summary of the evidence; an explanation of why any evidence was not considered (if applicable); credibility determinations, when appropriate; findings of fact; and an analysis of whether the Respondent is responsible for misconduct under the Policy. Prior to completion of the investigative report, the recipient must send to each party and the party's advisor, the evidence subject to inspection and review in an electronic format or a hard copy, and the parties must have at least 10 days to submit a written response, which the investigator will consider prior to completion of the investigative report.
11. After the report has been finalized, the matter will be referred for a hearing. No less than 10 days before any hearing, and a copy of the report will be provided to the Hearing Officer, the parties, and their advisors, if any, for the parties' review and written response.

12.5 Hearing Procedures

Once the matter is referred to a hearing, there will be a fact-finding hearing before a single Hearing Officer. The hearing is to determine whether a violation of the Policy occurred. Through the Hearing Officer, the institution will consider the relevant evidence available.

1. Hearing Officer - The Hearing Officer may be an institution employee or outside contractor appointed by the Title IX Coordinator. They will be appropriately trained, including on how to make a trauma-informed response, with such training coordinated by the Title IX Coordinator. The Title IX Coordinator will inform the parties of the Hearing Officer's identity. Within five (5) calendar days after the notification, the parties may request the Hearing Officer's disqualification because of bias or conflict of interest. The Title IX Coordinator shall have sole discretion to decide whether an actual bias or conflict of interest exists. Employment or affiliation with the institution, or prior work as a contractor, on its own, does not warrant disqualification. Similarly, the Hearing Officer's gender, gender identity, race, ethnicity, religion, sexual orientation or similar identifying characteristic, or the fact that they differ from those of any party, do not, on their own, warrant disqualification.
2. Pre-Hearing Communications - The Hearing Officer will send each party and their advisor a thorough pre-hearing email to explain the formal resolution process, address questions, begin to define the scope of the hearing, and address other issues to promote an orderly, productive and fair hearing.

    > Each party will be asked scheduling requirements and dates for the hearing. If the parties fail to agree, the Hearing Officer shall unilaterally set the date and time.
    > The Hearing Officer will explain what to expect at the hearing.

- The Hearing Officer will discuss with each party which witnesses they intend to bring to the hearing, the scope of issues, and disputed facts. The Hearing Officer has sole discretion to grant or deny, in whole or part, the parties' requests for witnesses.
- The Hearing Officer will discuss measures available to protect the well-being of parties and witnesses at the hearing, as appropriate.
- The Hearing Officer shall inform any party without an advisor that UAT will provide one without fee or charge. To the extent a party requires the appointment of an advisor, the Hearing Officer shall promptly inform the Title IX Coordinator in writing.
- The Hearing Officer will determine: the scope of the hearing; identify material disputed facts; whether to reasonably allow or exclude evidence including witness testimony; and/or make any other determinations necessary to promote an orderly, productive, and fair hearing.
- The Hearing Officer will request the attendance of all witnesses whose testimony is determined to be within the scope of the hearing. The institution cannot force parties or witnesses to testify in the hearing and their decision not to testify will not be a reason to cancel or postpone a hearing. However, the Hearing Officer shall inform the parties of the consequences of non-participation.
- At least five (5) business days prior to the hearing, the parties will receive the Hearing Officer's written confirmation of scope and evidence; copies of all the evidence that will be considered at the hearing, including, without limitation, the investigation file; and the names of expected witnesses and a summary of their expected testimony. If the Hearing Officer has excluded evidence (including witness testimony) that a party has requested to present, they will explain why in writing. The Hearing Officer will also notify the parties of any procedural determinations they have made regarding the hearing, including whether the Hearing Officer is ordering a new investigation due to a material procedural error committed by the investigator and delaying the hearing.

3. Hearing Procedures
   - The hearing will be live and recorded. For the convenience of the parties, Hearing Officer, and/or witnesses, the entire hearing, or portions of it, may be conducted over videoconference.
   - The parties and witnesses will address only the Hearing Officer and the parties' advisors.
   - Courtroom rules of evidence and procedure will not apply. The Hearing Officer will generally consider all evidence they determine to be relevant and reliable. The Hearing Officer may determine and weigh the relevance of any witness testimony or other evidence to the findings.
   - During the hearing, the Hearing Officer may: reasonably exclude evidence, including witness testimony; decide any procedural issues for the hearing; and/or make any other determinations necessary to promote an orderly, productive, and fair hearing.
   - The investigator shall make themselves available for questioning by the Hearing Officer at the hearing.
   - Witnesses will attend the hearing only to provide their testimony and will not be permitted to sit in attendance for any other part of the proceedings.
   - The investigation file will be entered as evidence at the hearing. The Hearing Officer may rely on any facts or findings in the report that are undisputed.
   - In cases where the credibility of a witness is not central to the determination of a particular disputed issue and the witness does not appear at the hearing, the Hearing Officer may determine what weight to give to their statements from the investigation report.
   - If a party or witness does not submit to cross-examination at the live hearing, the Hearing Officer shall not rely on any statement of that party or witness in reaching a determination regarding responsibility; however, that the Hearing Officer cannot draw an inference about the determination regarding responsibility based solely on a party's or witness's absence from the live hearing or refusal to answer cross-examination or other questions.
   - The Hearing Officer will allow the parties and/or witnesses to be visually or physically separated during the hearing. This may include, but is not limited to, the use of a physical partition, a separate physical location, videoconference, and/or any other appropriate technology.
   - To assess credibility, the Hearing Officer and advisors must have sufficient visual and audio access to the Complainant, Respondent, and any witnesses presenting information.
   - The parties will have the opportunity to present the evidence they submitted at the pre-hearing meeting, subject to any permissible exclusions determined by the Hearing Officer. Unless good cause is shown, the parties may not introduce evidence, including witness testimony, at the hearing that they did not identify during the pre-hearing communications.
   - The parties have the right to hear (or, if deaf or hard of hearing, to access through auxiliary aids for services) testimony of all individuals who testify at the hearing and to propose questions to be asked of all individuals who

testify at the hearing. The parties may propose questions at the hearing by submitting them to the Hearing Officer in writing ideally at the pre-hearing meeting or anytime during the hearing session(s) in which the witness or party provides testimony.

- The Hearing Officer will determine the order of questioning. The Hearing Officer may exclude questions that are unduly repetitive, not irrelevant, harassing, unduly time consuming, or seek privileged or protected information. The Hearing Officer will briefly state his/her reasons for excluding questions asked by the parties' advisors.
- Only the parties' advisors may ask questions of the opposing party and witnesses. All questions must be relevant, and the Hearing Officer shall make a determination of relevancy before the witness or party answers. Relevancy determinations may not be challenged by the party's advisor. If a party does not have an advisor present at the live hearing, UAT will provide one without fee or charge. If a party refuses to work with the appointed advisor, the party forfeits the right to cross-examination.
- The Hearing Officer will decide whether the Respondent was responsible for misconduct under the Policy based on a preponderance of evidence standard. The Hearing Officer will take into account the investigation file and report, as well as the other evidence presented and accepted at the hearing. On any disputed issue of significance, the Hearing Officer will make their own reasonable findings and credibility determinations based on all the evidence before them.
- The Hearing Officer will adjourn the hearing after they have determined that each side has had an opportunity to present their respective case and no other evidence is required to form reasonable conclusions.

12.6 Final Resolution

Once the Hearing Officer has adjourned the hearing, the Hearing Officer will render a decision. The Hearing Officer may reach any one of the conclusions below:

- Respondent was responsible for misconduct under the Policy.
- Respondent was not responsible for misconduct under the Policy.

If the Hearing Officer found that the Respondent was responsible for misconduct under the Policy, the Hearing Officer must determine disciplinary action for the Respondent but has discretion as to which of sanctions below will be imposed, understanding that the Hearing Officer may choose more than one sanction:

- Verbal warning;
- Training(s);
- Mandatory counseling/coaching;
- A formal written warning placed in the Respondent's file;
- Exclusion from participation in certain activities for specified period;
- Restricted access to campus spaces, resources, or activities;
- Suspension from campus;
- Termination of employment;
- Expulsion;
- Administrative leave without pay;
- Revocation of admission;
- Removal from on-campus housing; and/or
- Other appropriate corrective action.

UAT will take appropriate measures to prevent the reoccurrence of any Sexual Misconduct, and to correct any discriminatory effects on the Complainant and others, as appropriate. The Title IX Coordinator will be responsible for effective implementation of any remedies.

Results of disciplinary proceedings may be disclosed in a manner consistent with applicable law, including Family Educational Rights and Privacy Act (FERPA), Title IX, and the Clery Act, as is considered Privileged Information.

12.7 Notifications of Sanctions and Decisions

The Hearing Officer will send written notice to the Complainant, Respondent, and Title IX Coordinator, setting forth the determination and the sanctions to be imposed (if any). The written notice will conform to the requirements of 34 C.F.R. § 106.45, which includes:

- Identification of the allegations;
- A description of the procedural steps taken from the receipt of the formal complaint through the determination, including any notifications to the parties, interviews with parties and witnesses, site visits, methods used to gather other evidence, and hearings held;
- Findings of fact supporting the determination;
- Conclusions regarding the application of the Policy to the facts;
- A statement of, and rationale for, the result as to each allegation, including a determination regarding responsibility, any disciplinary sanctions the UAT imposes on the Respondent, and whether remedies designed to restore or preserve equal access to UAT's education program or activity will be provided by UAT to the Complainant; and
- The procedures and permissible bases for the Complainant and Respondent to appeal.

13. APPEALS

Appeals of a Hearing Officer's final, written decision of responsibility are strictly limited to: (1) procedural irregularity that affected the matter's outcome; (2) new evidence that was not reasonably available when the determination of responsibility was made that could affect the matter's outcome; and/or (3) the Title IX Coordinator/Investigator or Hearing Officer had a conflict of interest or bias that affected the matter's outcome. There are no other grounds for appealing a Hearing Officer's decision and only final, written decisions of responsibility are appealable.

Appeals may be made by either the Respondent or Complainant and must be in writing and submitted to the Title IX Coordinator within ten (10) calendar days of notification of the Hearing Officer's final, written decision of responsibility or of the Title IX Coordinator's mandatory or discretionary dismissal of a complaint. The initial request must contain a brief statement identifying the basis for the appeal. The Title IX Coordinator will refer only timely and appealable matters to an Appeal Officer. If the Title IX Coordinator determines that the matter cannot be appealed, written notice to the requesting party will be provided. If the matter is referred for an appeal, the Title IX Coordinator will then disclose, in writing, the Appeal Officer's identity to the person making the appeal. The appealing party will have three (3) business days after being notified of the Appeal Officer's identity to request, in writing, that the Title IX Coordinator appoint a new Appeal Officer and identify the alleged conflict of interest. The Title IX Coordinator, or designee if the Title IX Coordinator has been accused of bias or a conflict of interest, has the sole discretion to appoint another Appeal Officer or deny the appealing party's request.

After the Appeal Officer has been selected and the matter is assigned, the Appeal Officer will notify both parties in writing of the appeal and its basis. Both parties may submit a written statement supporting or challenging the matter's outcome. Although the Appeal Officer will set deadlines for responses, all appeals generally should be conclude within thirty (30) calendar days from the initial request.

After reviewing the written appeal, the Appeal Officer has the sole discretion to deny or grant the appeal, and, if granted, order a new hearing or refer the case back to the Hearing Officer with instructions. The Appeal Officer, if the appeal is granted, may order the Title IX Coordinator to reopen a dismissed case. The Appeal Officer may only rely on the evidence presented at the hearing; no other evidence may be considered. Within a reasonable amount of time after rendering a decision, the Appeals Officer will send a copy of the decision to the appealing party and the Title IX Coordinator. The written notice shall include reasons supporting the granting or denial of the appeal and the remedy chosen. All appeal decisions are final.

13.1 Additional Complaints

If the corrective action does not end the Sexual Misconduct, the Complainant should immediately notify the Title IX Coordinator. In such cases, the Complainant has the right to file another complaint.

14. TRAININGS

UAT ensures that all staff, faculty, and students receive Title IX training. Students are advised of the policy each semester during orientation and publishes training materials in the Learning Management System for all students to review at the start of every semester. UAT employees complete a Title IX training upon hire and complete the training each year they are employed. Mandatory reporters receive additional training to handle the complex nature of how to report a grievance.

Those who are involved with the Title IX process such as the Coordinator, Investigator, Hearing Officers, and Appeals Officer receive additional annual training as required. Training materials can be provided for review upon request.

UNDERGRADUATE COURSE CODES AND DESCRIPTIONS

KEY TO COURSE CODES AND DESCRIPTIONS

Letters used to denote a code prefix designate the topic area or course family associated with a course (refer to Course Category and Code Prefix List for complete listing).

Letter codes are arranged alphabetically by Course Category name in the Course Descriptions section of the catalog. Three numbers are employed as a course code suffix and indicate the course's level within its topic area. These numbers range from 100 to 499. Courses numbered between 100 and 299 are considered lower division courses. Courses numbered between 300 and 499 are considered upper division courses. All course numbers below 100 are considered preparatory and do not apply to overall credit hours in a degree program.

Prerequisite(s) indicates progression of courses. Prerequisites are met by completing the foundation course with a minimum passing grade of D (1.0) unless otherwise specified.

All General Education courses are identified within their course description by the notation GE and their area (i.e., Humanities, Social Sciences, Mathematics, Science). For example, the course ENG101 Composition is noted (GE, Humanities) because it is a General Education course in the Humanities area.

SYMBOLS

Foundational courses set the stage for higher-level courses by opening the doors to basic knowledge needed to navigate the field under investigation, as well as foundational information that will be built upon as the student is introduced to more advanced information.

Skills courses are utilized to educate students in the hands-on usage of technology tools native to each discipline or, when appropriate, those that are used as interdisciplinary tools.

Synthesis courses guide students toward practical usage of the knowledge and mastery of skills learned in lower-level courses. Complete, complex projects are common outcomes of Synthesis courses.

COURSE CATEGORY AND CODE PREFIX LIST

Art	ART
Astronomy	AST
Business	BUS
Computer Forensics	CFR
Computer Science	CSC
Design Build Make	DBM
Digital Media and Design	DMD
Digital Video and Animation	DVA
Fitness	FTN
Game Art and Animation	GAA
Game Programming and Engineering	GPE
Game Studies	GAM
Human Computer Interaction	HCI
Internships	INT
Marketing	MKT
Network Security	NTS
Network Technology	NTW
Production Studio	PDS
Robotics	RBT
Student Innovation Project	SIP
Technology	TCH
Technology Special Topics	SPT
Virtual Reality Technologies	VRT

GENERAL EDUCATION CATEGORIES AND CODE PREFIX LIST

Humanities

Communications	COM
English	ENG
Humanities	HUM
Spanish	SPA
Theater	THE

Mathematics

Mathematics	MAT

Science

Astronomy	AST
Physics	PHY
Science	SCI

Social Sciences

History	HIS
Law	LAW
Psychology	PSY
Social Science	SS

ART (ART)

ART103 CREDITS: 3 PREREQUISITE(S): NONE

Digital Asset Creation

This course is an overview of Adobe Photoshop and its application in creating graphical assets and collateral graphic materials. This course will cover asset creation from scratch as well as the process for using graphics in applications and on the web. The course will examine and apply the basic tools needed to function and design assets.

ART112 CREDITS: 3 PREREQUISITE(S): ART103 OR DMD210

Graphic Design Principles

This course combines the application of color theory and introductory design principles. The function of traditional design principles incorporating color perception and color psychology give students a strong understanding of basic visual communication elements. Digital and traditional methods in design, color issues and media manipulation are covered, along with designing for an ethnically diverse international audience.

ART121 CREDITS: 3 PREREQUISITE(S): NONE

Beginning Drawing I

Is drawing a gift that has to come naturally? It is actually a skill like any other. This course will demonstrate how easily it can be learned. Drawing is as much about learning how to see and think about form and space as it is about technique. The drawing part itself is just marks on paper. Those marks come together to tell the viewer something about the world that the artist experienced. Drawing also gives one a deeper understanding of the subject being captured. As students progress through the exercises in this class, they will develop a better understanding of the forms being observed and become more skillful in representing them. Improving drawing skills on paper can improve digital drawing skills. ART121 is an introduction to basic drawing concepts and provides a basic foundation in drawing. The course emphasis will be on traditional compositional theory, drawing principles, fundamentals of observing and describing form. Students will gain a strong understanding of tonal and dimensional perspective.

ART209 CREDITS: 3 PREREQUISITE(S): NONE

Typography

This course is an introduction to computerized layout and typography principles. The emphasis is on the visual effects of type as a design and communication element. Students will form an understanding of the fundamental rules related to page layout and type design, the study of letterforms and the practical application of these principles through student projects. The primary focus of the instruction addresses how type is used in contemporary graphic design applications. Students explore the creation of informative, experimental and expressive typographic forms by using traditional and computer-generated techniques.

ART231 CREDITS: 3 PREREQUISITE(S): ART121

Intermediate Drawing

Life doesn't stand still and neither should art. This course further explores the drawing techniques established in Beginning Drawing. Students will concentrate on increasing drawing skills with respect to lighting, texture and spatial interpretation, and infusing the smoking gun aspect of lifelike action in compositions. Students will learn how to use color in drawing and to make images come to life. Individual drawing assignments and the development of a final portfolio and sketchbook will be emphasized.

ART233 CREDITS: 3 PREREQUISITE(S): (ART112 AND ART121) OR GAA105

Concept Art

Students will learn to sketch, prototype and design functional creations before committing to their actual development. Concept art is a critical skill in increasing the quality and speed of production. Students will learn to craft, present and refine humanoid, animal, biological and environmental concept art that becomes the foundation for future assets.

ART234 CREDITS: 3 PREREQUISITE(S): ART121 OR GAA105

Storyboarding

This course unveils the art of visual storytelling. Storyboarding is an important skill for beginning directors to develop to pre-visualize shots and sets. It is also a critical skill in creating animation sequences and is important to the multimedia developer in planning the needs of a project. Students apply storyboarding techniques to scripts by accurately showing camera angles, placement of the actors, etc. Emphasis is placed on accuracy and presentation.

ART236 CREDITS: 3 PREREQUISITE(S): ART121

Basic Character Figure Drawing

This course explores a full range of techniques and artistic viewpoints to animate drawings. Emphasis will be on learning to sketch the human and animal forms in both stick and geometric figures studies. Students will learn the skeletal and muscular makeup of the figures. Studies in the form of homework assignments will be required as well as in-class work. Long and short poses will be interspersed with exercises specifically designed to allow artists to heighten perceptions. Students will practice using the formulas for making character sketches more realistic by understanding the volumetric description and underlying structure of the human form. This course provides the most thorough experience drawing from live models.

ART240 CREDITS: 3 PREREQUISITE(S): NONE

Figure and Character Sculpting

This course offers foundational knowledge of anatomy for artists. An in-depth study of the figure is essential to an artist's understanding of the shapes, both bony and muscular, critical for achieving an accurate representation of surface anatomy. Sculpting the écorché figure in clay and completing numerous anatomical drawings, students develop a deep appreciation and understanding for the construction of the human body, which can be applied critically either directly from nature or their imagination.

ART255 CREDITS: 3 PREREQUISITE(S): ART103

Visual Communications/Graphics Design

The course explores the principles and elements of design, and challenges the student to produce creative compelling solutions for promoting a variety of products and services. The student will learn how to build brand recognition and corporate identity through individual and team projects. The course emphasizes aesthetics and visual problem solving, including typographic issues, color management, hierarchy of information and effective layout.

ASTRONOMY (AST)

AST101 CREDITS: 3 PREREQUISITE(S): NONE

The Night Sky

(GE, Science)
Astronomers over the last several centuries have unlocked many of the wonders of the night sky. Students will familiarize themselves with the night sky, objects visible from the earth, and properties of those objects. They will explore some of the foundational, scientific principles of astronomy as they learn to use telescopes, astronomical planetarium software, and other readily available online astronomical tools.

AST301 CREDITS: 3 PREREQUISITE(S): NONE

The Solar System

(GE, Science)
Introduction to the field of astronomy for the non-science major. History of astronomy; astronomy as a physical science; properties of light; telescopes; and structure and evolution of the Sun, planets, moons and other bodies in the Solar System.

AST302 CREDITS: 3 PREREQUISITE(S): NONE

Stars, Galaxies and Cosmology

(GE, Science)
Introduction to the field of astronomy for the non-science major. History of astronomy; astronomy as a physical science; properties of light; telescopes; structure and evolution of stars; structure of the Milky Way galaxy and other galaxies and history of the Universe.

BUSINESS (BUS)

BUS102 CREDITS: 3 PREREQUISITE(S): NONE

Management in a Technology Environment

This course introduces management principles that specifically apply in contemporary technology environments, applications of management in technology organizations that include the management functions and processes of controlling, decision making, leading, motivating, organizing and communicating. This course will examine working in groups and teams, effective communication and adapting to change.

BUS200 CREDITS: 3 PREREQUISITE(S): NONE

Entrepreneurship to Market

Translating technology innovations and inventions from concept to prototype to market usability requires attending to specific and established development considerations. This course provides students with currently applied frameworks associated with technology products that carry them through development and to a minimally viable state. Considerations such as foundations of cyber and information security, entrepreneurial funding sources, and market analysis will be presented and practiced.

BUS220 CREDITS: 3 PREREQUISITE(S): NONE

Project Management

Successful design and implementation of technology projects require substantial planning and execution. This course covers industry accepted techniques and frameworks for managing projects such as: PERT, Agile, Prince2, Benefits Realization Management, Lean, Process Based Management, Critical Chain Analysis and Pragmatic Project Management. Students will learn about and practice management models as a requisite for successfully completing future projects.

BUS230 CREDITS: 3 PREREQUISITE(S): BUS220

Organizational Development

This course will study leadership and management functions that are anticipated for preparing for the future and the current situation. Students will learn to mobilize resources, analyze human resource market trends and identify new trends and situations regarding managing people. Human resource issues such as job performance, benefits and leadership theories will also be explored. The course will examine the body of knowledge within an organization and how management can harness it. Part of the course will be devoted to the gathering of business intelligence by competitors to assess future organizational environments.

BUS300 CREDITS: 3 PREREQUISITE(S): NONE

Strategic Accounting

This course explores the use of finance, accounting and quantitative data for making decisions in a leadership role. Students will learn the various uses and processes to obtain this vital data for strategic decision making. The course will showcase the use and need at various levels of organizations from start-up to enterprise. Students will go through the process of producing this essential information and learn the proper ways of interpretation that will lead to actionable items.

BUS320 CREDITS: 3 PREREQUISITE(S): MAT210 AND BUS220

Financial Management in a Technology Environment

Students will examine the role of risk in financial decision making. Various methods of corporate financing will also be discussed. The student will understand financial markets, interest rates, risk and rates of return. This course discusses the concepts of basic accounting and financial reporting and forecasting germane to a manager.

BUS330 CREDITS: 3 PREREQUISITE(S): BUS220

Leading Technologists and Tech. Teams

Technology organizations are unique in that they are predominantly comprised of individuals possessing deep technical skills. Specialized leadership approaches are needed within technology organizations to fully capture the potential of knowledge workers and apply their capacity. This course introduces students to technology leadership topics such as: the role of personality profiles, leading geeks, situational leadership, human development, transformational and transactional leadership, team dynamics, inference management along with accountability and performance management. Successful conceptualization, design and implementing of technology that requires planning.

BUS415 CREDITS: 3 PREREQUISITE(S): NONE

Strategic Planning and Analytics

Organizations that align their mission, identity and strategy with their technology products and services have the greatest likelihood of sustained success. When analytics provide ongoing feedback on performance, entrepreneurial, lean and traditional organizations can adjust to market conditions and the desire of customers. This course introduces techniques for strategic planning, architecting aligned organizations and implementing analytic streams of data allow leaders and members of organizations to guide their organizations.

BUS420 CREDITS: 3 PREREQUISITE(S): NONE

Data Visualization and Mining

This course introduces theory and concepts relating to the effective display of data with a focus on quantitative data. Concepts provide the basis for selecting, designing and presenting graphs based on multidimensional data. Current tools are used to graph the correct data, alert decision makers to problems and display data geographically. Current tools are used to graph the correct data, alert decision makers to problems and display data geographically.

BUS440 CREDITS: 3 PREREQUISITE(S): NONE

Business Intelligence and Data Management

Business intelligence focuses on the use of information to drive effective business actions. It is the vehicle to achieve maximum business value from both developing and mature data warehouses. This course provides a comprehensive overview of business, technical and cultural implications of business intelligence. It explores a wide range of contemporary issues, including data warehousing and data mining theory and practice, tools and techniques for delivering business intelligence, information and knowledge management, implementation and exploitation of emerging technologies, CRM, process reengineering, supply chain management and geographic information systems. The course particularly focuses on Data Mining, a computer-assisted process of evaluating enormous sets of data to find previously undiscovered patterns, draw conclusions and then make decisions based on these patterns.

BUS450 CREDITS: 3 PREREQUISITE(S): BUS415

ROI Based Decision Making and Negotiations

This course is centered on 12 negotiation exercises that simulate competitive business situations. Specific topics covered include distributive bargaining (split the pie!), mutual gains framework, mixed motive bargaining (several issues at stake) with two and with more than two parties, auctions and fair division. Ethical dilemmas in negotiation are discussed at various times throughout the course. There are two principal objectives for this course. The first is to provide the student with negotiation tools that enable them to achieve their negotiation objectives in a fair and responsible fashion. The second is to learn by doing. That is, we provide a forum in which you actively apply these tools to a wide variety of business-oriented negotiation settings.

BUS455 CREDITS: 3 PREREQUISITE(S): NONE

Big Data Analytics

This course is an application of Big Data concepts including algorithms, analytics, and visualization of Big Data such as dashboards and predictive models. Artificial life algorithms and data mining concepts are implemented. Some of the modeling will include linear and logistic regression. Statistical and machine learning will be studied and investigated in areas such as medical informatics and biology.

COMPUTER FORENSICS (CFR)

CFR101 CREDITS: 3 PREREQUISITE(S): NONE

Computer Forensic Essentials

This course covers the essentials of computer forensic investigations and the evolution of computer forensics. It will explain various modes of attack, examples of cyber crimes, the reasons for cyber attacks, the role of computer forensics in tracking cyber criminals and computer forensics methodologies.

CFR105 CREDITS: 3 PREREQUISITE(S): CFR101

File Systems and Structures

A firm grasp of basic file systems and structures is a key to the success of a forensic investigator. This course provides an overview of fundamental file structure concepts. This is the foundation of knowledge for file systems and structures that will be the cornerstone for understanding future forensics courses.

CFR225 CREDITS: 3 PREREQUISITE(S): CFR105

Operating System Forensics

This course will provide the skills, tools and knowledge necessary to choose the proper tool to examine various operating systems. It will explore operating systems from a forensic point of view. Topics covered in this course include examining Windows, UNIX, Linux and Mac operating systems with a key focus on areas of persistence, malware locations and important data locations for each OS. The course will guide students through the popular forensic tools used with each operating system and case examples.

CFR227 CREDITS: 3 PREREQUISITE(S): CFR225

Malware Detection and Analysis

This course provides the skills necessary for students to find, analyze and categorize zero day malware compiled for specific attacks/victims. The course uses actual malware and a variety of tools currently used by practitioners. The course focuses on real-world examples of malware utilized by the Advanced Persistent Threat (APT), the effect on the enterprise and methods for mitigations.

CFR230 CREDITS: 3 PREREQUISITE(S): CFR101

Investigative Techniques

Forensic sleuthing can involve using some highly creative methods to find the evidence in a case. This course will explore the methods that can be used to solve digital forensic mysteries. It will also train students to use sound methods so all evidence collected during an investigation will be admissible and reliable in court.

CFR235 CREDITS: 3 PREREQUISITE(S): CFR105

Mobile Device Forensics

Evidence can be found on handheld devices such as cell phones and tablets. This course will provide the skills, tools and knowledge necessary to seize, image, examine and build cases for handheld devices. It will explore the latest mobile phone technologies, flash memory and along with the tools that can be used to extract information from these devices.

CFR315 CREDITS: 3 PREREQUISITE(S): CFR101

Video Forensics

This course will cover the process of Forensic Video Analysis. It will explain the makeup of CCTV systems, the optimization of these systems, and the recovery of evidence from CCTV along with the processing of video and image evidence, including authentication. Finally, the creation of reports and testimony will be the same as students will face when becoming certified Forensic Video Analysts.

CFR410 CREDITS: 3 PREREQUISITE(S): CFR101 AND NTW216

Network Forensics

Today's enterprises implement a variety of equipment within their infrastructures. A successful computer forensic candidate must have the skills necessary to understand topologies and protocols. This course will provide the skills, tools and knowledge necessary to identify and gather evidence on a network.

CFR420 CREDITS: 3 PREREQUISITE(S): CFR410

Advanced Forensics

This course covers advanced forensic topics such as router, application and database attacks. Everything needed to complete complex investigations will be explored, as well as advanced data recovery methods. Advanced Forensics will provide the necessary skills to become one of the top computer forensic investigators on the market today.

CFR470 CREDITS: 3 PREREQUISITE(S): CFR105

Corporate and Business Issues in Digital Forensics

This course covers aspects being dealt with in human resource management (protection/investigation of data related to HR operations), eDiscovery (data collection and attribution for legal processes) and intrusions/criminal activities. Topics will reflect actual issues facing businesses globally utilizing real malware, incidents and tools used by practitioners.

COMMUNICATIONS (COM)

COM226 CREDITS: 3 PREREQUISITE(S): NONE

Communication in Technology

(GE, Humanities)
Students will experience expressing technology concepts to a broad audience. Students will learn best practices in presenting technology products and pitching concepts using business-appropriate communication skills. Effective use of voice, nonverbal skills and visuals will be applied to topics such as robotics, virtual reality, animation, digital video, network security and others. Presentations include peer-to-peer feedback in student-led discussions. In addition, students will have the opportunity to create a resume and be mock interviewed for a technology position.

COMPUTER SCIENCE (CSC)

CSC102 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Programming

The purpose of this course is to introduce the fundamentals of computer science and programming. Students will become familiar with problem solving techniques and algorithm development using computers, including a structured high-level programming language. Topics will include flow of control, assignment, arrays, functions, and input and output, among others.

CSC104 CREDITS: 3 PREREQUISITE(S): NONE

Beginning Website Interfaces

This course lays the foundation for web design and coding by teaching students how to create and maintain static websites. Students will design web pages using HTML and CSS in conformance with current and future web standards, learn the basic underlying concepts of HTML page structure and content, CSS styling and rendering of web pages, be introduced to usability and information design principles and have a functioning website by the completion of the class. They will also learn about server technologies, the fundamentals of HTTP and FTP, and how search engines work.

CSC115 CREDITS: 3 PREREQUISITE(S): NONE

Data Science Now

Students will learn about previously unsolvable problems that can now be solved from solutions devised from data through mathematical algorithms and statistical formulas. Problem-solving is done by reviewing current case studies and examples. The data science workflow will be discussed, in detail, independent of any specific toolset.

CSC150 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to AI and Analytics

This course introduces what AI is, the history, and where it is going. Students will understand how AI utilizes technology and impacts the world today. Students will go beyond understanding to developing both AI and analytics applications utilizing libraries and other resources to accomplish this. This course does use programming but the research and use of libraries is the primary focus.

CSC175 CREDITS: 3 PREREQUISITE(S): CSC102

Data Collection, Verification, Transformation, and Analysis

This course provides an introduction to data science, how to collect and verify datasets. It will also introduce and apply techniques for data transformation and an introduction to analytical tools to process data.

CSC202 CREDITS: 3 PREREQUISITE(S): CSC102

C# Programming I

C# is a general purpose, object-oriented programming language suited for all types of development. This course presents the entire language and introduces the Base Class Library (BCL) to the student. Students will learn the syntax, keywords and constructs, as well as how to leverage the resources of the BCL. This is a project-based class and students will develop applications with C# using real-world tools and practices.

CSC203 CREDITS: 3 PREREQUISITE(S): CSC102

Java Programming I

Java is a general purpose, object-oriented programming language suited for all types of development. This course presents the entire language and the standard libraries to the student. Students will learn the syntax, keywords and constructs, as well as how to leverage the resources of the standard libraries. This is a project- based class and students will develop applications with Java using real-world tools and practices.

CSC211 CREDITS: 3 PREREQUISITE(S): CSC102

Introduction to Databases

This course will introduce students to the commands, architecture, and applications of structured query language (SQL). Topics will include design documents for a database such at Entity Relationship diagrams, creation of the database schema, creation, access, and manipulation of databases, tables, views, indexes, and stored procedures. In addition, normalization, optimization, backups and database restores will be studied and implemented.

CSC215 CREDITS: 3 PREREQUISITE(S): CSC102

C/C++ Programming I

C++ is a general-purpose programming language that supports object-oriented programming and is suited for all types of development. This course presents the entire language and the Standard Template Library (STL) to the student. Students will learn the syntax, keywords and constructs, as well as how to leverage the resources of the STL. This is a project-based class and students will develop applications with C++ using real world tools and practices.

CSC230 CREDITS: 3 PREREQUISITE(S): CSC102

Internet of Things

This course will cover Internet of Things (IoT) concept from a practical, telecommunication usage, security, augmentation of common devices, current enabling technologies and implementation perspective. This course will focus on fully integrating embedded smart devices, their protocol selections, information security, and real-time software development. Students will develop multiple terminating "smart devices" for inter-connected software applications. Student are introduced to the cyber-physical design architecture and discuss integration of application-level security services. The use cases, protection hardening, legal concerns, and security defense issues related to Internet of Things (IoT) will be addressed.

CSC235 CREDITS: 3 PREREQUISITE(S): CSC102

Python Programming I

This course is an introduction to the Python programming language including IDE usage, syntax and implementation of basic data structures. This will go beyond the introduction of concepts and cover object oriented programming, debugging, and libraries.

CSC240 CREDITS: 3 PREREQUISITE(S): NONE

Linux Operating System

This course is an introduction to the Linux operating system fundamentals, Linux shell, commands, administration, and kernel. This course will include system configuration, graphical interfaces, and discussions of various flavors of Linux. In addition, installation, administration, and security will be addressed.

CSC256 CREDITS: 3 PREREQUISITE(S): CSC104 AND CSC102

Designing Website Interfaces I

This is an intermediate course in client-side coding of enhanced dynamic websites, incorporating the use of HTML/CSS, JavaScript, and AJAX. In this class, students will build functional websites that exhibit professional site planning, design and development. In addition, JavaScript will be utilized to advance the website to include GUI functionality such as buttons, picture carousels, and panels. Students will learn how to use current web development software and an integrated development environment (IDE) to support coding.

CSC262 CREDITS: 3 PREREQUISITE(S): CSC202

C# Programming II

This course focuses on the craft of software. Students will build upon their previously acquired programming and language fundamentals and develop additional skills essential for crafting high quality and maintainable software. This is a project-based class and students will apply C# and real-world tools and practices to solve common programming problems involving advanced object- oriented programming with design patterns, shared code (DLLs), graphical user interfaces, multi-threading, network I/O and relational databases.

CSC263 CREDITS: 3 PREREQUISITE(S): CSC203

Java Programming II

This course focuses on the craft of software. Students will build upon their previously acquired programming and language fundamentals and develop additional skills essential for crafting high quality and maintainable software. This is a projects-based class and students will apply Java and real-world tools and practices to solve common programming problems involving advanced object-oriented programming with design patterns, shared code, graphical user interfaces, multi-threading, network I/O, and relational databases.

CSC275 CREDITS: 3 PREREQUISITE(S): CSC215

C++ Programming II

This course focuses on the craft of software. Students will build upon their previously acquired programming and language fundamentals and develop additional skills essential for crafting high quality and maintainable software. This is a projects-based class and students will apply C++ and real world tools and practices to solve common programming problems involving advanced object-oriented programming with design patterns, advanced Standard Template Libraries, and dynamic memory management including smart pointers, shared code, multi-threading and network I/O.

CSC285 CREDITS: 3 PREREQUISITE(S): CSC235

Python Programming II

This course is designed for students who have a basic understanding of Python and want to learn more advanced features. Intermediate topics covered include object-oriented programming, importing and working with data, and creating GUIs. Students will also learn how to create and distribute their own Python packages.

CSC311 CREDITS: 3 PREREQUISITE(S): CSC211

Advanced Databases

This course emphasizes security for databases. It will also cover tools such as MySQLi, PDO, SQLite (for mobile), CouchDB/PouchDB, NoSQL, Project management, data warehousing, and new forms of storage such as Amazon GO! And Apache Cassandra.

CSC312 CREDITS: 3 PREREQUISITE(S): CSC382

Cloud Computing

This course will introduce students to cloud computing concepts, architecture, and design. In addition, students will learn about the major types of clouds (public, private, hybrid), how to select the right cloud for their needs, and how to deploy and manage applications in the cloud. Finally, students will learn how to secure data transport and storage within the cloud environment.

CSC313 CREDITS: 3 PREREQUISITE(S): CSC382

Operating Systems Theory

This course explores operating system structure and services through the development of an operating system on a complex embedded system. Topics include processor scheduling, concurrent processes, synchronization techniques, memory management, virtual memory, input/output, storage management and file systems.

CSC318 CREDITS: 3 PREREQUISITE(S): CSC262 OR CSC263 OR CSC275

Software Engineering Principles

In this course, students will explore both basic and advanced software engineering principles, as well as formal application development processes. Students will apply selected Agile-style development processes utilizing UP (Unified Process) and UML (Unified Modeling Language) to produce a substantial application for a real-world scenario. Additional topics include architectural design and characteristics, the impact of software engineering on the performance of an application, industry-standard documentation practices and utilizing various testing methods to ensure quality.

CSC338 CREDITS: 3 PREREQUISITE(S): NONE

Statistical Data Science

Statistical Data Science provides students the opportunity to explore sources and types of behavioral data and empowers students to select and use appropriate tools for finding answers to questions about human behavior. Students will work with a variety of data models and theories, like factor analysis, item response theory, centroid clustering models, recommender systems, and topic models using a wide variety of data (e.g., traffic violations, crime, and video game data).

CSC340 CREDITS: 3 PREREQUISITE(S): CSC203 AND CSC211

Big Data Essentials

This course will introduce the basics of Big Data. It will define Big Data and the types of systems that are often used with Big Data including their respective advantages and disadvantages. Finally, we will cover how Big Data is used in business to create data products. This course teaches Big Data tools such as Hadoop, streaming technologies and NOSQL Databases. It also introduces cloud technologies and data mining concepts.

CSC342 CREDITS: 3 PREREQUISITE(S): NONE

React Native I

Students will learn and explore the future of mobile development with React Native. React Native helps you create real and exciting mobile apps for both android and iOS platforms. Just code once, and the React Native apps are available for both iOS and Android stores which helps to save development time and cost. The React Native framework was created by Facebook and is similar more in name than in syntax to their older JavaScript library React.js. At the end of the course, students will have created several MVP Android and/or iOS applications.

CSC345 CREDITS: 3 PREREQUISITE(S): CSC202 OR CSC203 OR CSC215

High Performance Embedded Systems

High performance embedded systems can provide a low-cost development platform for software and hardware developers and they can help fuel the creativity and innovation of the maker community. This class will provide exposure to develop an embedded platform and operating system where learners can have fine-grained control of the software, hardware and communications. The Internet of Things will be researched, discussed, and software and hardware development associated with the Internet of Things will be explored. Learners will investigate software and hardware development communities and make meaningful contributions to them.

CSC356 CREDITS: 3 PREREQUISITE(S): CSC256

Designing Website Interfaces II

This is an advanced course in server-side coding of enhanced dynamic websites, incorporating the use of HTML/CSS, JavaScript, JQuery, and PHP. Students will learn the concepts of server-side database connectivity to relational database management systems. A survey of the technology of the emerging field of Big Data will be undertaken. In this class, students will build functional dynamic websites that exhibit professional site planning, design and development. Students will continue to learn how to use current web development software and an integrated development environment (IDE) to support coding.

CSC352 CREDITS: 3 PREREQUISITE(S): NONE

React Native II

In React Native I, students created mobile apps which included multiple Screens with navigation stacks, images, sound, backgrounds, GPS, maps, publishing, UI components, persist state, and I/O. In React Native II students will be learning to architect and code more advanced mobile applications. These more advanced apps can store information in Databases, scrolling, multiple views, advanced I/O, and communicate with network services.

CSC370 CREDITS: 3 PREREQUISITE(S): CSC235

Artificial Intelligence

In this course, students will explore both historical approaches for AI, as well as the major subfields and applications of AI today. These include using AI in intelligent devices, machine learning, voice recognition, APIs, and libraries for these implementations. Students will then apply that knowledge to create their own fully functioning AI applications.

CSC372 CREDITS: 3 PREREQUISITE(S): NONE

E.L.K. – Elasticsearch, Logstash, and Kibana

An overview of the Elastic Stack as well as Elastic Cloud. ELK is a fast-growing search and data analytics platform for diving deep into log data as well as other data sets. Topics include creating a search index, building an enterprise search, configuring a Logstash pipeline, visualizing data with Kibana, and creating data presentations using Canvas.

CSC373 CREDITS: 3 PREREQUISITE(S): CSC262 OR CSC263 OR CSC275 OR CSC370

Machine Learning

This course focuses on the artificial intelligence field of machine learning. Students will build upon their previously acquired programming and AI fundamentals and develop additional skills essential for developing their own original machine learning algorithms. This is a projects-based class where students will apply unsupervised and supervised machine learning techniques, predictive data models, classification, online learning algorithms, neural networks, and predictive analytics to current machine learning trend case studies.

CSC377 CREDITS: 3 PREREQUISITE(S): CSC482

Machine Learning Utilizing Data Science

In this course, students will explore the history of machine learning through its current state today, as well as examine potential applications for it in the future. Students will learn how to write machine learning classifiers from scratch using Python, as well as how to select the best classified for a given situation. Additional topics include artificial neural networks, decision trees, k-nearest neighbor, and Naïve Bayes.

CSC382 CREDITS: 3 PREREQUISITE(S): CSC262 OR CSC263 OR CSC275

Data Structures and Algorithms

This course explores the specification and implementation of containers as abstract data types. Structures covered include strings, vectors, stacks, queues, sequential lists, binary trees, hashes and graphs. The course also investigates algorithm design and evaluation, such as sorting, search, recursion and algorithmic analysis.

CSC409 CREDITS: 3 PREREQUISITE(S): NONE

Statistical Models

This course gives students an advanced look at describing statistical models beginning with classic linear regression. Course material will emphasize formulating, choosing, applying, and implementing statistical techniques to realize patterns exhibited in data. Students will be able to decide which techniques are appropriate for a given question, as well as how to make trade-offs between model complexity, ease of interpreting results, and computing time required for processing. Concepts involving probability and statistics will be practically applied with real world examples.

CSC413 CREDITS: 3 PREREQUISITE(S): CSC382

Advanced Software Development I

In this course, students will be introduced to full stack development using advanced software development techniques. Students will learn to apply requirements gathering, design, version control, testing, object-oriented programming, design patterns, and refactoring techniques to create a well-designed and maintainable software package. Integration of web, frameworks, object-oriented design, and database connectivity are all inclusive for the final project.

CSC436 CREDITS: 3 PREREQUISITE(S): CSC211AND CSC382 AND MAT220

Data Analytics

This course follows CSC340 Big Data Essentials and goes beyond the techniques to include full data mining, data interpretation, predictive models and trend analysis. It will also introduce Machine Learning algorithms and tools such as R programming.

CSC442 CREDITS: 3 PREREQUISITE(S): CSC382

Secure Coding

This course will be founded on the CERT secure coding standards. It is designed to teach the practices needed to avoid vulnerabilities that can be exploited. This will address new code as well as mitigating issues in legacy code. This includes libraries, authentication, and encryption used to accomplish secure code. Securing against hijacking, sandboxing, and tools to aid in secure code will be addressed.

CSC444 CREDITS: 3 PREREQUISITE(S): CSC262 OR CSC263 OR CSC275 OR CSC373

Deep Learning

This course focuses on the fundamentals and basic application of deep learning. Students will build upon their previously acquired programming and deep learning to develop additional skills essential for coding their own basic neural networks. Students will design self-learning intelligent systems that learn from big data using APIs. This is a projects-based class where students will develop and apply new algorithms to neural networks in applications on real world case studies.

CSC445 CREDITS: 3 PREREQUISITE(S): CSC211 AND CSC263 AND CSC356

Advanced Web Programming

Introduction to web frameworks, such as Ruby on Rails. Installation of development frameworks. Configuration of web server and distributed database management systems environments. Software architecture patterns such as Model-View-Controller (MVC). Database-backed web applications, output display, and data validation paradigms.

CSC448 CREDITS: 3 PREREQUISITE(S): CSC370

Artificial Intelligence Simulations in Unity

In this course, the student will learn the basics of the Unity Engine development environment. The student will learn to create and code artificial AI environments and simulations in the Unity Engine Development System using C# with graphical assets. The student will research, design, and code environments to run simulations that demonstrate AI solutions. These include but are not limited to genetic algorithms and reinforcement learning.

CSC449 CREDITS: 3 PREREQUISITE(S): NONE

Time Series

Time series analysis Is a statistical method that deals with how data values change over time. Advancing the use of statistical modeling using either R or Python, this course will apply time series models to solve real world problems. Topics will Include serial correlation, visualizing time series data, testing for stationarity, and selecting model parameters.

CSC456 CREDITS: 3 PREREQUISITE(S): CSC256 AND MKT250

Best Practices in Web Production

Is your website as effective as it needs to be? Does it send the right message? Does it utilize appropriate technologies? Can your prospects ever find it? Who is your audience? Does your online portfolio address your strengths and communicate your unique design to your future employer? This course will address best practices in web design and development, will critique professional sites as well as the students' and will provide specific recommendations to strengthen your site and maximize your investment. The class is also designed to guide students through the processes of creating their own effective online portfolio by identifying strengths and weaknesses of a site, discussing how to approach a web redesign, how to approach site structure and information architecture.

CSC462 CREDITS: 3 PREREQUISITE(S): MAT220 AND CSC340

Data Visualization

This course is a cumulation of the data tools that have been learned in earlier courses. Students will build various visualizations of be datasets using techniques such as various dashboards designed for the target audience, real-time updates, graphical display of data, and/or use of external devices for these visualizations such as an AR display device.

CSC482 CREDITS: 3 PREREQUISITE(S): CSC484

Data Visualization Utilizing Data Science

In this course, you will learn to create data visualization graphs for small and Big Data. You will take data you have mined, or from a source which has mined it. You will then structure the data to provide a foundation to be used with data visualization tools. Once the data is structured in a meaningful way, it can be coupled with different data visualization tools. Using these tools, you will learn how to identify data trends and patters which can answer questions you were not able to before.

CSC484 CREDITS: 3 PREREQUISITE(S): CSC175

Data Mining

In this course, you will learn to connect to and collect data from several different types of data stores using several methods. You will then learn how to store and structure data in a database depending on the scenarios it will be used for, such as machine learning and deep learning. The crux of this course will be to learn and use data mining to turn the data from many sources into useful information in a reasonable amount of time to be of use. Data scrubbing will also be taught.

CSC488 CREDITS: 3 PREREQUISITE(S): CSC377

Deep Learning Utilizing Data Science

Introduction to the history of Deep Learning to its current state today and beyond. In this course, we will explore a deep learning artificial neural network. We will then use deep learning tools to design and create our own Deep learning artificial neural network. In this course, we will be pulling from larger datasets and even deploy a small supercomputer to train our artificial neural network.

DESIGN BUILD MAKE (DBM)

DBM100 CREDITS: 3 PREREQUISITE(S): NONE

3D Build Tools

One of the most important skills of any maker is the ability to understand, design, and build a three-dimensional product. Whether that design will ultimately take form via a 3D printer, CNC machine, or a more advanced manufacturing method, being able to intricately model the shape and behavior of a component is critical in becoming an effective maker. In this course students will learn the key fundamentals of 3D design, including the history of computer aided design/build, key manufacturing methods used in industry, the use of case studies to model and demonstrate rapid prototyping principles, and a number of physical deliverables printed via the University's set of 3D printers.

DBM150 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Maker Studio

Ideas evolve much more easily toward applications when they are given a physical form. Maker style technologies and techniques provide tools and pathways for designers from any of University of Advancing Technology (UAT's) programs to rapidly create versions of their ideas. Intended for non-majors, this course provides an introduction into the use of the most common entry-level maker equipment to create props and functional prototypes.

DBM215 CREDITS: 3 PREREQUISITE(S): DBM100

Prototyping Tools and Practices

This course focuses on creating functional prototypes from digital models using a variety of tools, techniques and materials as students explore the process of taking an idea from conception to a functional state. Students in this course will learn to use a variety of maker style tools representing differing levels of complexity to generate complex prototypes. Prototypes will be based on 3D models, where materials, their properties and their functional relationships with each other as a part of a working model play key roles in design decisions.

DBM240 CREDITS: 3 PREREQUISITE(S): DBM215

Electromechanical Devices

Articulated and mobile devices depend upon electromechanical components for their functionality. This course provides students an overview of electromechanical devices, their appropriately matched applications and then gives students opportunities to incorporate them into project builds.

DBM360 CREDITS: 3 PREREQUISITE(S): RBT173

Wearable Technologies

Integrating digital technology that incorporates computing, display and Internet connectivity and is worn by humans is a rapidly emerging area of technology interest. In this course, students will learn current technology trends and capacities for wearable technology and apply them in completed projects.

DIGITAL MEDIA AND DESIGN (DMD)

DMD150 CREDITS: 3 PREREQUISITE(S): NONE

Digital Tools for Media and Design

This course is an overview of Adobe Illustrator and InDesign and its application in creating 2D vector-based graphics to market an individual, product or service. Using these tools, along with advanced Photoshop techniques, students will learn to create digital assets and concepts that convey good design practice, brand consistency and establishing a brand story to audiences via the Internet, social media platforms, device-based applications and media channels.

DMD200 CREDITS: 3 PREREQUISITE(S): NONE

Digital Photography

This class concentrates on digital camera technology (lenses, sensors, ISO, depth of field, compression, digital media, color spaces, camera form factors and accessories) as well as technique (exposure, composition, color, contrast and more). With an emphasis on sculpting beautiful images—both still and in motion—this course trains students to become digital photographers, camera operators and camera assistants.

DMD210 CREDITS: 3 PREREQUISITE(S): NONE

Vector Illustration

In this course, students will gain proficiency in the creation of 2D vector graphics using industry-standard software. Students will learn the commands, interfaces, and pipelines to create logos, product designs, and style guides with an emphasis on design identity. Throughout the course, students will become proficient at mastering the software to provide visual communications.

DMD220 CREDITS: 3 PREREQUISITE(S): ART103 AND ART112

Principles of Interface Design

What is it that makes an engaging interface? What elements must be considered to hold user interest? This course explores the aesthetic and functional components associated with creating effective interfaces that encourage the user to be an active participant. Topics include product design, color and compositional ergonomics, and the design process as it relates to interaction with the content. Students will be involved in creating unique interface design solutions, as well as critiquing existing interfaces from a variety of media sources.

DMD230 CREDITS: 3 PREREQUISITE(S): NONE

Personal Branding

In our ever more connected world, your social media persona is often the first impression others will have of you. How do you put your best digital self forward? This course will help students navigate the major social media sites such as Facebook, Twitter, Instagram, YouTube, and more, as well as give them the tools to create their own websites, blogs, logos, and other elements of their digital identity.

DMD235 CREDITS: 3 PREREQUISITE(S): NONE

Marketing for Digital Media

So you've made something awesome. Now what? How do you get people to see it, care about it, and share it with their friends? If you've done it right, you thought about these issues before you even started your project. In this course, students will learn how to identify the audience for a project, how to plan a campaign, leverage social media as well as traditional media, develop a marketing plan, and more.

DMD410 CREDITS: 3 PREREQUISITE(S): NONE

Media and Content Accessibility

Students will explore the relationship between digital technologies and human disabilities. This course will delve into the role of accessibility in the digital world. An importance will be placed on creating an understanding of unmet needs and learning how to meet those needs through innovative problem-solving.

DIGITAL VIDEO AND ANIMATION (DVA)

DVA101 CREDITS: 3 PREREQUISITE(S): NONE

Digital Fundamentals

This course familiarizes students with digital film production equipment while immersing them in the basic aesthetics of motion picture production. Hands-on projects involve scriptwriting, storyboarding, camera work, continuity, 3-point lighting, sound recording and basic video editing. Students work in groups to complete various technical exercises that familiarize them with terms and equipment while preparing them to produce complete digital film works.

DVA110 CREDITS: 3 PREREQUISITE(S): NONE

Lighting and Environment Design

This course introduces the student to the theories and techniques used in lighting and scene design when creating a setting for digital film, animation or game projects. Script analysis and interpretation may be used to teach the principles of style, form and balance in scene design. Lighting subjects include the psychological effects of light and color. Students will be introduced to the basic lighting elements of visibility, selective focus, modeling and imparting mood to a scene.

DVA140 CREDITS: 3 PREREQUISITE(S): NONE

Audio Fundamentals

This course serves as a foundation for familiarizing students with the fundamentals of digital audio. Students will explore the theories and techniques necessary to record and edit sound for use in digital media. Topics covered include the perception of sound, waveform editing, digital signal processing sound effects, MIDI, voiceovers and music composition.

DVA145 CREDITS: 3 PREREQUISITE(S): NONE

Intro to 3D Studio Max and Maya

As tools for game and digital artists, 3D Studio Max and Maya are widely used to create models, render them and ultimately animate them. This course provides students with a foundational overview of these industry 3D modeling and animation tool systems. Students will use this baseline knowledge as a launching place for later coursework that more deeply explores specific techniques and applications of 3D Studio Max and Maya.

DVA150 CREDITS: 3 PREREQUISITE(S): NONE

Interpersonal Client Relationships/Communications

Knowing how to work with potential clients is a key component to being successful in the industry. In this course, students will learn the skills needed to build relationships with clients. Students will learn best practices regarding communication with clients, such as being able to actively listen to their needs and wants, and how to approach topics such as revisions and changes throughout the production lifecycle.

DVA215 CREDITS: 3 PREREQUISITE(S): DVA150

Professional Practices

In this course, you will learn how to work on business and change documents. This course is not a legal course, but you will need to know the fine lines in the field of where not to cross, as well as help your client not cross those same fine lines. BMI and ASCAP organizations will be reviewed and how it is applied in scenarios. What does it look like to have your own business?

DVA220 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Production Design

Students will get a basic understanding of shock composition, what to put in front of a camera and set design, costume and lighting. All the choices they put into making a project, that can include props costumes and set dressing. Students will also gain an insight into what a producer and director do.

DVA230 CREDITS: 3 PREREQUISITE(S): DVA140

Digital Audio Production

This course builds on the theories and techniques of Digital Audio Fundamentals by focusing on the synchronization of audio to picture. Students will take part in all aspects of audio post-production, including ADR, Foley, sound effects, ambiance and the mix. The final project will consist of a complete work in which all audio has been added in post.

DVA234 CREDITS: 3 PREREQUISITE(S): NONE

Special Effects and Character Makeup

In this highly collaborative setting, students will learn makeup techniques for use in digital film and as a basis for facial animation. Basic corrective, old age and fantasy makeup techniques will be used as building blocks for character and effects makeup. Effects may include burns (gelatin build-up), scars, bleeding wounds and monster faces using wax and/or latex build-up.

DVA241 CREDITS: 3 PREREQUISITE(S): DVA101
RECOMMENDED: THE130, DVA110, THE310

Content Production

Continuing the concepts begun in DVA101, this course introduces students to more advanced digital film production equipment and techniques and emphasizes the production of complete works. Working in teams, students will produce various projects, including music videos, documentaries and short films, while also exploring additional aesthetic concepts such as depth of field, camera movement, and advanced lighting and sound. A greater emphasis is also placed on the pre-production stage for each type of project.

DVA254 CREDITS: 3 PREREQUISITE(S): NONE

Motion Graphics

From Saul Bass to Kyle Cooper, from Psycho to Se7en and onward to every commercial in recent memory. Motion Graphics is the art and science of using design as a storytelling tool. Using text, images, graphic elements, animation, camera movement and music, students will explore the concepts, aesthetics and techniques that shape this fast-growing and ever-changing field. Practical exercises throughout the course are designed to develop software competency and assist students in building board-quality complete works.

DVA258 CREDITS: 3 PREREQUISITE(S): DVA101 AND DVA241

Matching Tools to Media

If you are working in Digital Production, you will be working in a number of different formats, such as print, game, web, film, hi-def film, you need to know what the common specs are for those outputs and during preproduction and set up make decisions about all your equipment, so you are producing matches your outputs.

DVA265 CREDITS: 3 PREREQUISITE(S): DVA101

Innovative Camera Tools and Techniques

The camera platforms used to create video content are always changing to create new and innovative shots and content. Beyond the standard camera platforms, creators now have access to drones, 360 cameras, and robotic cameras. Beyond these, there are always new platforms and techniques evolving as well as custom created solutions for each project. This course explores these platforms from the technical and setup standpoint as well as the creative use, implementation, and utilization of these platforms within the context and needs of the project.

DVA274 CREDITS: 3 PREREQUISITE(S): DVA101

Editing

Editing is the final rewrite—the last explosion of creativity that shapes what a viewer ultimately sees, hears and feels when watching a film. In this course, students explore the aesthetic development of this crucial cinematic art through film clips, readings, writing assignments and class discussions, while also completing practical exercises on industry-standard digital film editing software. Students are encouraged to collaborate with students in DVA241 to complete several projects, including music videos, documentaries and short films.

DVA280 CREDITS: 3 PREREQUISITE(S): DVA140

Audio Production Software I

Students will use the interface and clean up audio files, identify what the software does. Along with discovering the hardware elements, how to use a mixer, how to record foley and ADR., etc. This course will distinguish what home media management is and its importance.

DVA334 CREDITS: 3 PREREQUISITE(S): DVA234

Special Effects and Character Makeup II

Building on the skills taught in the previous course, students will develop makeup techniques used in their digital film productions related to facial and body makeup. The use of prosthetics and animatronics will be more deeply practiced.

DVA335 CREDITS: 3 PREREQUISITE(S): DVA241

Cinematography

This course will expose the student to the tools and techniques that will allow them to light a variety of stories. Students may use light kits, gels and filters to produce 3-point lighting and soft or hard lighting, and craft an array of different settings. Different styles of motion picture lighting will be analyzed and the student will have the opportunity to recreate the lighting used in specific scenes.

DVA353 CREDITS: 3 PREREQUISITE(S): DVA241

Visual Effects Compositing

Compositing is defined as the combination of two or more images into one final image. Students will explore the art, science and history of visual effects compositing from its earliest, celluloid-based origins through its most recent digital implementations in film and video production. Practical exercises throughout the course are designed to develop software competency and assist students in building boards-quality complete works.

DVA365 CREDITS: 3 PREREQUISITE(S): DVA101 AND DVA230

Audio Mastering

This course is an advanced sound course, where students will be able to ultimately master sound for their final projects, whether it be a short film, video, etc. This is a strictly postproduction studio-based setting. At this time, students will be working on their boards pieces.

DVA380 CREDITS: 3 PREREQUISITE(S): DVA280

Audio Production Software II

Once students are familiar with software and hardware and all that it does, This course focuses on sound design. Students will be manipulating sound work for a video project. Students will also focus on creative ways to sweeten a sound effect or build a sound library. This may include working with foley, ADR recording in studio. This course is focused on mastering sound for video projects, as well as on how sound is engineered to enhance the viewer experience.

DVA405 CREDITS: 3 PREREQUISITE(S): NONE

Virtual Sets and Production

Virtual and combination set of production are an emerging new area. This course will introduce the student to the technologies and practices that are associated with virtual sets and production. Along the way, students will have the way to practice preproduction design as they prepare for and execute virtual design work.

ENGLISH (ENG)

ENG101 CREDITS: 3 PREREQUISITE(S): NONE

Composition I

(GE, Humanities)
This course is designed to present effective techniques in organizing, developing and writing academic essays that reflect a collegiate level of writing. The purpose of this course is to help students write correctly, clearly and thoughtfully. Students will receive an introduction to basic writing, thinking and reading skills required for success in college, with emphasis on fluency in analytical, rhetorical and creative non-fiction presentation.

ENG102 CREDITS: 3 PREREQUISITE(S): ENG101

Composition II

(GE, Humanities)
ENG102 is designed to introduce students to the essential language, theories and strategies of argumentation and research. The purpose of the course is to provide students with the tools necessary to develop arguments for specific audiences within specific rhetorical situations. Students will also develop their critical reading skills: analyzing, evaluating and critiquing the claims and evidence used by various authors. Finally, students will learn proper research skills and write an in-depth research essay/project.

ENG215 CREDITS: 3 PREREQUISITE(S): ENG101

Topics in Creative Writing

(GE, Humanities)
This course teaches the principles that result in effective original work: the creation of characters, plots, visual imagery and effective dialogue. Students are also expected to be able to provide constructive criticism to others. Students will be expected to produce original work as a final project.

ENG301 CREDITS: 3 PREREQUISITE(S): ENG102

Technical Writing

(GE, Humanities)
Effective professional communication is critical in the business environment, and can take the form of email, memorandum, user's manual, developer documentation or laboratory report. This course focuses on developing writing skills for technical audiences, emphasizing professional writing style, clarity, and presentation of information. Students will analyze, develop, and critique a variety of technical documents to practice and understand the role of the technical writer.

ENG305 CREDITS: 3 PREREQUISITE(S): ENG101

Mythology, Fable and Fairy Tale

(GE, Humanities)
This course will explore various definitions of myth, compare and contrast various mythologies from around the world and examine the ways myths have evolved over time. We will also study the mythological roots of the fairy tale, compare and contrast fairy tales from around the world, and explore how fairy tales have changed over time.

ENG310 CREDITS: 3 PREREQUISITE(S): NONE

Science Fiction as Literature

(GE, Humanities)
This course will delve into selected readings in the literature of science fiction to show how the genre of science fiction has evolved from the dark fantasy narratives of the 19th century through the start of the 21st century. Students will examine key genre texts from the worlds of print, cinema, and the web.

ENG330 CREDITS: 3 PREREQUISITE(S): NONE

Crime Literature

(GE, Humanities)
Crime Literature provides a survey of selected topics within the literature, cinema, and high-profile criminal cases of selected eras between the late Victorian era and the modern era. Texts and multimedia include Sherlock Holmes stories, an Agatha Christie novel, hardboiled and film noir masterpieces, television procedurals, and contemporary thrillers. Emphasis will be placed on important themes, authors, and texts of the genres of mystery, crime fiction, and detective stories

ENG340 CREDITS: 3 PREREQUISITE(S): ENG215

Advanced Creative Writing

(GE, Humanities)
This course builds upon concepts taught in ENG215 Topics in Creative Writing to further advance creative writing skills of students. This course teaches the principles that result in effective original work: the creation of characters, plots, visual imagery and effective dialogue. Students are also expected to be able to provide constructive criticism to others. Course may combine beginner and advanced students to maximize mentorship and critical abilities of advanced students.

ENG345 CREDITS: 3 PREREQUISITE(S): NONE

Gothic Literature

(GE, Humanities)
Gothic Literature is the literature of horror and terror, the stuff of bad dreams and nightmares, ghost stories and hauntings. This course surveys the evolution of Gothic texts since the late 18th century, beginning with the earliest examples, and then moves forward through 21st century variations. Texts for this class include novels, short stories, films, and television shows, including the stories of Poe and Lovecraft, and much more. Students may create their own gothic works as part of this class.

ENG350 CREDITS: 3 PREREQUISITE(S): NONE

Fantasy Literature

(GE, Humanities)
This course will examine key fantasy literature texts in the form of novels, short fiction, film, TV series, and other media to show how the genre of fantasy has evolved toward its current incarnations. Students will engage in analytical and creative contexts to seek an understanding of how works within this genre and its subgenres play upon (and occasionally subvert) audience expectations through themes, characters, narrative formats, and literary and artistic techniques.

ENG412 CREDITS: 3 PREREQUISITE(S): ENG101

The Graphic Novel

(GE, Humanities)
This course will consider a selection of contemporary graphic novels and related theories of visual narratives. Until recently, this genre of literature has been dismissed as childish, or even worse, as "low culture" unworthy of critical consideration. Throughout the class, we will test theories with a variety of projects and some challenging (but intriguing) readings. We will also place each work in its unique historical and “social context.”

ENG415 CREDITS: 3 PREREQUISITE(S): ENG101

Selected Topics in Literature

(GE, Humanities)
This course is designed to explore a defined area of literature, including individual authors, literary movements, issues in popular culture and various genres. The in-depth study may include works from both Western and non-Western cultures. Contents and methods vary with instructors and from semester to semester.

FITNESS (FTN)

FTN210 CREDITS: 1 PREREQUISITE(S): NONE

Yoga

Balance mind and body while increasing strength and flexibility. This physical education course is geared toward giving the student an opportunity to calm their busy minds through slow and deliberate body movements and development of breath control. Yoga is suitable for all body types as part of the experience is learning to listen to the wisdom of the self. This course may be taken multiple times.

FTN211 CREDITS: 1 PREREQUISITE(S): NONE

Swordplay

The purpose of this course is to provide an overview exposure to competition and recreational swordplay. The work will in part be aimed at the development and enjoyment of physical skills in working with a variety of sword and martial art equipment and learning the basic techniques of movement, attacks, parries and drills.

FTN222 CREDITS: 1 PREREQUISITE(S): FTN211

Advanced Swordplay

The purpose of this course is to provide an advanced exposure to competition and recreational swordplay. Students will be required to attend one competition in the Phoenix area. Coursework will in part be aimed at the development and enjoyment of physical skills in working with a variety of sword and martial art equipment. Students will learn the basic techniques of movement, attacks, parries and drills. This course will also focus on historical swordplay and theatrical swordplay. Choreographed skits will be a major element of this class.

GAME ART AND ANIMATION (GAA)

GAA105 CREDITS: 3 PREREQUISITE(S): NONE

Game Art and Animation Fundamentals

Game Art and Animation is built on a foundation of drawing, graphic design and art. This course is designed to build that foundation allowing the student to build a base of visual communication and artistic theory. Concentrations on composition, color, drawing, observation and traditional design allow the student to develop a personal aesthetic and style linked to sound artistic principles. This course uses both traditional and digital techniques to create a basis for Game Art and Animation projects.

GAA110 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Game Art and Animation

This course introduces the student to industry standard 3D game art and animation for video games. Students will recognize, differentiate, analyze, and create game art assets that are used in 3D game projects. Areas of emphasis include: game art, concept, box modeling, UV unwrap, texturing, rigging, animation, rendering, and development of an online portfolio.

GAA220 CREDITS: 3 PREREQUISITE(S): GAA110
RECOMMENDED: ART234

3D Modeling Environments and FX

This class will explore modeling game environments and special effects using different industry standard modeling procedures and will discuss when each is appropriate. Students will study organic and hard surface modeling. Areas of emphasis include: sculpting tools, box modeling, Boolean, lofting, modifiers and deformers. Students will complete exercises that build toward a final project.

GAA230 CREDITS: 3 PREREQUISITE(S): GAA110
RECOMMENDED: ART233

3D Modeling Characters and Vehicles

This course will explore modeling game characters and vehicles using various industry standard modeling procedures and will discuss when each is appropriate. Students will study organic and rigid surface modeling techniques and pipelines. Areas of emphasis include: Polygon, Sub-division, and NURBS surfaces with sculpting tools, box modeling, extruding, lofting, modifiers and deformers. Students will complete exercises that build toward a final project.

GAA240 CREDITS: 3 PREREQUISITE(S): GAA220

Game Texturing

This course focuses on the creation of textures for digital games. Students will learn how to create consistent and efficient texture maps from scratch as well as from photo references. Proper mapping and application procedures will also be reviewed. Assignments will help students build their own texture library to increase their production speed.

GAA320 CREDITS: 3 PREREQUISITE(S): GAA220

Environmental and FX Animation

Students will develop capacity in the process of environmental and special FX animation techniques needed for current game animation trends. The utilization of particle systems and game engine import/export strategies will be addressed. The development of common and custom animations for dynamic level objects and game environments will be emphasized. The use of physics-based, dynamic animation systems will also be explored in this course.

GAA325 CREDITS: 3 PREREQUISITE(S): GAA240

Materials, Shaders and Lighting

Students will explore procedural and non-procedural materials, textures and shaders as they immerse themselves in the creation of natural surfaces for game engines. Proper lighting techniques for game environments and material shaders will be examined. The application of materials and specialized mapping techniques to achieve realistic surfaces for game art assets will be emphasized.

GAA330 CREDITS: 3 PREREQUISITE(S): GAA230

Characters and Vehicles Animation

This course will introduce basic rigging and animation principles and techniques for 3D character and vehicle models. Students will learn fundamental rigging and animation toolsets using industry standard tools. Course topics include: custom bone setup, IK/FK, constraints, and keyframing, looping cycles and spline animation. Students will rig and animate a character and vehicle which they created in a previous modeling course.

GAA360 CREDITS: 3 PREREQUISITE(S): GAA105

UI Design and Animation

This course will build on the student's skills in creating interactive and visually compelling menus and HUDs as seen in today's high-profile titles. The student will script design solutions and problem solve communication issues using industry standard 2D and 3D UI animation software and scripting tools. Assignments will emphasize the visualization and creation of interface transitions with stylish animation.

GAA420 CREDITS: 3 PREREQUISITE(S): GAA240

Environmental and FX Animation

Current AAA games feature amazing environments that drip with atmosphere and stunning interactive details. Throughout this course students will research the latest trends in level modeling and apply their skills in the development of advanced architectural and organic models needed for current game development. Assignments will lead the student to create a complete game environment that is ready to add to their boards.

GAA430 CREDITS: 3 PREREQUISITE(S): GAA230

Advanced Character Rigging and MoCap Animation

Students will learn the importance of good planning and problem solving as they relate to character design for 3D animation. Course topics will cover: character setup, inverse kinematics, joints and bones, deformers, set-driven keys, bipedal and quadruped setups. Students will be immersed in hands-on motion capture exercises and explore advanced techniques for blending actions and mapping data to multiple characters. Students will create a fully functional character rig and apply animation to it.

GAA440 CREDITS: 3 PREREQUISITE(S): GAA230

Advanced Game Character Creation

Never in the history of game development have characters and vehicles been so realistic in appearance. Students will explore and apply techniques to create hyper realistic game characters, creatures and vehicles used for Triple-A titles. Tools come and go; the essence of what makes a great character modeler is artistic knowledge and a critical artistic eye. Anatomy, anthropomorphic creature construction and automotive design are emphasized during this course.

GAME STUDIES (GAM)

GAM101 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Game Design

Whether the goal is to become a game designer, artist or programmer, this course is a path into the world of video game production. Students will explore what career paths lay ahead in the respective areas of game development through an understanding of the game design process and develop awareness of the many positions within the game industry. By learning fundamental design and visualization techniques needed to express complex game ideas, students will apply professional documentation techniques to their projects. Students will also learn how to convert their own game playing skills to tools used to analyze popular games and break down gameplay elements to discover what makes the greatest games tick.

GAM113 CREDITS: 3 PREREQUISITE(S): GAM125

Introduction to Game Tools

Game development toolkits are the basis for industry games both casual and large. This course introduces students to working in a toolkit environment by instructing in how games of all sizes and complexities are built within a toolkit. This course also provides practice for students as they use the most foundational tools to build game projects.

GAM125 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Game Development

The process of developing games is an extensive process and requires developers to understand the many intricacies of development. This course aims to teach the full process of developing a game, from the pre-production stages to the final release and support of a game. The class will cover the basics of production, as well as the various positions and their duties on a game development team. Students will take part in mock game projects where they will attempt to fulfill all the needs of a mock game studio to learn the many parts of the development process.

GAM150 CREDITS: 3 PREREQUISITE(S): NONE

Evolution of Electronic Games

This is a critical review of the technology and design history of video games, from the first all analog machines to the powerful console systems of today. This course will discuss primary innovators and historical figures of the industry and the origins of game design elements such as scoring, risks and rewards, level design, interacting with AI and interface design. Through analysis and example, students will look at the development of the industry, the formation of the classical game genres, the explosion of game-related technology and the possible futures of the field. These design lessons will be applied to simple projects to reinforce how game design elements from three decades ago still shape our industry and its products.

GAM170 CREDITS: 3 PREREQUISITE(S): GAM101

Game Design Workshop I

This course explores the invention, revision and presentation of game design ideas in an atmosphere similar to a creative writing workshop. Students will work singly and in small groups to develop game ideas, compare and contrast them with published games and then create focused design documents for potential future production. The end-product will be several robust, polished game designs that have been tested by the most critical audience—your peers.

GAM200 CREDITS: 3 PREREQUISITE(S): GAM101

Critical Game Studies

This course is an introduction to advanced critical techniques and approaches to game design, analysis of games and game theory. Using techniques of critical theory, ludology and semiotics, students will explore the structure of games, interaction with the user and how games balance rules with freedom and risk with reward. This course will also delve into interface design, user control issues, data representation for the gamer and feedback loops. Present and future game genres will be examined and compared and contrasted among different platforms and styles of play.

GAM218 CREDITS: 3 PREREQUISITE(S): GAM113

Game Scripting for Designers

Game scripting is a basic requirement for the development of games of all genres and sizes. From basic level scripting to AI, games have many layers of high-level scripting in them. This course aims to teach how a designer will integrate their scripts into a game, and how they can have a direct impact on the game's direction and play through their high-level scripting. Through the class, the students will use multiple scripting languages to directly modify pre-existing games. Game projects will include standalone projects and mods to previous games.

GAM235 CREDITS: 3 PREREQUISITE(S): GAM218

Game AI Concepts

Artificial Intelligence is at the core of the modern interactive experience in video games. This course is a survey of the many approaches to creating realistic, interesting behavior from a design point of view, while experimenting with concepts such as pathfinding, sensory systems, flocking, scripted events, heuristics and genetic algorithms. Students will use a variety of tools to create functioning projects that demonstrate class concepts and study various game AI systems and theories.

GAM310 CREDITS: 3 PREREQUISITE(S): GAM113

Level Design

This project-oriented class involves producing game levels for a variety of 2D and 3D engines with a focus on pacing, risks vs. rewards, designing for difficulty level and storytelling. Students will create and concept several projects and learn basics of geometry, texturing, lighting and interactive scripting as well as playtesting and optimizing for various engines and environments.

GAM351 CREDITS: 3 PREREQUISITE(S): GAM200

Writing for Interactive Games

Writing for the interactive environments of current and future video games poses complex challenges that are unique to the field. As the consumer base grows more sophisticated, gamers are demanding complex, believable worlds in which their decisions have an impact. This course explores best practices for creating interactive stories, quests, characters and worlds that flesh out the bare mechanics of game design. Students will create interactive projects and design scenarios with dialog, branching choices, backstory elements and intellectual challenges, as well as look towards the future of game storytelling.

GAM352 CREDITS: 3 PREREQUISITE(S): GAM200

Game Systems Design

In this course, students will take on the role of a game system designer. Game system designers are responsible for developing the core gameplay mechanics and systems of games. Students will design game mechanics and systems for new and existing games across multiple genres and platforms. Students will also learn how to model complex systems and economies both visually and mathematically and apply systems thinking to balance game systems.

GAM370 CREDITS: 3 PREREQUISITE(S): PDS300

Game Design Workshop II

This course focuses on game pitching, prototyping, and execution. Within this course students will create pitches and prototypes designed to build teams and studio level projects. Students will prototype game concepts in a rapid development environment with an emphasis on originality, playability, and iterative development. Students will also plan and host a rapid game development event.

GAM385 CREDITS: 3 PREREQUISITE(S): PDS300

Casual Game Design

Accessible, easy-to-play (but difficult-to-master) games are the bridge by which many customers enter the video game market, and an increasingly large pool of gamers make casual games their genre of choice. The casual game must be elementary in design but deep in execution; it must fit the genres and platforms of choice for casual gamers and give both the novice and the expert a memorable challenge. In this course we'll design, prototype and build casual games that move beyond Tetris and Solitaire clones and advance the genre as a whole.

GAM395 CREDITS: 3 PREREQUISITE(S): GAM200

Monetization Design and Strategies

Accessible, easy-to-play (but difficult-to-master) games are the bridge by which many customers enter the video game market, and an increasingly large pool of gamers make casual games their genre of choice. The casual game must be elementary in design but deep in execution; it must fit the genres and platforms of choice for casual gamers and give both the novice and the expert a memorable challenge. In this course we'll design, prototype and build casual games that move beyond Tetris and Solitaire clones and advance the genre as a whole.

GAM418 CREDITS: 3 PREREQUISITE(S): PDS300

Deployment Strategies and Project Constraints

Game development must accommodate constraints from many aspects of development. These include the deployment of the project for a public release as well as internal processes and practices, from business needs to technology concerns. This course will explore what is needed to deploy game projects on multiple platforms and services. It will also look at the processes linked to SKUs. localization, ratings, regulations, and other external constraints that a developer must deal with when publishing a game project. Internal aspects such as business, advertising, and technology constraints will also be addressed.

GAM425 CREDITS: 3 PREREQUISITE(S): GAM310

Advanced Level Design

Having mastered the basics, students in this course will apply level design principles to the creation of entire game environments, interactive elements and objects, storytelling through level design, and texturing and lighting. The emphasis will be on using advanced game engines and their toolsets and may involve expert topics such as texturing with shaders, cut scenes, scripted events and large-scale environments.

GAM465 CREDITS: 3 PREREQUISITE(S): PDS300

Game-A-Week

Rapid-prototyping, the creation of a small playable game that proves or disproves a design concept, is a common stage in the professional game development process. This course aims to build up a student's rapid prototyping skills and provide students with experience in starting and finishing games. Students will produce, publish, and present a boards-quality game each week of the course, requiring students to not only master the use of their game development tools, but also learn to hone their project scope, quickly distinguish promising game design concepts, and to sharpen their ability to be creative "on demand."

GAME PROGRAMMING AND ENGINEERING (GPE)

GPE104 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Game Programming

Recommended for students with little or no prior programming experience. Students will use a game engine to study the basics of computer programming: variables, data types, looping, conditional logic, functions, arrays, types, and other basic concepts. The ability to explore these concepts prior to learning a more complex language such as C++ allows the student to learn game concepts without a language course and prepares the student for future courses in this program during the first year. Students will gain valuable programming experience by writing simple tutorial-based games.

GPE205 CREDITS: 3 PREREQUISITE(S): GPE104

Gameplay Programming Concepts

Gameplay Programming Concepts teaches students the most important theories and concepts in game programming. Students will be exposed to major game mechanic fundamentals that are expressed in multiple games across several genres. There is a strong focus on analysis and discovery learning. Those taking this class will be expected to observe existing mechanics and attempt to reproduce them both in documentation and in code. The course makes use of an existing game engine to focus on gameplay mechanics with the end goal of producing a playable game.

GPE230 CREDITS: 3 PREREQUISITE(S): GPE104

Gameplay Programming Implementation

Building on the core gameplay programming skills from Introduction to Game Programming, this course does a deep dive into the implementation needs of gameplay mechanics. Using established programming practices and techniques, students will solve design, programming, and technical issues with an eye toward implementing gameplay into a consistent player experience.

GPE275 CREDITS: 3 PREREQUISITE(S): GPE205

Mobile Game Programming

Mobile games are a lucrative industry that is still in a state of rapid growth with tens of millions of users as a potential market for games, all delivered wirelessly on a royalty basis. This course teaches how to develop games for mobile platforms using appropriate languages and toolkits. Students will explore the mobile hardware and learn about the specific techniques and challenges present in developing a game for a small screen and limited user input capabilities.

GPE303 CREDITS: 3 PREREQUISITE(S): GPE205 AND GPE230

Applied Game AI Concepts

Quality implementations of artificial intelligence can make or break a game. This course will synthesize the theories and concepts of artificial intelligence with the skills of game programming. Students will program a wide variety of artificial agents utilizing a variety of traditional, modern and theoretical techniques. The student will apply algorithms for pathfinding, strategy, personality and other behaviors. Player interactions with these behaviors will be examined to provide challenging, balanced and enjoyable gameplay.

GPE310 CREDITS: 3 PREREQUISITE(S): CSC215 AND GPE230

Visual Programming for Games

Modern game engines provide development tools for the game development team such as game editors and visual scripting systems. Game programmers must build and maintain these tools. This course explores the integration of visual scripting as part of the game development pipeline. Within this course, you will use and extend the visual scripting system of a modern game engine to provide functionality for game development projects.

GPE338 CREDITS: 3 PREREQUISITE(S): GPE205 AND GPE230
RECOMMENDED: CSC262

Advanced Gameplay Programming

This course teaches students advanced theories and concepts in game programming, such as delegates, interfaces, namespaces, coroutines, threading, and event handling. The course will also focus on best practices and methods for optimizing code, not only at run time, but also focusing on optimizing for ease of development. This course makes use of an existing game engine to focus on gameplay programming techniques with the end goal of producing a playable game.

GPE340 CREDITS: 3 PREREQUISITE(S): GPE205 AND GPE230

Programming for Game Engines

This course introduces the fundamentals of game engine programming by customizing and enhancing an existing framework. Students will learn the core concepts of engine programming. Symptoms of taking Programming for Game Engines may include: a greater understanding of frame rates, synchronization, timing, 2D and/or 3D graphics rendering, timed animation, user input, multiplayer, physics, collision detection and the most common algorithms used in game development. Many of these fundamentals will be implemented into a working engine from which playable games may be developed.

GPE341 CREDITS: 3 PREREQUISITE(S): GPE205 AND GPE230

Game Tools Development

A game is only as good as its tool chain. Today's games are extremely complex and the amount of data required to produce them can be overwhelming, thus the need for efficient data and asset management tools. In the modern games industry, almost every aspect of game development requires several custom-designed tools. The engine, art, asset management, editors, physics, AI and sound editors are all tools that create a game. This course teaches fundamentals of game tools development, including the theory behind these tools and the practical application of that theory. Basic editor creation and user-interface programming are also covered.

GPE410 CREDITS: 3 PREREQUISITE(S): GPE205 AND GPE230

Programming Action Games

Students will design and develop an Action Game solving the programming challenges associated with games in this genre. This course will explore topics such as weapon systems, cover systems, movement, health, powerups, inventory, physics, and camera control. The game will be complete with AI, HUD, and missions.

GPE425 CREDITS: 3 PREREQUISITE(S): GPE205 AND GPE230

Programming Strategy Games

Students will design and develop a Strategy Game solving the programming challenges associated with games in this genre. This course will explore topics such as mission setup, formations, movement, data tracking, map control, AI, and game flow. The game will consider both real time and turn based systems.

GPE440 CREDITS: 3 PREREQUISITE(S): GPE205 AND GPE230

Programming Roleplaying Games

Students will design and develop a Role-Playing Game solving the programming challenges associated with games in this genre. This course will explore topics such as multiple character selection, inventory system, storytelling, quests, player progression, and character control. Characters will each have special attributes such as strength, power, weapons, casting spells, throwing projectiles, etc. as well as creating Heads-Up Displays (HUDs) for inventory and player health, mana and progress, all of which are tested by generating Artificial Intelligence (AI) characters.

HUMAN COMPUTER INTERACTION (HCI)

HCI101 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Human Computer Interaction

This course will cover some of the core concepts in HCI relating to users and technology use. These include the notions of the interface, interactivity and interaction. Traditional ways of characterizing these aspects of the relationship between technology and users will also be examined in terms of various usability aspects.

HCI102 CREDITS: 3 PREREQUISITE(S): HCI101

Human Factors

This course will focus on human physical and cognitive capacities and how an understanding of them should inform the design of such everyday things as tools, information displays and computer software design. Among other topics, it will discuss the interaction of humans with computer systems, a domain generally known as Human Computer Interaction. The goal is to help students learn and apply cognitive science theory and principles to increase the convenient use of man-made objects and systems, to reduce errors, and to increase productivity and improve safety by using such tools and systems.

HCI215 CREDITS: 3 PREREQUISITE(S): HCI101

Designing Human Computer Interfaces

This course tackles the challenges of developing interfaces with multiple technologies and design requirements. Through this course, the student will be exposed to the tools needed to create human computer interfaces, analyzing the strengths and weaknesses of each of the technologies. Students in the course will apply the tools and techniques of interface design to solve current and future interface development challenges.

HCI250 CREDITS: 3 PREREQUISITE(S): HCI101

User Experience Design and Testing

Often developers overlook the importance of the customer experience when using their products. As a result, it is becoming increasingly important for companies to provide customers with positive user experiences through fundamentals like navigation, search, usability and identifying the needs of the real user as well as that of the business. This course teaches students user experience design process from start to completion using appropriate design patterns, developing user personas, conducting usability evaluations within the cultural context and producing prototypes for further design research.

HCI320 CREDITS: 3 PREREQUISITE(S): NONE

Gender and Technologies

Men and women are different. Gender factors influence how individuals approach and use technologies. Gender factors also influence the physical form that technologies take to be responsive to the physical differences between men and women. This course explores gender differences and teaches how they can be applied during the design and build process.

HCI335 CREDITS: 3 PREREQUISITE(S): NONE

Designing Software Interactions

This course covers factors associated with building interfaces for the major categories of software platforms (mobile, web, desktop) along with factors associated with major types of software (productivity, eCommerce, entertainment). Students will learn, evaluate and prototype interactions for these differing interfaces.

HCI350 CREDITS: 3 PREREQUISITE(S): NONE

Designing Device Interactions

Integration of technology is changing how we interact with devices. This course covers trending interface technologies, such as the use of touch pads with gesture recognition, and their emerging application spaces (cars, home IoT). Students will learn, evaluate and prototype interactions for these differing interfaces.

HCI470 CREDITS: 3 PREREQUISITE(S): HCI215

Emerging Interface Technologies

As technology grows and changes, so does the need for humans to interact with it in new and natural ways. The future of interfaces is always in motion as technologists discover new and intuitive ways to work with technology. This course will explore and apply emerging interface technologies and examine how these technologies will impact the development of technology, software and products as well as how they impact the interactions with the users who use them.

HCI490 CREDITS: 3 PREREQUISITE(S): HCI101

Special Topics in HCI

Special topic classes in HCI will study selected topics in Human Computer Interaction providing opportunities for the study of material not covered in current course offerings. Special emphasis will be on emerging areas. Topics vary from semester to semester. Students will be encouraged to work within a multidisciplinary team in the class. Some of the topics of this class may be physical computing for creating interactive installation spaces and design prototypes that extend beyond the limitations of the computer mouse, keyboard and monitor screen; perceptive computing, which is a new field that combines visual cognition and computer visualization for massive data analysis such as NASA satellite data processing, behavior measurement from head-mounted video or surveillance video systems; or develop dynamic and engaging computer screen–based interactive projects. The topic selection will be contingent on the school's resources.

HISTORY (HIS)

HIS220 CREDITS: 3 PREREQUISITE(S): NONE

American History

(GE, Social Sciences)
This course covers American history from the period of colonial settlement through the 20th century. The course is topical, covering key themes and areas of American history that led to major economic, cultural and technological changes.

HIS230 CREDITS: 3 PREREQUISITE(S): NONE

Survey of American History from Colonial Era to The Civil War

(GE, Social Sciences)
In this course, we will explore social, cultural, intellectual, economic, and diplomatic history as we embark on a journey to more deeply understand the United States, its inhabitants, and its global context.

HIS240 CREDITS: 3 PREREQUISITE(S): NONE

Survey of American History from The Civil War to the 20th Century

(GE, Social Sciences)
In this course, we will explore social, cultural, intellectual, economic, and diplomatic history as we embark on a journey to more deeply understand the United States, its inhabitants, and its global context.

HIS305 CREDITS: 3 PREREQUISITE(S): NONE

20th-21st Century Innovation

(GE, Social Sciences)
This course examines the role of technology in the 20th and 21st centuries and how it affects us culturally. Key themes include invention of new technologies and debates over the advantages and drawbacks of industrialization, mass production and information technologies. Students participate in a variety of innovative activities designed to understand the changes that took place socially and economically because of these innovations.

HIS315 CREDITS: 3 PREREQUISITE(S): NONE

Aerospace in America

(GE, Social Sciences)
This course will use NASA (and its predecessor NACA) as a lens to explore United States history in the 20th and 21st centuries. Aerospace history becomes the gateway for understanding the essential social, cultural, political, technological, scientific, and military developments from 1903 (the year of the Wright Brothers' first flight) to the present. This class emphasizes United States and aerospace history, and how they have influenced and shaped each other. Students will learn the early history of flight through WWI, analyze the history of aviation in the 1920s (business themes) and 1930s (adventure and innovation themes), and explore air power through the end of WWII with the dropping of the atomic bomb. The class places emphasis on the Cold War with the launch of Sputnik, the creation of NASA one year later, and the political motivation behind our journey to the moon. The course compares the knowledge gained from the low-Earth orbits of the Space Shuttle program, with the unmanned voyages into our solar system. Students will conclude with an investigation into the current private attempts to launch humans into space and the dream of inhabiting Mars.

HIS320 CREDITS: 3 PREREQUISITE(S): NONE

Classical World

(GE, Social Sciences)
This course will focus on the major social, political, intellectual, and technological developments in the Classical World, which encompasses the ancient Greek and Roman civilizations. The course will cover the time periods from Bronze Age Greece to the fall of the Roman Empire in the 5th Century AD. Throughout the course, students will examine the impact of key events that shaped society in Classical World civilizations. In addition, students will gain an understanding of the methods that historians and archeologists utilize to draw conclusions about ancient civilizations that left behind little or no written sources in the historical record. Finally, this course will also consider the relevance of the Classical World to later civilizations and to 21st century Western society.

HIS330 CREDITS: 3 PREREQUISITE(S): NONE

The Revolutionary Era

(GE, Social Sciences)
This course will examine the Revolutionary War Era in the British colonies and in the early days of the United States. Topics this course will cover include the Enlightenment and the French and Indian War and their impact on the American Revolution. Additionally, the military history of the Revolutionary War will be examined and students will gain an understanding of why the Americans emerged victorious over the seemingly more powerful British military. The class will also cover the history of the Constitution and will critically examine the Constitution and how it can be interpreted in our modern times.

HIS340 CREDITS: 3 PREREQUISITE(S): NONE

Cold War Era

(GE, Social Sciences)
This course will examine American history during the Cold War Era of 1945-1990. Topics this course will cover include the origins of the Cold War, the impact of the Cold War on American politics and foreign policy, and the proxy wars of the Cold War. Additionally, students will learn about American popular culture through literature, music, film, and television.

HIS350 CREDITS: 3 PREREQUISITE(S): NONE

Civil War and Reconstruction

(GE, Social Sciences)
This course examines the US Civil War and the period of Reconstruction following the conflict. Key themes include experiences of the common soldier, technological innovations used during the war, tactical and strategic overviews of the conflict, social upheavals created by the conflict and the lasting effects the war had on the United States.

HIS355 CREDITS: 3 PREREQUISITE(S): NONE

History of Broadcasting

(GE, Social Sciences)
This course will provide a general overview of American broadcasting from the age of radio, through the emergence of television, to the proliferation of the internet and digital media. We will examine broadcasting as an essential element to American cultural history by contextualizing U.S. broadcasting media amidst major social and cultural changes. Finally, we will also examine the various ways people have sought to understand the impact of radio and television throughout American history.

HIS360 CREDITS: 3 PREREQUISITE(S): NONE

The Twilight Zone and Postwar America

(GE, Social Sciences)
Was postwar America a dream or a nightmare? By using *The Twilight Zone* as well as other popular culture products, we will explore a wide array of historical issues relating to World War II, consumerism, Cold War paranoia, gender, race, suburbanization, family life, and technology. We will discuss the capacities and limitations of television and popular culture, namely how TV can reflect but more frequently refracts, real life experiences. In this way, we will look more deeply as to how popular television hinders our understanding of history when taken at face value, but can offer fresh insights when critally analyzed and retuned to its original context.

HIS415 CREDITS: 3 PREREQUISITE(S): ENG102

Selected Topics in History

(GE, Social Sciences)
This course is designed to explore a defined area of history, including specific eras and historical topics. The in-depth study may include topics from both Western and non-Western civilization. Contents and methods vary with instructors and from semester to semester.

HUMANITIES (HUM)

HUM150 CREDITS: 3 PREREQUISITE(S): NONE

Introductory Topics in Humanities

(GE, Humanities)
This course will survey topics in the Humanities, including literature and film, popular culture and the arts, religion and philosophy, and Western and non-Western cultural productions, with emphasis on major ideas and concepts of the areas explored. Emphasis will be placed on creative project building and collaborative explorations of unique topic areas. Contents and methods vary with instructors and from semester to semester.

HUM160 CREDITS: 3 PREREQUISITE(S): NONE

Art of the Comic Book

(GE, Humanities)
The visual evolution of comics has synchronicity with the cultural contexts in which they are produced. From the earliest newspaper strips to contemporary graphic novels, this course will study the visual language of comics as it evolved through time. Students will be encouraged to produce both critical and creative responses to the texts studied, emerging with a deeper appreciation for comics as an art form.

HUM305 CREDITS: 3 PREREQUISITE(S): NONE

Countercultures

(GE, Humanities)
Countercultures will examine major countercultural movements of the 20th century and explore their social, political, artistic roots and impact. Topics will include the Beat Generation, anti-war movements and drug subcultures of the 1960s-1970s, and Punk rock. Major artists and their works will be explored, as well as their impact on popular culture and the creation of subcultures. Students will read novels, lyrics, and poetry, watch films of the eras and listen to selected recordings of music from these periods to appreciate countercultural expressions.

HUM310 CREDITS: 3 PREREQUISITE(S): NONE

Contemporary Themes in Humanities

(GE, Humanities)
This course will introduce students to contemporary themes in the humanities. Topics will explore issues facing contemporary audiences as a result of the rise in new modes of expressions and the developments within the arts from innovators and creators.

HUM320 CREDITS: 3 PREREQUISITE(S): NONE

The American Dream

(GE, Humanities)
The concept of the American Dream has a rich tradition in the American consciousness, carrying with it both the idealism and spirit of national self-identity and the aspirational values we seek to instill in each new generation. But questions remain about the validity of this idea and whether all Americans are included in this ethos. Students will explore these questions through the dual lenses of history and the humanities. Theis course offers students an opportunity to explore and interrogate this ever-evolving idea through texts, film, music, and other vehicles of cultural and historical study and criticism. Themes of the course include patriotism, citizenship, success, wealth, property ownership, work, and religion. (*This course may also be offered to students enrolled in the Honors Program).*

HUM330 | CREDITS: 3 | PREREQUISITE(S): NONE
RECOMMENDED: THE230

Scriptwriting

(GE, Humanities)
This course is an introduction to writing for the screen (cinema, web, animation and/or game). Topics include plot development, format, classic paradigm structure, dialogue, voice, scope, and context. An emphasis is placed on developing and defining each student's individual style and personal themes. The student will create several complete-story scripts in the short form.

HUM365 | CREDITS: 3 | PREREQUISITE(S): NONE

Dystopian Worlds

(GE, Humanities)
This course examines the dynamics of living and thriving in a dystopian world. To understand the dystopian genre, students will apply various critical lenses revolving around community, ethics, survival, communication, environmental resources, and economic principles. In addition to viewing 3 dystopian movies, students will read various online articles.

HUM388 | CREDITS: 3 | PREREQUISITE(S): INSTRUCTOR APPROVAL

Special Topics in Humanities

(GE, Humanities)
Special topic courses are intended to provide focused studies within a specific discipline. Students in this course will engage in the advanced study of a specific aspect of the humanities, potentially engaging the basic principles of art, creative writing, literature, architecture and/or music. Students will consider subject matter within various contexts, which might include a social, historical, cultural and/or political context.

HUM415 | CREDITS: 3 | PREREQUISITE(S): ENG102

Selected Topics in Humanities

(GE, Humanities)
This course is designed to explore a defined area of the humanities, including literature, the arts, and philosophy. The in-depth study may include topics from both Western and non-Western cultures. Contents and methods vary with instructors and from semester to semester.

INTERNSHIPS (INT)

INT350 | CREDITS: 3 | PREREQUISITE(S): SPONSOR APPROVAL

Internship

An internship is considered a supervised, practical experience that is the application of previously learned theory. Employers/sponsors work with the student to meet specific objectives and/or learning goals and provide special mentoring or networking opportunities. In exchange, the intern helps the employer/sponsor in meeting overall work goals for the agency/company. Students completing 3.0 credit internships must work a total of 150 hours, or ten hours per week for 15 weeks.

INT400 | CREDITS: 6 | PREREQUISITE(S): SPONSOR APPROVAL

Internship

An internship is considered a supervised, practical experience that is the application of previously learned theory. Employers/sponsors work with the student to meet specific objectives and/or learning goals and provide special mentoring or networking opportunities. In exchange, the intern helps the employer/sponsor in meeting overall work goals for the agency/company. Students completing 6.0 credit internships must work a total of 300 hours, or 20 hours per week for 15 weeks.

INT450 | CREDITS: 12 | PREREQUISITE(S): SPONSOR APPROVAL

Industry Immersion

An immersed production studio allows students to take on a full-time role within sponsored external projects. Students will be solely focused on the completion of these projects in a real-world practical application. Students will be supervised to completed specific milestones and work directly with project sponsors to ensure project completion. The industry immersion production studio will require students work a total of 450 hours, or 30 hours per week for 15 weeks.

LAW (LAW)

LAW350 CREDITS: 3 PREREQUISITE(S): NONE

Contract Law

(GE, Humanities)
Contract law is a broad field that governs the conduct of business in many areas including contract drafting, assignment of rights, transactions, delegation of duties, what agreements have to be in writing, conditions to a contract, breach and remedies. The Uniform Commercial Code (UCC) is an important area of contract law that governs the sale of goods. Typical contract issues include whether an enforceable contract exists and whether a party has breached their contractual duties such as the stated agreements.

LAW370 CREDITS: 3 PREREQUISITE(S): NONE

Legal Issues in Technology

(GE, Humanities)
This course addresses typical legal and business issues in the multimedia field. Rights granted under copyright, principles of fair use, trademarks, intellectual property law, trade secrets, unfair competition, disclosure and privacy laws are covered. Students explore these legal topics with a focus on electronic media.

MATHEMATICS (MAT)

MAT174 CREDITS: 3 PREREQUISITE(S): NONE

College Algebra

(GE, Mathematics)
Relations and functions are developed thoroughly with their graphs. Function types include polynomial, rational, radical, exponential and logarithmic. Other topics include systems of equations and inequalities, as well as matrices. Application, relevance, and appreciation are evolved through various methods.

MAT179 CREDITS: 3 PREREQUISITE(S): NONE

Pre-Calculus

(GE, Mathematics)
Introduction to Trigonometry with associated functions and graphs is the primary focus. Modeling is explored using trigonometric functions. There is a focus on developing an understanding of vectors in both rectangular and polar forms. Application, relevance, and appreciation are evolved through various methods.

MAT210 CREDITS: 3 PREREQUISITE(S): NONE

Business Mathematics

(GE, Mathematics)
This course provides a comprehensive coverage of personal and business-related math topics. The focus will be on personal finance, business finance, and basic accounting practices. The personal finance section will include topics related to budgeting, taxes, investing, and mortgages. For the business finance portion of the class, the students will focus on applying mathematical formulas, percent markups and markdowns, and graphical representations needed to present data in a business situation.

MAT220 CREDITS: 3 PREREQUISITE(S): MAT174

Statistics

(GE, Mathematics)
This course presents the student with basic statistical concepts and methods. This course introduces descriptive and inferential statistics including elementary probability, linear regression and hypothesis testing.

MAT250 CREDITS: 3 PREREQUISITE(S): MAT174 AND MAT179

Calculus I

(GE, Mathematics)
This course is the study of single variable differential calculus. Emphasis is placed on differentiating elementary functions and solving application problems.

MAT251 CREDITS: 3 PREREQUISITE(S): MAT250

Calculus II

(GE, Mathematics)
This course continues the study of single variable calculus. Emphasis is placed on anti-differentiation, numerical interpretations of the integral and the use of the integral in application problems.

MAT342 CREDITS: 3 PREREQUISITE(S): MAT250

Linear Algebra

(GE, Mathematics)
This course serves as an introduction to linear algebra. It includes the study of systems of linear equations, matrix algebra, vector spaces, linear transformations, eigenvalues and eigenvectors.

MAT370 CREDITS: 3 PREREQUISITE(S): MAT174

Applied Statistics with R

(GE, Mathematics)
This course will teach statistical sampling and modeling techniques using the R programming language with applications in modeling and analysis. Topics will include summarizing data, the normal distribution, hypothesis tests, simulation, confidence and probability intervals, and simple linear regression. Students will use the appropriate R packages to evaluate and sample data.

MAT415 CREDITS: 3 PREREQUISITE(S): MAT179

Selected Topics in Mathematics

(GE, Mathematics)
This course is designed to explore a defined area of mathematics. Contents and methods vary with instructors and from semester to semester.

MARKETING (MKT)

MKT100 CREDITS: 3 PREREQUISITE(S): NONE

Art of Sales

This course is designed to walk you through all things sales. Discussions will cover history, types, dos and don'ts, and how to work with different types of personalities in sales. Objectives will help you to identify your skill set to prepare for business and an understanding of the full sales cycle, thus making students able to identify and overcome objections and practice the methods being applied in real world scenarios.

MKT120 CREDITS: 3 PREREQUISITE(S): NONE

Survey of Business and Marketing for Industry

Students will be immersed in a personalized business startup where they will be taking the role of running their own business as a consultant. This course will go over how small businesses run and operate along with exploring marketing methods and outreach. Students will learn best practices for utilizing the various social media outlets for customer outreach. They will also create marketing assets to use for both personal brand recognition and customer advertising.

MKT220 CREDITS: 3 PREREQUISITE(S): NONE

Brand Management Strategies

In this course students learn how to apply the concepts of advertising and marketing to branding. Students will go over topics and various strategies related to building, measuring, and managing a brand. The focus of this course is around management of brands over time. They will learn how to keep brands relevant, understand their customer base and overall market trends for proper brand management.

MKT250 CREDITS: 3 PREREQUISITE(S): NONE

Marketing Environments

Students explore a comprehensive approach to marketing, opportunity, and measure, as well as correlate appropriate marketing strategies with marketing channels in this course. Marketing environments delivers a strong foundation in brand presence and strengthening, website design principles, search engine marketing (SEM), social media networks, and mobile advertising. Students learn practical business strategies, promotion, performance evaluations, and improvement opportunities as they relate to marketing and advertising.

MKT320 CREDITS: 3 PREREQUISITE(S): MKT250

New Media Communication and Marketing

The New Media Communication and Marketing course instructs students how to promote and advertise their products and services across online media markets. Students research best practices for content creation and optimization that incorporates their brand, product and service into a vast network of applicable communication channels and audiences. Course content includes decision making on and evaluation/design of effective content, user demographics, social networks/news, blogs, video/photo sharing sites, viral marketing and brand presence strength.

MKT330 CREDITS: 3 PREREQUISITE(S): MKT250

SEO and Applied Online Marketing

Students gain an applied understanding of Internet marketing approaches, opportunity, and measure, as well as correlate appropriate marketing strategies with marketing channels. The SEO and Online Marketing Applied course thoroughly examines brand presence and marketing for social media, search engines, blogs, affiliate, email and mobile devices. Course participants receive an in-depth education in search engine optimization (SEO) and search engine marketing (SEM). Elevated topics include landing page design, meta-tags, anchor text, keyword development, image optimization, local search, conversion tracking, and link building, designed to increase relevant consumer traffic. This course also teaches performance evaluation and response through web analytics and site data reporting. Students distinguish the various metrics to identify areas of improvement, expand strengths and define campaign success.

MKT345 CREDITS: 3 PREREQUISITE(S): NONE

International Wed Development and Marketing

This course will focus on creating consumer facing interfaces and advertisements for international markets. Students will explore the diverse richness of human societies to create marketing content for emerging and developed global economies.

MKT415 CREDITS: 3 PREREQUISITE(S): NONE

Advanced Advertising Strategies and Creations

This course will be a more immersed experience for students in the AA and DM majors. Students will create very sophisticated brand and market strategies with analytical data points to back their process. Their advertisements will need to be professional grade and have a very specific use.

MKT430 CREDITS: 3 PREREQUISITE(S): NONE

Professional Ad Creation for Industry

The advertising industry is a mix of PR, marketing, and media services fueling a global, multibillion dollar industry. Students will learn how to create ads for various channels using industry-standard content creation tools. They'll also utilize UI/UX principles and elements of design to produce advertisements.

NETWORK SECURITY (NTS)

NTS103 CREDITS: 3 PREREQUISITE(S): NONE

Identity Protection and Personal Security

One of the most prolific crimes that is occurring in modern society is identity theft. This is perpetuated by the rise of social media, online presence and lack of education on proper protections of your personal information. There is also a physical risk with this type of information. This course explores the critical life skills needed to better protect your identity and yourself in today’s society.

NTS201 CREDITS: 3 PREREQUISITE(S): NONE

Security Essentials

The goal of this course is to provide network administrators with the knowledge to design and implement an effective security strategy in a competitive corporate networking environment. This course will explore security-by design utilizing anti-virus tools, security policies and practices, password management, risk analysis and assessments, network vulnerabilities, enhancing security through cabling and network hardware, understanding different types of firewalls, packet filtering and NAT, setting up and securing a VPN, and understanding contemporary hacker exploits.

NTS305 CREDITS: 3 PREREQUISITE(S): NONE

Information Governance

As the front line of the 21st century information age will you be managing information appropriately while considering the threats you face? Information is managed by a wide range of elements that must be considered as part of the full equation. The laws and regulations that apply to the business, the importance placed on the information by business leadership, the expectations of the customer, and of course the desire for the most reasonable protections to the information in support of all objectives. This course focuses on how all these elements come together to create and manage the information governance of the organization.

NTS310 CREDITS: 3 PREREQUISITE(S): NTS201 AND TCH310

Social Engineering

Have you ever fallen victim to a phishing scam? Why are these scams so successful? Scams are based on specific attributes of individual decision-making processes known as cognitive biases or bugs in the human system. Social engineering is developing the art of persuasion to gather confidential information from individuals that would normally not disclose this data. A successful social engineer does not need to solely rely on hard technical skills to access information systems. This is a project-based course that will provide examination of historical exploits and develop the necessary skills to successfully use the art of social engineering to access confidential information in a corporate environment and develop defense measures.

NTS330 CREDITS: 3 PREREQUISITE(S): NTS201 AND TCH310

Applied Exploits

When discussing practical network security, we must acknowledge that all systems have vulnerabilities. This course combines the fundamental and historical perspective of hacking methodologies and applied hands-on skills. Hacking topics are explored to examine the current systems associated with these vulnerable points. This is an applied hands-on course requiring the use of a variety of modern operating systems. Typical walkthroughs explore the standard hacking methodologies such as discovery, footprinting, targeting, attacks, penetration, escalation of privileges and maintaining access. Technical feedback is provided on appropriate means for countering each step of this common methodology.

NTS336 CREDITS: 3 PREREQUISITE(S): NTS201

Cloud Security

In this course, students will learn how to set up, use and maintain servers hosted on cloud platforms. Students will compare various cloud infrastructures and analyze costs and benefits of cloud hosting. From there, students will practice deploying and administering cloud-based applications, as well as being able to identify potential security issues and creating solutions to ensure secure applications.

NTS350 CREDITS: 3 PREREQUISITE(S): NTW216

Network Security Monitoring

Explore the world of Network Security Monitoring (NSM) and packet analysis. Network security monitoring takes a step past standard intrusion detection models and collects the full spectrum of data types (event, session, full content and statistical) needed to identify and validate intrusions on contemporary network infrastructures. This course will examine typical network security monitoring hardware, tools, design and deployment. Standard vulnerability packet analysis scenarios will provide an in-depth appreciation of monitoring corporate-level networking environments.

NTS370 CREDITS: 3 PREREQUISITE(S): NTS201 AND NTW220

Shell Scripting for Technologists

The goal of this course is to provide network security students with a solid foundation in creating shell scripts and basic programming concepts within UNIX/ Linux, specifically to aid in security related tasks. This course explores the creation of scripts to manage large amounts of security-related data and automate normal active security operations. Students will write shell scripts to manage, correlate and analyze security logs; pass variables from one security application to another to continue a flow of security activities; and to automate and simplify security related tasks and processes.

NTS405 CREDITS: 3 PREREQUISITE(S): NTS201

Incident Response

Although network teams possess the tools needed to secure their infrastructures, they often lack the skills for managing the incident response process. This course provides students with the skills needed to create processes for appropriately responding to security incidents. Students will learn to evaluate at what point are computers shut down and the organization disconnected from the Internet. Students will learn to analyze when is it best to let the intruders continue, so we can further determine their motivations, or goals. These processes are critical to ensuring that an incident doesn't create greater organizational damage.

NTS415 CREDITS: 3 PREREQUISITE(S): NTS330

Network Defense and Countermeasures

The Network Defense and Countermeasures course is the art of fencing for network protection. This course covers designing a network defense, security policies, choosing and designing firewalls, configuring firewalls (demos and research), setting up VPNs, Intrusion Detection System overview and design, honey pots, and behavior-blocking software. Additionally, this course will provide solutions for identifying, assessing and preventing external and internal threats to your network in a multi-vendor environment.

NTS435 CREDITS: 3 PREREQUISITE(S): NTS201

International and Federal INFOSEC Standards and Regulations

This course is an overview of the world of federal and international information security standards that guide the way organizations are doing business today. Research and analysis are conducted on how US security regulations vary from industry to industry, including healthcare, education, military, federal organizations, utilities and financial organizations. International security standards will also be reviewed to understand the impact of implementing appropriate information security mechanisms in a global organization.

NTS442 CREDITS: 3 PREREQUISITE(S): INSTRUCTOR APPROVAL

Collegiate Cyber Defense Competition

This course prepares students for a competition that specifically focuses on the operational aspect of managing and protecting an existing commercial network infrastructure. Not only do students get a chance to test their knowledge in an operational environment, they will also get a chance to network with industry professionals. Due to the changing nature of the challenges, this course can be taken twice and credits received both times toward the appropriate degree.

NTS465 CREDITS: 3 PREREQUISITE(S): NTW216

Security Evaluation and Assessment Methodology

The course is based on the National Security Agency's (NSA) Information Security (INFOSEC) Evaluation Methodology (IEM), which is NSA's recommended methodology for evaluating an organization's technical security. The course will examine the process of coordinating with the customer, setting the scope of the project, obtaining legal authorization, conducting the ten baseline activities of the evaluation, and compiling a meaningful and understandable final product for the customer. Students registering for this course will be required to participate in an actual IEM based evaluation as a course project.

NETWORK TECHNOLOGY (NTW)

NTW102 CREDITS: 3 PREREQUISITE(S): NONE

Foundations of Network Engineering I

This course will lay the foundation on which to build a working knowledge of network engineering. This introductory class will provide a comprehensive overview of how modern networks operate. Topics will include OSI model, legacy technology overview, TCP/IP, LAN and WAN technologies, how the Internet works, switching and routing basics. Students will be given hands-on exercises to reinforce the knowledge taught in class.

NTW103 CREDITS: 3 PREREQUISITE(S): NTW102

Foundations of Network Engineering II

This course will build on the fundamentals covered in NTW102, to further advance the students working knowledge of network engineering. This class will provide depth of knowledge regarding the operation of modern networks. Topics will include managing risk and security, advanced networking, IPv6, remote connectivity, wireless, virtualization, mobile networking, building and monitoring networks, and troubleshooting network issues. Students will be given hands-on exercises to reinforce the knowledge taught in class.

NTW216 CREDITS: 3 PREREQUISITE(S): NTW103

Systems Administration I

This course will lay the foundation on which to build a working knowledge of system administration. This class will provide a comprehensive overview of contemporary systems administration with a focus on Cloud, Virtualization and Microsoft based environments. An overview of the available server and desktop operating systems, cloud architecture and their common use cases and their strengths and weakness will be given. Topics such as cloud and virtualization, active directory, user/computer/group management, resource permissions, optimizing performance, backup, storage, server monitoring will be covered. Students will be armed with a baseline of knowledge with which to identify and understand server infrastructures for business solutions. Students will be given hands-on exercises to reinforce the knowledge taught in class.

NTW220 CREDITS: 3 PREREQUISITE(S): NONE

Linux I for Technologists

This course provides an overview of the commands, utilities and supporting architecture used in Linux operating systems. This course provides the student with skills such as system and application installation, shell scripting, regular expressions, system management, web services installation and maintenance.

NTW233 CREDITS: 3 PREREQUISITE(S): NTW103 AND NTS201

IoT Architecture and Security

The Internet of Things (IoT) is the standard term being applied to the integration of multiple types of connected devices in both the commercial, government and personal environments. IoT provides a unique and expanded set of considerations for implementation and security to provide the most effective solution. This course will examine the various types of IoT devices and the considerations for implementation. Students will have the opportunity to get hands on experience with many IoT devices.

NTW245 CREDITS: 3 PREREQUISITE(S): NTW216

Applied Mobile Computing and Cloud Collaboration Technologies

This course will provide students with an understanding of the modern mobile computing technology landscape. The explosive growth in this area makes this essential knowledge for the IT engineer to have. Wireless fundamentals and history will be covered. Popular topics such as how to manage smartphones, tablets and other mobile consumer devices in a business environment and how service providers architect their wireless networks to accommodate mobile devices will be covered. Wireless technologies such as GSM, CDMA, 3G/4G, LTE, 802.11, Bluetooth and WiMAX will be introduced. Students will learn the various wireless and collaboration technologies influencing modern corporations and service providers. This course will also explore the types, uses and configuration of on-demand collaboration, solutions email systems, file sharing, web publishing, web portals, content management solutions, online meeting, instant messengers, web-based word processor, spreadsheet, presentation and data storage services. During this course, you will learn the business drivers, social drivers and technology being used to mobilize the collaborative workforce. The trend towards consumerization of IT will also be discussed. A study of these technologies will prepare students to make objective evaluations of the different wireless/mobile and collaboration technologies and their use cases. Students will be given hands-on exercises to reinforce the knowledge taught in class.

NTW275 CREDITS: 3 PREREQUISITE(S): NONE

Network Infrastructure Design I

During this course, students will learn how to design and build a network. Topics included in this course will prepare students to translate organizational needs into network designs. Students will learn how to consider the logic of both the physical network topology and the server infrastructure during a network infrastructure design process.

NTW280 CREDITS: 3 PREREQUISITE(S): NTW216

Virtualization System Technologies and Administration

This course will prepare students for working in the highly virtualized IT environments of contemporary businesses. The skills required to administer a typical Virtual Infrastructure will be covered in this class. The skills learned in this class will prepare you for understanding the design, implementation and tools used in a virtual environment. The course will focus on planning, implementing, configuring, deploying and securing server and network virtualization server and desktop technologies for software-as-a-service (SaaS), cloud computing technologies, administering virtualized server infrastructure, resource and balancing management, virtual switching, routing and forwarding, logical storage partitions, virtual processors, network interfaces, virtual and remote management of virtualized operating systems in a vendor-neutral environment. Each student will complete a hands-on project to build a complete multi-server VMware environment using the tools explored in this class. Students will be taught the business drivers, pros and cons and use cases of virtualization technology.

NTW318 CREDITS: 3 PREREQUISITE(S): NTW275

Emerging Network Engineering Technologies

Technology is ever changing. This course will allow students to experience cutting edge technologies as well as assist in forecasting the future of networking. Implementation, development, and design of technologies expected to be used in industry in the near future will be discussed, and ample opportunity will be afforded for students to conduct research on trends and technologies that are forecasted to become industry standard.

NTW320 CREDITS: 3 PREREQUISITE(S): NONE

Directory Services Design and Administration

Strategies presented in this course are used to identify the information technology needs of an organization and design and deploy a directory services structure that meets those needs. The focus of this course is the applied skills necessary to plan, design and implement the required directory services infrastructure for a worldwide enterprise. Topics covered include Directory Services forest and tree creation, populating directory services objects, construction of sites, DS backup and the restoration of a corrupted structure, securing the enterprise and maintaining proper procedures. Using a networking lab, teams will create a directory service infrastructure to meet business needs of a popular corporate entity.

NTW325 CREDITS: 3 PREREQUISITE(S): NTW216

A+ and Network+ Certification Preparation

This course will lay out the material for the CompTIA A+ and Network + certification and help students to better prepare for the certification testing process. Students will be exposed to the core competencies required by CompTIA to achieve certification. Topics include virtualization, networking, troubleshooting, security, mobile devices, cloud computing, and operational procedures.

NTW342 CREDITS: 3 PREREQUISITE(S): NTW220

UNIX/Linux Systems Administration

Today's enterprises implement a variety of server operating systems within their infrastructures. A successful information technology candidate must have the skills necessary to deploy current Unix/Linux distributions and alternative operating systems. Using a networking lab, teams will create a popular organizations enterprise level infrastructure. This course focuses on the application of UNIX/Linux as a server. The applied topics will include account and resource management, installing Domain Naming Service (DNS), Dynamic Host Configuration (DHCP), file/printing services, securing the enterprise, Intranet/ Internet tools, performing backup/restoration of critical files, performance monitoring and proper preventive maintenance procedures.

NTW375 CREDITS: 3 PREREQUISITE(S): NTW275

Network Infrastructure Design II

This advanced course provides students with additional opportunity to practice designing and implementing network infrastructures. Building upon concepts learned and practiced in NTW275, this course provides more complex scenarios requiring more advanced infrastructure design techniques and technologies. The concepts and labs of this course will be layered upon each other such that by course completion a best practice–based multi-site networking project will have been built. This course will prepare students to evaluate, design and implement network engineering best practices.

NTW385 CREDITS: 3 PREREQUISITE(S): NONE

Managing Enterprise Networks

This course provides students with the opportunity to practice designing and implementing enterprise networking communication and content solutions. The course will cover designing and implementing unified communication, social media, and storage technologies at an enterprise level. This course will prepare students to evaluate, design and implement enterprise network engineering best practices.

NTW428 CREDITS: 3 PREREQUISITE(S): NONE

The Business of Technology

This course takes a comprehensive look at how business requirements affect network technology design. Real-life case studies detailing how corporate and industry requirements drive technology design to supplement and enhance business processes. Topics will include assessing corporate IT culture, understanding organizational structure, and working with key stakeholders to design network solutions that meet business unit requirements. Upon completion of this course you will understand how business needs drive the technology innovation of an organization.

NTW440 CREDITS: 3 PREREQUISITE(S): NTW216

Business Continuity/Disaster Recovery

Business continuity planning and disaster recovery planning are vital activities and required knowledge for the Information Systems Engineer. For every IT system, location or process there should be a companion continuity and recovery plan. This course will explore this topic in detail, highlighting topics such as creating a plan and maintaining a plan. The COBRA methodology for Business Impact Analysis and Risk Analysis will be used. This project-based course will allow you to create a business continuity and disaster recovery plan using best practices learned in this course.

NTW455 CREDITS: 3 PREREQUISITE(S): NTW375

Modern Data Center and Cloud Computing Design and Services

Strong data center design skills are incredibly sought after in the IT marketplace. Receive an in-depth introduction to designing data centers and review industry best practices in this course. The focus is on the design of all aspects of a modern IT data center. This project-based course will guide you on a journey to build a medium-sized data center from the ground up. This course is divided into three sections: physical, network infrastructure, and systems. Multi-tenant and cloud architectures for data center design will also be explored.

PRODUCTION STUDIO (PDS)

PDS300 CREDITS: 3 PREREQUISITE(S): NONE

Production Studio I

Working towards the creation of market-ready, professional applications of technology, students will take on the roles and procedures of teams working in production pipelines that mirror the workplace.

PDS400 CREDITS: 3 PREREQUISITE(S): NONE

Production Studio II

This course will continue upon Production Studio I allowing students to move their project along the production pipeline. Students will likely serve as project leads and mentor students in Production Studio I.

PDS450 CREDITS: 3 PREREQUISITE(S): NONE

Production Studio III

This course will continue upon Production Studio I and Production Studio II allowing students to move their project along the production pipeline. Students will likely serve as project leads and mentor students in Production Studio I or Production Studio II.

PHYSICS (PHY)

PHY101 CREDITS: 3 PREREQUISITE(S): MAT174

Physics

(GE, Science)
This course explores the theories and use of Newtonian physics, formulas and techniques associated with 2D kinematics, force, momentum, work, energy, heat and wave properties.

PHY125 CREDITS: 3 PREREQUISITE(S): MAT174

Introduction to Electricity and Magnetism

(GE, Science)
This course will introduce the student to basic concepts of electricity and magnetism with discussion of practical applications. Charges and fields will be used to understand the concepts of potential, resistance, capacitance and inductance, and to solve basic DC circuits. Math through college algebra is required.

PSYCHOLOGY (PSY)

PSY101 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Psychology

(GE, Social Science)
This course is designed to present a comprehensive overview of the scientific study of human behavior as it is currently viewed by the science of psychology. Some of the topics that will be introduced are the following: an overview of psychology as a science, the brain and behavior, child development, life-span development, abnormal psychology, health, stress and coping, personality, perception, and social behavior.

PSY300 CREDITS: 3 PREREQUISITE(S): NONE

Living Your Best Life

(GE, Social Science)
In this course, students explore psychological principles and concepts related to personal success strategies, self-actualization, growth mindset, wellbeing, positivity, and happiness. Students will engage in reflection and introspection activities to develop a mindset that will enhance the student's ability to persevere when faced with life's challenges and live their best life possible.

ROBOTICS (RBT)

RBT125 CREDITS: 3 PREREQUISITE(S): NONE

Intro to Robotics

Students will learn about the general field of Robotics. Students will gain an understanding of how robotic systems are designed to accomplish specific tasks and discuss current topics in Robotics such as AI and novel sensors. Students will use the (either) M5StickC or Microbit to perform simple programming tasks.

RBT131 CREDITS: 3 PREREQUISITE(S): MAT174

Digital Logic Basic Processor Design

Students will learn how a processor is built from fundamental logic gates. Learning how a processor works under the hood will help students become better programmers. Electronics fundamentals will be covered, including digital logic, Ohm's Law, schematics and integrated circuits. The use of oscilloscopes and other electrical equipment will also be covered, including soldering and circuit construction techniques (programming with solder). Students will implement an assembly instruction set on a 4-bit µController they design.

RBT173 CREDITS: 3 PREREQUISITE(S): CSC102 AND RBT131

Introduction to Microcontrollers

Various microcontroller architectures and integrated circuit families will be studied, along with their development environments. Interfacing to transducers, actuators, analog-to-digital converters and other supporting hardware will be covered, as well as elements of programming (software) and circuit implementation (hardware).

RBT205 CREDITS: 3 PREREQUISITE(S): NONE

Mechanisms and Materials

Students will explore the use of materials and design of simple mechanical systems using CAD software and rapid prototyping technologies. Topics include design for manufacturing, power transfer, and choice of materials in designs.

RBT211 CREDITS: 3 PREREQUISITE(S): RBT173

Embedded Programming

Embedded programming is a key component of any high-fidelity robotics product, as well as many high-tech maker-based platforms. This course will work through the details of component, assembly, and complex product-based embedded programming solutions, with an emphasis on Arduino hardware. Students will learn to understand the elements of real-world problems and be able to translate those problems into a structured list of requirements, scope elements, and ultimately—programming.

RBT220 CREDITS: 3 PREREQUISITE(S): RBT131

Introduction to Mechanical Concepts

Introduces the fundamental concepts in mechanical engineering. Concepts such as mechanical advantage, simple machines, and simple physical analysis (torque, kinematics, etc.) will be covered. Students will also learn the different components used to create a complex mechanism.

RBT307 CREDITS: 3 PREREQUISITE(S): CSC102

Physical Computing Studio

Interesting connections between the physical world and the computer world are investigated. Active sculpture, electronics based art, simple aesthetic machines and interactive art installations are some of the topics that will be covered. Simple light/LED/relay control, small motors and servos, and simple sensors will also be covered. The Processing and Arduino programming environments will be studied, as it applies to projects. Class interest will drive topics covered. Students will complete a project of their design by the end of the course.

RBT310 CREDITS: 3 PREREQUISITE(S): RBT211

ARM Embedded Programming

Concepts involved with advanced embedded programming will be covered with a focus on the ARM microcontroller architecture. Students will use the embedded programming concepts learned in RBT211 and apply them through the use of a real-time operating system. By the end of the course, students will have knowledge of a new embedded platform as well as applications with a real-time embedded platform.

RBT337 CREDITS: 3 PREREQUISITE(S): CSC382 AND MAT220

Digital Vision and Sensor Processing

Computer vision is an important means of robot control in many systems, such as pick and place machines, production line, construction robotics and terrain navigation. The data structures and algorithms used to process visual data are studied and show how they can overcome certain robotics problems. Edge finding, texture analysis and other feature detection/sensing methods are studied.

RBT347 CREDITS: 3 PREREQUISITE(S): RBT211

Robot Navigation

Student teams will design, implement and evaluate software for an autonomous mobile robotic platform. Real-world environment design considerations will be addressed throughout the design process. The level of autonomy must be clearly defined, taking into consideration asynchronous events and sensor input. Appropriate architecture selection will be a major component to the design, as dictated by performance requirements outlined in the project objectives. Topics that relate to the design will also be studied, including data structures used in the implementation of intelligent machines.

RBT353 CREDITS: 3 PREREQUISITE(S): RBT173

Robotics Competition

Student teams will design, implement and evaluate projects relating to an entry in a collegiate level, non-destructive robotics competition. Topics include mechanical, electrical, and computation design; autonomous system evaluation; real-time debugging and reliability testing.

RBT431 CREDITS: 3 PREREQUISITE(S): RBT173

Autonomous Aerial Vehicles

Students will explore the computer control of both fixed-wing and rotorcraft aerial vehicles. Topics will include flight mechanics, electronic control of flight, control base stations, and important software techniques for controlling flying vehicles.

RBT441 CREDITS: 3 PREREQUISITE(S): RBT173

Autonomous Ground Vehicles

During this class, a fully autonomous outdoor rover will be developed. This rover will have the ability to learn and memorize any object and then autonomously track it and follow it with the goal of interception. One example would be for a soccer ball to be kicked and the rover would continuously chase it. It is easy to track objects at low speed, however extending this problem to high speed on an outdoor platform with multiple unknown obstacles makes the task much more challenging.

RBT479 CREDITS: 3 PREREQUISITE(S): RBT211

Mechatronics

Students will learn basic mechanical design, PCB layout and common mechanical control methods. Mechanical design topics include basic mechanical drafting, mechanical design, design analysis and rapid prototyping. PCB layout topics include schematic capture, design for electromagnetic interference, CRC design rules and surface-mount layout. Control topics include an introduction to controls theory, PID control methodology and adaptive control systems.

SCIENCE (SCI)

SCI150 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Electronics

(GE, Science)
This course introduces fundamental concepts in electrical and computer engineering such as Ohm's Law, capacitors, LEDs and 7-segment displays, transformers and rectifiers, and digital logic. Design concepts such as schematic layout and board design will also be covered. Lab work exposes students to commonly used instrumentation such as oscilloscopes, multimeters, and power supplies. Skills in wiring, soldering and wire-wrapping are developed.

SCI330 CREDITS: 3 PREREQUISITE(S): NONE

Green Technologies

(GE, Science)
Green Technologies offers a conceptual study of the current trends in energy production by means of accepted green technologies. This course will present a brief discussion about the history of fossil fuels and the impact of the current electric grid, as well as in-depth discussions about the development and uses of solar, wind, hydro, fuel cells, biomass and biofuels, geothermal, and emerging technologies. The course will provide students a connection to community and society by showing them ways to install these systems in the typical home, as well as how to understand policies or incentives dictated by the government.

SCI340 CREDITS: 3 PREREQUISITE(S): NONE

Natural Disasters

(GE, Science)
Natural Disasters offers a conceptual study of the dramatic natural processes and their effects on human livelihoods and society. This course will present and connect each of these natural processes to environmental science concepts and the overarching theme of climate change and human interaction and impact on the earth's system. The course will provide a brief discussion of mitigation and adaptation procedures for different natural disasters, as well as in-depth case study discussions of the impact of natural disasters on societies around the world. The course will provide students a connection to community and society by showing them how to implement disaster plans in their own life and what has gone wrong in other societies when managing disaster situations.

SCI345 CREDITS: 3 PREREQUISITE(S): NONE

Sustainability in Practice

(GE, Science)
Sustainability in Practice offers a hands-on study of the practical applications of sustainability science. This course will present an overview of tools like systems diagrams and sustainability frameworks to support students as they transition from theoretical sustainability concepts in the beginning of the course through to building projects like insulation and pitching sustainability concept ideas to university management for implementation. This course will provide students a connection to community and society through supporting students as they tackle sustainability challenges through practical and implementable projects specific to their own community context at UAT.

SCI350 CREDITS: 3 PREREQUISITE(S): NONE

Environmental Perspectives

(GE, Science)
Environmental Perspectives offers a holistic study of the science behind sustainability challenges and technologies through the lens of the human experience. This course will present a brief history of environmentalism and the impact of economic, social and environmental issues on sustainability discourse in environmental documentaries, policy, current events and popular culture. This course will provide students a connection to community and society by showing them challenges from places around the world across sectors as well as allowing them to problem-solve and present their own solutions to some of the world's most "wicked" challenges. The course will cover topics of energy, waste, food, climate change, conflict minerals, ocean sustainability, urban design and development, poverty and social well-being.

SCI360 CREDITS: 3 PREREQUISITE(S): NONE

Conservation and Zoos

(GE, Science)
Conservation and Zoos will introduce students to basic biological concepts before describing conservation biology and how zoos contribute to conservation. Conservation biology, its origins, and its significance in our world today will be discussed with a particular emphasis on how zoos are making an impactful contribution to biological conservation.

SCI365 CREDITS: 3 PREREQUISITE(S): NONE

Animal Diversity

(GE, Science)
Animal Diversity will introduce students to taxonomic biological classification of living organisms before launching into a more in-depth exploration of the Kingdom Animalia. The feeding modes, senses, reproduction and more will be discussed for the varying animal groups; e.g., sponges (Phylum Porifera), flatworks (Phylum Platyhelminthes), jellyfish (Phylum Cnidaria), arthropods (Phylum Arthropoda – the largest phylum of all living organisms), Phylum Chordata including amphibians, reptiles, birds, mammals, and many more.

SCI388 CREDITS: 3 PREREQUISITE(S): INSTRUCTOR APPROVAL

Special Topics in Science

(GE, Science)
Special Topics courses are intended to provide advanced or focused studies within a specific discipline. In the science discipline, topics can include, but are not limited to, advanced materials, quantum theory, calculus-based physics, game- based physics, advanced astronomy and advanced life systems.

STUDENT INNOVATION PROJECT (SIP)

SIP311 CREDITS: 3 PREREQUISITE(S): 60 CREDIT HOURS

Student Innovation Project I

In this course, students will explore potential topics for their Student Innovation Project (SIP) based on their field of study and make progress towards a prototype to be submitted and demonstrated in the latter SIP courses as a graduation requirement. Exploration of innovation will occur through workshops and/or discussions and research exercises in which students explore management principles and project management techniques. Passing this course is contingent on approval of a SIP project by subject matter experts.

SIP405 CREDITS: 2 PREREQUISITE(S): COM226 AND SIP311

Student Innovation Project II: On-Campus

SIP405 leads to completion, demonstration, and submission of a Student Innovation Project (SIP) in fulfillment of graduation requirements. Coursework in SIP405 is concentrated on the completion of SIP elements and their demonstration, including a working prototype developed in SIP311. Passing this course is contingent upon meeting all expectations related to SIP demonstration and collection of all artifacts related to SIP works. Students will also begin collecting works to be demonstrated in SIP410. Upon passing, students progress to SIP410. On-campus students only.

SIP408 CREDITS: 1 PREREQUISITE(S): COM226 AND SIP311

Student Innovation Project II: Online

SIP408 continues a sequence of online courses begun in SIP311 leading to completion, demonstration, and submission of a Student Innovation Project (SIP) in fulfillment of graduation requirements. Coursework in SIP408 is concentrated on the completion of SIP elements and their demonstration begun in SIP311. Students entering this class are expected to have made progress towards a functional prototype of their SIP. This is a Pass/No Pass course contingent upon a subject matter expert (SME) review of the student's documentation of progress towards SIP completion. Upon passing, students progress to SIP409. Online students only.

SIP409 CREDITS: 1 PREREQUISITE(S): SIP408

Student Innovation Project III: Online

SIP409 concludes a sequence of online courses begun in SIP311 leading to completion, demonstration, and submission of a Student Innovation Project (SIP) in fulfillment of graduation requirements. Coursework in SIP409 is concentrated on the demonstration of SIP elements begun in SIP311. Students entering this class are expected to have completed a functional prototype of their SIP. This is a Pass/No Pass course contingent upon meeting all expectations for the SIP project and presentation of the SIP during scheduled synchronous reviews. Upon passing, students progress to SIP410. Online students only.

SIP410 CREDITS: 1 PREREQUISITE(S): SIP311

Boards Presentation: On-Campus

SIP410 leads to completion, demonstration, and submission of student works to be assessed by program subject matter experts (SME) in fulfillment of graduation requirements. Coursework in SIP410 is concentrated on the collection and demonstration of student works completed or to be completed in their programs of study. This is a Pass/No Pass course contingent upon meeting all course expectations related to collection and demonstration of Boards materials during scheduled reviews, as well as submission of all artifacts related to these works. This course is not eligible for students to receive an incomplete grade; all work must be completed in the designated course time frame. Students will automatically be placed in SIP410 in the subsequent registration period until they receive a passing grade.

SIP411 CREDITS: 1 PREREQUISITE(S): SIP408

Boards Presentation: Online

SIP411 leads to completion, demonstration, and submission of student works to be assessed by program subject matter experts (SME) in fulfillment of graduation requirements. Coursework in SIP411 is concentrated on the collection and demonstration of student works completed or to be completed in their programs of study. This is a Pass/No Pass course contingent upon meeting all course expectations related to collection and demonstration of Boards materials during scheduled reviews, as well as submission of all artifacts related to these works. This course is not eligible for students to receive an incomplete grade; all work must be completed in the designated course time frame. Students will automatically be placed in SIP411 in the subsequent registration period until they receive a passing grade.

SPANISH (SPA)

SPA101 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Spanish

(GE, Humanities)
This course is an introduction to the Spanish language and Spanish-speaking culture. Students will explore Spanish at an introductory level through coursework in pronunciation, vocabulary, verb conjugation, nouns and pronouns, and usage basics such as speaking and listening, as well as the culture of the Spanish-speaking world.

SPA201 CREDITS: 3 PREREQUISITE(S): SPA101

Intermediate Spanish

(GE, Humanities)
In this course, students will examine the topics learned in SPA101 and study them at a more advanced level; they will continue to acquire skills in Spanish reading, writing, speaking and listening. Emphasis will be on both conversational skills and grammatical analysis of the language.

SOCIAL SCIENCE (SS)

SS320 CREDITS: 3 PREREQUISITE(S): NONE

Contemporary Global Issues

(GE, Social Sciences)
This course is a study of a variety of issues of international and global importance that are a part of the dialogue of contemporary geopolitics and social justice. The issues selected for examination reflect the most important events, trends, and problems facing citizens and leaders in an increasingly interdependent world.

SS388 CREDITS: 3 PREREQUISITE(S): INSTRUCTOR APPROVAL

Special Topics in Social Sciences

(GE, Social Sciences)
This course will explore special topics in the field of Social Sciences.

TECHNOLOGY (TCH)

TCH100 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Design

True design stresses the importance of human beings in all aspects of thinking and practice. This course begins with exploration of design and the human dimension, discussing the nature of human beings and their physical, psychological, spiritual and/or cultural needs. Then, the role of human beings in the design process is considered, discovering how designers respond to human need as well as issues of value. Lastly, the course discusses the scope of design in personal, social and cultural environments, observing how design has permeated human life through images, physical objects, services and environmental systems. Students in the course will review, write, reflect and develop an understanding of design and its place in the human condition.

TCH115 CREDITS: 3 PREREQUISITE(S): NONE

Thinking Strategies

This course will offer students a cross-disciplinary, project-oriented approach to applied thinking strategies as they may relate to technologists. Students will learn the logical basis, history and potential for application of the following dimensions of thinking: critical, systems, creative, lateral and parallel thinking. Assignments and projects will guide students toward an understanding of how thinking dimensions relate to their intended disciplines in emerging technology industries, as well as to their personal educational aspirations.

TCH200 CREDITS: 3 PREREQUISITE(S): NONE

Product Development

This course provides the student with an understanding of the product development lifecycle for technologies from inception to innovation to production and through distribution to the contemporary market. Product case studies and insights into long tail product development will be discussed.

TCH211 CREDITS: 3 PREREQUISITE(S): NONE

Industry Innovation

Innovation is about creating ideas that can be executed in such a way that adds value to customers. This course explores major innovations of the contemporary era to identify success factors through methodologies, case studies and thought leadership. Topics include trend identification, problem-solving, project management, and various systematic methods of innovation. Students will be exposed to self-directed learning through process-oriented experiences and involved in idea generation through a proprietary framework. *(This course may also be offered for students enrolled in the Honors Program.)*

TCH270 CREDITS: 3 PREREQUISITE(S): TCH100

The Design Process

This course will expose students to the analytical processes and skills that underpin the creative process of product design. These processes may include user research, use cases and usability, ergonomic analysis, materials selection, production processes, hand drawing and sketching, comparative product research, model making, prototyping and testing. Additionally, students will develop AutoCAD skills designed to allow for 3D design of products.

TCH310 CREDITS: 3 PREREQUISITE(S): ENG101

Technology, Society and Ethics

The course will introduce students to essential concepts necessary to evaluate the social and ethical impacts of accelerating technology. Students will explore ethical theories, construct moral dilemmas, and consider the nature and meaning of real-world scenarios that highlight technological challenges that are influencing global societies of the 21st Century. (*This course may also be offered to students enrolled in the Honors Program).*

TCH315 CREDITS: 3 PREREQUISITE(S): NONE

Exponential Tech and Existential Risk

Exponential technology refers to the continued growth and performance of technology over time. Often aligned with the theory of Moore's Law, technology's capacity will continue doubling. AI, nanotech, genetic engineering, and information tech are rapidly advancing and offering benefits to society. They are also producing challenges. Existential risk relates to the potential risks that face humanity because of these technologies. For example, AI could assist in sorting data and delivering objective problem-solving effortlessly. Yet, it could cause unrecoverable global catastrophe and even human extinction. This course offers students an opportunity to explore exponential tech, its growth, trends, and future advances and the possible risks that are the topic of leading scientists and entrepreneurs, including machine ethics.

TCH375 CREDITS: 3 PREREQUISITE(S): NONE

Space Expedition

This course allows high performing students to apply their major toward the development of UAT's SPACE Expedition. Each semester the program will have a list of projects that need to be completed, with topics spanning across all majors. Each student will work with the course professor to develop a project plan and will partner with a professor from their major to complete the work. The course will utilize Agile/Scrum project management techniques to ensure all SPACE Expedition projects are completed.

TCH410 CREDITS: 3 PREREQUISITE(S): TCH270

Advanced Topics in Technology Product Design

This course explores a variety of technology product design topics and different subjects are included each time the course is offered over a calendar year. Topics explored in this advanced course may include materials and material innovation, visualization, environmental design, advanced human factors, and prototyping methods such as rapid prototyping and digital prototyping.

TECHNOLOGY SPECIAL TOPICS (SPT)

SPT123 CREDITS: 3 PREREQUISITE(S): INSTRUCTOR APPROVAL

Special Topics in Technology

Students will engage in unique or current topics related to Technology. Activities may include reports, special projects, group work or research.

SPT323 CREDITS: 3 PREREQUISITE(S): INSTRUCTOR APPROVAL

Special Topics in Technology

Students will engage in unique or current topics related to Technology. Activities may include reports, special projects, group work or research.

THEATER (THE)

THE130 CREDITS: 3 PREREQUISITE(S): NONE

Movie Theory

(GE, Humanities)
Ever wonder why some movies feel different from others? This class will reveal the secrets. This course introduces the concepts and practices associated with how the written word is translated into visual language. During this course, students will have the opportunity to learn the art and theory behind motion pictures, including how lighting and cameras are used to create emotion, setting and dramatic emphasis. Topics include shooting styles, lighting, camera angles, continuity, composition and cutting techniques. Technical innovations in cameras, filters and lenses will be explored.

THE220 CREDITS: 3 PREREQUISITE(S): NONE

Shakespeare in Film

(GE, Humanities)
This course combines the timelessness of Shakespeare's works with the innovation and technology of film to encourage understanding of the universal themes found in his work. Shakespeare's plays and poetry are analyzed side by side with film adaptations to interpret cultural, societal and political influences from the earliest silent films to the present. The inherent differences of film verses live theater will be explored to illuminate the disruptive and productive aspects of adaptation. *(This course may also be offered for students enrolled in the Honors Program.)*

THE230 CREDITS: 3 PREREQUISITE(S): ENG101

Character Development

(GE, Humanities)
This course develops the student's ability to create a fictional personality for use in novels, short stories, movies, animations, and video games. Stereotypes, archetypes, and allegory will be explored as a means for developing character attributes. Topics include the elements of character, symbolism, naming conventions, how to develop background, analysis of existing characters, and how to create a complete character profile.

THE238 CREDITS: 3 PREREQUISITE(S): NONE

Acting and Movement

(GE, Humanities)
This course introduces the student to the basic principles of acting and movement in a highly collaborative setting. Techniques for memorization, concentration and relaxation will be explored. Topics include terminology used by directors, exercises in character interpretation and improvisation. Movement topics may include rhythm, alignment, isolation and body language interpretation. Monologues and short scenes may be performed and critiqued.

THE310 CREDITS: 3 PREREQUISITE(S): NONE

History of Movies

(GE, Humanities)
This course examines the technological advances that make movies magic. From the silent era through the present, students will explore the innovations that fueled film creation. World cinema and the Hollywood studio system will be studied through the viewing of classic and pop-culture films. This course explores mostly feature-length narrative films, placing them in their historical, cultural and technological context, therefore giving the student a foundation for interpretation and analysis.

THE320 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Shakespeare

(GE, Humanities)
This course guides students past the linguistic challenges of Elizabethan English to encourage the understanding of the themes, literary elements, and theater conventions used in Shakespeare's work. A critical study of Shakespeare's plays and poetry are placed in cultural, societal, and political contexts allowing the student to discover that certain themes are timeless and shape our society today.

VIRTUAL REALITY TECHNOLOGIES (VRT)

VRT101 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Virtual and Augmented Reality

Creating and delivering immersive simulations requires specialized tools. As an emerging technology, the hardware and software associated with Virtual Realty technology changes rapidly. This course surveys the current forms of head mounted display and motion capture technology. It also introduces students to the major software tools used to create immersive environments. Students will work with and learn the roles of these tools as they are integrated to create virtual experiences.

VRT210 CREDITS: 3 PREREQUISITE(S): VRT101

Virtual and Augmented Reality Hardware

The hardware platforms associated with Virtual and Augmented Reality are a defining aspect of development. How the user interacts with your VR and AR content is often dictated by the platform and hardware associated with the experience. This course will look at the hardware and software platforms used in VR and AR development, including PC, Console, Mobile, HMDs, and glasses.

VRT215 CREDITS: 3 PREREQUISITE(S): GAM101

Serious Applications of VR and AR

This course informs students of non-entertainment applications of immersive technologies such as remote telepresence, education, training, military, healthcare and psychological therapies. Social, legal, privacy and ethical concerns will be addressed as a part of this exploration. As students learn about emerging and potential professional uses of virtual and augmented reality, they will also learn how to scope and design effective solutions. They will practice these skills by actively applying industry prototyping processes to prepare projects that they can subsequently pursue.

VRT232 CREDITS: 3 PREREQUISITE(S): VRT210

Gamification

The game industry has developed a set of tools and practices for engaging player bases. This engagement has become part of the culture and expectations of interactive user experiences. The design psychology and philosophy behind gamification includes principles of engagement, interaction, motivation, socializing, competition, achievement, and self-expression. This course leverages these design principles to create activities, solve problems, and build interactions using game systems and mechanics.

VRT260 CREDITS: 3 PREREQUISITE(S): VRT210

Instructional Design

This course provides an exploration of interactive learning theory and the instructional design process. Students develop strategies to improve the learner's comprehension by delivering information in an engaging medium. This course emphasizes the many roles of the designer in the instructional development and evaluation process. Topics include conducting a needs assessment; classifying learning objectives; enhancing the learner's ability to master skills and procedures; sequencing content to facilitate comprehension; and developing methods to test behaviors, knowledge and perceptions.

VRT310 CREDITS: 3 PREREQUISITE(S): VRT210

Virtual Environments

Immersive digital environments provide students with simulated spaces that they can interact with and explore. Students will learn the elements of effective virtual environments along with how to construct them within the parameters of existing hardware to produce simulation that are realistic to its users. Topics such as latency, feedback, geometry, multi-person interaction, physics engines and data integrations will be learned by students.

VRT320 CREDITS: 3 PREREQUISITE(S): VRT210

VR/AR User Experience Design

As game and simulation software development technology and techniques have come together, the ability to apply Virtual Reality and Augmented Reality solutions that maximize the strengths and uniqueness of the platform has become essential. Developing solutions that concentrate on the specific elements of these platforms and how the hardware, software, and design solutions create a user experience will set your applications apart from simple ports to the technology. Embracing UI, UX, storytelling, movement systems, control schemes, and platform best practices will separate average applications from applications that move the industry forward and push users into adoption of the technology as a mainstream experience.

VRT330 CREDITS: 3 PREREQUISITE(S): VRT101 AND GPE205

Augmented Reality Development

Augmented reality technologies provide a new form of human experience by superimposing computer generated imagery over real-world images in real time. When used with mobile devices, augmented reality layers and enhances information by combining the wealth of internet information with live views of world. Individually and in a social context, augmented reality has applications within areas such as entertainment, travel, merchant selection and data analysis. During this course, students will learn the elements of augmented reality along with the software tools needed to link live mobile device camera displays to internet data.

VRT380 CREDITS: 3 PREREQUISITE(S): VRT260

Serious Game Design

Games that teach, test, train and pose complex, realistic challenges to the player have been branded Serious Games. Using game technologies to teach is not a new concept, but the recent reinvigoration of this genre puts the spotlight on games that focus on giving the gamer new experiences and learning opportunities rather than an endless chain of aliens to slay. Using contemporary theories of electronic education, students will create and prototype games with a message to their mechanics. Students will study stealth serious games as well as institutional tools and tutorials, games based on scientific principles and simulation and the future of gameplay in education.

VRT420 CREDITS: 3 PREREQUISITE(S): VRT310

Telepresence

In a connected world, the ability to attend and impact events from a remote location is an application of Virtual and Augmented Reality technology that has the potential to change the way people interact. This course will cover the technology behind implementing a telepresence solution as well as the design and experience implications of the solution. Project work will consider the audio, visual, tactile, movement, and interaction elements of a telepresence solution as well as the benefits of current and future applications of the technology as these solution are adopted and implemented.

VRT456 CREDITS: 3 PREREQUISITE(S): VRT101 AND GPE205

AR Applications and Ethics

This course will explore and implement an augmented reality device(s) along with understanding how to enhance the user experience (UX). The focus will be on applications for the real world that are student designed and implemented with instructor guidance. Limitations and ethics of augmented reality will also be addressed.

VRT481 CREDITS: 3 PREREQUISITE(S): VRT310

Virtual Reality World Build

This synthesis course will focus on the creation of completed virtual reality (VR) applications. Using pipeline and Agile methods, this course simulates a production studio environment. Bringing together all the principles of virtual reality development, students will apply the principles of prototyping, design documents and integration of assets, code, hardware and testing to produce completed virtual reality applications. Students will work in teams and with students in other programs to fulfill production roles as they apply design, asset and programming techniques to complete VR projects in a learning environment that reflects a production studio.

GRADUATE COURSE CODES AND DESCRIPTIONS

KEY TO COURSE CODES AND DESCRIPTIONS

Letters used to denote a code prefix designate the topic area or course family associated with a course (refer to Course Category and Code Prefix List for complete listing).

Letter codes are arranged alphabetically by Course Category name in the Course Descriptions section of the catalog. Three numbers are employed as a course code suffix and indicate the course's level within its topic area. Courses numbered between 500 and 699 are considered graduate level courses.

Prerequisite(s) indicates progression of courses. Prerequisites are met by completing the foundation course with a minimum passing grade of D (1.0) unless otherwise specified.

COURSE CATEGORY AND CODE PREFIX LIST

Master of Science	MS

MASTER OF SCIENCE (MS)

MS501 CREDITS: 3 PREREQUISITE(S): NONE

Game Production and Documentation

(Game Production Module)
The ability to clearly communicate exactly what a game is, how it plays, what it will feel like, how it will look and, more importantly, how a team will get it done is what makes or breaks projects at both the pitch stage and during review points in actual development. Students will create a game design document representative of professional quality documentation found in leading game studios and master the art of pitching to multiple audiences from team members to executive decision makers.

MS503 CREDITS: 3 PREREQUISITE(S): NONE

Game Marketing and Advertising

(Game Production Module)
This course examines the progress and potential for the marketing and advertising of games. The unique needs of this market and target audience will be analyzed. In addition, the traditional marketing functions of product, price, distribution and promotion as related to the game industry will be discussed.

MS504 CREDITS: 3 PREREQUISITE(S): NONE

Critical Game Studies

(Game Development Module)
This course will cover advanced critical techniques and approaches to game design, game theory and the gaming audience. Using techniques of critical theory, ludology and game theory, students will take a deep look at the structure of games and their interaction with the user. Students will be expected to produce their own critical research based on the games and ideas studied.

MS507 CREDITS: 3 PREREQUISITE(S): NONE

Introduction to Cyber Security

(Cyber Security Module)
The goal of this course is to provide master's-level students with the necessary applied security knowledge and background to effectively continue with their cyber security program. This course will help them to design and implement an effective security strategy in a corporate network environment. This course will cover anti-virus tools, security policies, password management, risk analysis, security policies, network communication vulnerabilities, enhancing security with cabling and network hardware, understanding different types of firewalls, packet filtering and NAT, setting up and securing a virtual private network, and understanding hacker exploits. Current industry trends will be reviewed.

MS508 CREDITS: 3 PREREQUISITE(S): MS507

Governance, Risk Management and Compliance

(Cyber Organization Module)
The challenge of holistically aligning information technology and organizational objectives is a primary concern of executive management. This course will explore the effective governance of an organization's Information Technology (IT) investments and roles in Federal and International Standards and Regulations. The course will also cover performance, risk, contingency management, and the integration of federal and international standards into your corporate governance strategy.

MS509 CREDITS: 3 PREREQUISITE(S): NONE

Game Processes and Pipeline

(Game Development Module)
Games and game development are a complex series of decisions, iterations, and processes linking together to complete a full production. At the core of this complexity is the game production pipeline, discipline-specific pipelines, and software development methodologies. To be effective in production and management roles, it is essential to understand the workings of these processes and pipelines. Students will take part in a full game production working with development teams to implement, manage, and utilize these production techniques.

MS510 CREDITS: 9 PREREQUISITE(S): NONE

Cyber Security Module

The Cyber Security module provides master's-level students with the necessary applied security knowledge and background to effectively work in cyber and continue with their cyber security program. This module will help them to design and implement an effective security strategy in a corporate network environment. This module will cover anti-virus tools, security policies, password management, risk analysis, security policies, network communication vulnerabilities, enhancing security with cabling and network hardware, understanding different types of firewalls, packet filtering and NAT, setting up and securing a virtual private network, and understanding hacker exploits. Current industry trends will be reviewed.

This module further guides through the world of federal and international information security standards that guide the way organizations are doing business today. Research and analysis are conducted on how US security regulations vary from industry to industry, including those in healthcare, education, military, federal matters, utilities and financial matters. International security standards will also be reviewed to understand the impact of implementing appropriate information security mechanisms in a global organization.

The Cyber Security module covers the implementation of key components of network and applications that are needed to run businesses. This study and practice encompasses the concepts of defense-in-depth and the interplay of technologies in securing your organization. Also covered are security architectures and the importance of appropriate placement of key network and application functionality in protecting the organization.

MS511 CREDITS: 3 PREREQUISITE(S): MS507

Principles of Incident Response, Business Continuity and Disaster Recovery

(Cyber Organization Module)
This course will provide a comprehensive overview of disaster recovery and countermeasures for networks and businesses. Students will assess risks in the enterprise, determine critical business components, develop an enterprise disaster recovery system and develop disaster policies, procedures, departmental roles and communication processes for enterprise networks. Students will also produce a disaster recovery document of procedures and policies to implement training, testing and rehearsal of a disaster recovery.

MS514 CREDITS: 3 PREREQUISITE(S): NONE

Blockchain Architecture

(Blockchain Module)
This course presents background fundamentals associated with Blockchain so that students understand its context and potential applications. Topics covered include the history of Blockchain, its open source evolution and current architecture. Server and network architecture associated with current Blockchain infrastructure are covered along with the structures used to define Blockchains, their ledgers, encryption, distribution and validation.

MS516 CREDITS: 3 PREREQUISITE(S): NONE

Makerspace Tools

(Digital Maker Module)
Students will learn and use the technologies available in the Maker Studio to create physical prototypes of their personal designs. Rapid prototype processes and procedures will be effectively utilized with both hardware and software tools in the creation process. Basic and intermediate techniques will be discussed and used to bring student's ideas into existence.

MS520 CREDITS: 3 PREREQUISITE(S): MS507

Principles of Cyber Forensics

(Cyber Security Module)
This course is a guide through the world of federal and international information security standards that guide the way organizations are doing business today. Research and analysis are conducted on how US security regulations vary from industry to industry, including those in healthcare, education, military, federal matters, utilities and financial matters. International security standards will also be reviewed to understand the impact of implementing appropriate information security mechanisms in a global organization.

MS528 CREDITS: 3 PREREQUISITE(S): NONE

Founding and Operating a Technology Startup

(Technology Startup Module)
This course develops skills and capacities associated with being a successful startup founder. Students will learn how to assess, select and file for appropriate organizational legal structure along with filing for business licenses. The course will cover the process and best practices of business planning including mission/vision documents, culture, goals and strategic planning. Students will take these and use them to write a strategic business plan that is ready to present to stakeholders and sources of venture capital.

MS532 CREDITS: 9 PREREQUISITE(S): NONE

Application Development Module

The Application Development module immerses students new to coding into the world of programming and software development. Students will learn the foundational concepts and skills of programming such as algorithms, flowcharting, input/output, conditionals, loops, and arrays in the context of mobile app development. Objects and object-oriented programming will be explored as students complete personalized programming projects.

Data structures and efficient algorithms are core components of modern software systems. Students will study and implement many of the foundational data structures and algorithms such as linked lists, stacks, queues, trees, graphs, and sorting. They will learn algorithms and techniques to build efficient systems, and they will utilize the full software development process to create high quality systems and applications that are thoroughly analyzed and tested.

The Application Development module further guides students in implementing mobile development on 2 platforms – iOS and Android. Students will develop apps for both with an emphasis on GUI design for mobile devices, messaging protocols, and application of streaming data sources.

MS539 CREDITS: 3 PREREQUISITE(S): NONE

Programming Concepts

(App Development Module)
Students will be immersed in the fast-paced world of programming and software development. They will learn the foundational concepts and skills of programming such as algorithms, flowcharting, input/output, conditionals, loops, and arrays in the context of mobile app development. Objects and object-oriented programming will be explored as students complete personalized programming projects.

MS544 CREDITS: 3 PREREQUISITE(S): NONE

Organizational Metrics and Analytics

(Technology Startup Module)
Knowledge work and decision making associated with technology teams, products and organizations are often best framed by data. This course explores different approaches to data and their application. As a result of this course, students will be capable of understanding the roles of big data, snapshot data and over time data within technology frameworks and be capable of applying each towards effective decision making along with individual, team, project and organizational success.

MS545 CREDITS: 3 PREREQUISITE(S): NONE

The Business of Gaming

(Game Production Module)
This course addresses the economics of the game industry. This includes the ways games are funded, marketed and sold and the relationships between publishers, developers, retailers and other companies. Other topics to be covered include legal issues of gaming, intellectual property laws, the social forces that impact games and the governmental and legislative forces that impact game content.

MS546 CREDITS: 3 PREREQUISITE(S): NONE

Startup Funding and Marketing

(Technology to Market Module)
This course provides students with understanding and skills needed to resource and communicate startup organizations. Focus will be made on lean and social models of funding and connecting the value of products to their customers. Additional time will be spent on the cultivation and implication of venture capital.

MS548 CREDITS: 3 PREREQUISITE(S): MS539

Advanced Programming Concepts and AI

(Data Cloud A.I. Module)
Advanced programming skills will be developed and utilized building on student's foundational programming skills and experience. They will be introduced to and implement Artificial Intelligence and Machine Learning.

MS549 CREDITS: 3 PREREQUISITE(S): MS539

Data Structures and Testing

(App Development Module)
Data structures and efficient algorithms are core components of modern software systems. Students will study and implement many of the foundational data structures and algorithms such as linked lists, stacks, queues, trees, graphs, and sorting. They will learn algorithms and techniques to build efficient systems, and they will utilize the full software development process to create high quality systems and applications that are thoroughly analyzed and tested.

MS555 CREDITS: 3 PREREQUISITE(S): NONE

Agile Project Development

(Technology Leadership Module)
Every major development, breakthrough, or innovation is the result of a project that is managed well. Companies have risen and fallen due to the success and failure of project management. In this course, students will learn the fundamentals of solving problems at the project level by using real world examples and hands-on experience. The Agile process will be used in depth, along with other methodologies.

MS558 CREDITS: 3 PREREQUISITE(S): MS507

Principles of Network and Application Security

(Cyber Security Module)
This course covers the implementation of the key components of the network and applications that are needed to run the business. This course will cover the concepts of defense-in-depth and the interplay of technologies in securing your organization. This course will also discuss security architectures and the importance of appropriate placement of key network and application functionality in protecting the organization.

MS563 CREDITS: 9 PREREQUISITE(S): NONE

Game Development Module

The Game Development module covers advanced critical techniques and approaches to game design, game theory and the gaming audience. Using techniques of critical theory, ludology and game theory, students will take a deep look at the structure of games and their interaction with the user. Students will be expected to produce their own critical research based on the games and ideas studied.

Games and game development are a complex series of decisions, iterations, and processes linking together to complete a full production. At the core of this complexity is the game production pipeline, discipline-specific pipelines, and software development methodologies. To be effective in production and management roles, it is essential to understand the workings of these processes and pipelines. Students will take part in a full game production working with development teams to implement, manage, and utilize these production techniques.

Across the module are themes that concentrate on techniques to create a game from the standpoint of production. Students will tackle topics such as people management, team building, communication and workflow to grasp the complexities of running a development team. The types of projects, including platform and genre, will change from semester to semester.

MS568 CREDITS: 9 PREREQUISITE(S): NONE

Technology Startup Module

The Technology Startup module examines what it takes to become a successful founder. Students will look at traits, attitudes and behaviors that are associated with being a successful founder. From setting vision and establishing strategy, to examining assumptions and selling your product, founding a startup requires specific capacities that will be described and practiced within this course.

The Technology Startup module further provides students with a close understanding of the skills needed to resource and fund startup organizations. Focus will be made on lean and social models of funding, as well as how to communicate and demonstrate the value of products to their customers. Additional time will be spent on the cultivation and implication of venture capital.

Agile methods have become a backbone approach for teams and organizations as they move towards goals within rapidly evolving settings. Rapid builds, high levels of transparency within workgroups and getting feedback from intended users at each iteration exist at the core of agile approaches. Agile approaches such as scrum increase the success of technology projects and technology organizations. This is particularly true within startups and new product development. The Technology Startup module instructs in the concepts of Agile along with its application using a variety of established and accepted techniques. Students will apply what they learn in team settings both as a path to tech product development and as an organizational tool.

MS572 CREDITS: 9 PREREQUISITE(S): NONE

Technology Leadership Module

Knowledge work and decision making associated with technology teams, products and organizations are often best framed by data. The Technology Leadership module explores different approaches to data and their application. As a result of these activities, students will be capable of understanding the roles of big data, snapshot data and over time data within technology frameworks and be capable of applying each towards effective decision making along with individual, team, project and organizational success.

In the recent past, it has become clear that with the advent of the information age and particularly in technology environments, managers in technology environments face unique challenges and traditional management models may not be successful. This module provides students an in-depth look and opportunity to analyze different management models, the unique challenges facing technology managers and the opportunity to explore new and emerging management models designed for the technology environment.

The Technology Leadership module is designed to provide the student with practical and applicable insights, strategies and critical thinking skills to anticipate, manage and embrace periods of rapid and dynamic change, innovation, and uncertainty across all spectrums of the business. Further, this module prepares students to foster and nurture a culture and organizational framework for innovation, creativity, change management, and accelerated go to market strategies.

MS577 CREDITS: 3 PREREQUISITE(S): MS516

Fabrication, Materials and Build Techniques

(Digital Maker Module)
Students will utilize advanced Maker Studio technology, processes, and techniques to create effective prototypes. Students will learn how to adapt their designs and fabrication processes to various constraints such as material properties and other real-world limitations. They will analyze design decisions and determine their impact on the fabrication process. Advanced software tools will be used and their applications to the design and prototyping process will be discussed.

MS579 CREDITS: 3 PREREQUISITE(S): NONE

Special Topics in Technology

Special topics courses are intended to provide focused studies within a specific discipline. Students in this course will engage in the advanced study of a specific area of technology.

MS582 CREDITS: 3 PREREQUISITE(S): MS514 AND MS539

Coding Blockchain

(Blockchain Module)
Students in this course will learn how Blockchains are created and undertake the software development required to build them. Students will learn how the algorithms and architectures of Blockchains are represented in software and exist within hardware. Using industry development environments, basic Blockchain applications will be created.

MS585 CREDITS: 9 PREREQUISITE(S): NONE

Digital Maker Module

The Digital Maker module presents Maker technologies used to create physical prototypes of their personal designs. Rapid prototype processes and procedures will be effectively utilized with both hardware and software tools in the creation process. Basic and intermediate techniques will be discussed and used to bring student's ideas into existence.

In this module students will further develop and utilize advanced maker device technologies, processes, and techniques to create effective prototypes. Students will learn how to adapt their designs and fabrication processes to various constraints such as material properties and other real-world limitations. They will analyze design decisions and determine their impact on the fabrication process. Advanced software tools will be used and their applications to the design and prototyping process will be discussed.

Agile methodology will be used and applied in the development and production processes as students turn their designs into products. Opportunities for innovation will be identified, and iterative design methods will be applied. Techniques for optimizing designed based on manufacturing feedback will be utilized, and students will learn and apply topics customized to their product development.

MS587 CREDITS: 3 PREREQUISITE(S): MS548

Databases and Web Development

(Data Cloud A.I. Module)
This course will teach how to implement databases and connect these to a website. Databases will be covered from introduction to implementation and include some form of SQL for access to the databases. In addition, basic web page development including tools such as CSS and http will be included. Finally, the integration of the website with connectivity to the database will be implemented.

MS603 CREDITS: 3 PREREQUISITE(S): MS501

Game Project

(Game Development Module)
This course concentrates on techniques to produce a game from the standpoint of production. Students will tackle topics such as people management, team building, communication and workflow to grasp the complexities of running a development team. The types of projects, including platform and genre, will change from semester to semester.

MS608 CREDITS: 9 PREREQUISITE(S): NONE

Blockchain Module

The Blockchain module presents background fundamentals associated with Blockchain so that students understand its context and potential applications. Topics covered include the history of Blockchain, its open source evolution and current architecture. Server and network architecture associated with current Blockchain infrastructure are covered along with the structures used to define Blockchains, their ledgers, encryption, distribution and validation.

Blockchain module students will learn how Blockchains are created and undertake the software development required to build them. Students will learn how the algorithms and architectures of Blockchains are represented in software and exist within hardware. Using industry development environments, basic Blockchain applications will be created.

Having gained fundamental skills in creating Blockchains, students will further develop their skills by building categories of applications that are being advanced as compelling reasons for this technology to be actively explored. Students will explore and build Blockchain applications in areas of high interest that include digital contracts, transactions, currency, identification, records and voting.

MS612 CREDITS: 9 PREREQUISITE(S): MS510

Cyber Organization Module

The challenge of holistically aligning information technology and organizational objectives is a primary concern of executive management. The Cyber Organization module explores the effective governance of an organization's Information Technology (IT) investments and roles in Federal and International Standards and Regulations. The module will also cover performance, risk, contingency management, and the integration of federal and international standards into corporate governance strategy.

This module provides a comprehensive overview of disaster recovery and countermeasures for networks and businesses. Students will assess risks in the enterprise, determine critical business components, develop an enterprise disaster recovery system and develop disaster policies, procedures, departmental roles and communication processes for enterprise networks. Students will also produce a disaster recovery document of procedures and policies to implement training, testing and rehearsal of a disaster recover.

The Cyber Security module will provide students with the critical skills required to conduct full spectrum information security assessments and evaluations on a variety of organizations. Students will explore methodologies for organizing these projects, coordinating with customers, setting the scope of the work, ensuring the work meets regulatory requirements, conducting the actual security assessment and evaluation efforts, and providing the customer with meaningful results that are directly applicable to their organization. Students may be required to work as a team to achieve the learning objectives, simulating true-to-life projects.

MS624 CREDITS: 3 PREREQUISITE(S): NONE

Managing People in a Technology Environment

(Technology Leadership Module)
In the recent past, it has become clear that with the advent of the information age and particularly in technology environments, managers in technology environments face unique challenges and traditional management models may not be successful. This course provides students an in-depth look and opportunity to analyze different management models, the unique challenges facing technology managers and the opportunity to explore new and emerging management models designed for the technology environment.

MS628 CREDITS: 3 PREREQUISITE(S): MS587

Cloud Computing

(Data Cloud A.I. Module)
Cloud computing and distributed data and systems are major components of many modern systems. The infrastructure as a service (IaaS) and platform as a service (PaaS) cloud computing models will be studied and implemented using cloud computing providers such as Azure, Google Cloud, and AWS. Cloud-based solutions will be designed, developed, and implemented leveraging the strengths of distributed architectures.

MS631 CREDITS: 3 PREREQUISITE(S): MS507

Cyber Posture Analysis

(Cyber Organization Module)
This course will provide students with the critical skills required to conduct full spectrum information security assessments and evaluations on a variety of organizations. Students will explore methodologies for organizing these projects, coordinating with customers, setting the scope of the work, ensuring the work meets regulatory requirements, conducting the actual security assessment and evaluation efforts, and providing the customer with meaningful results that are directly applicable to their organization. Students may be required to work as a team to achieve the course objectives, simulating true-to-life projects.

MS636 CREDITS: 3 PREREQUISITE(S): MS582

Blockchain Application Prototyping

(Blockchain Module)
Having previously gained fundamental skills in creating Blockchains, students will further develop their skills by building categories of applications that are being advanced as compelling reasons for this technology to be actively explored. Students will explore and build Blockchain applications in areas of high interest that include digital contracts, transactions, currency, identification, records and voting.

MS642 CREDITS: 9 PREREQUISITE(S): MS532

Data, Cloud and AI Module

Advanced programming skills will be developed and utilized building on student's foundational programming skills and experience. Within this module, students will be introduced to and implement artificial intelligence and machine learning code.

The Data, Cloud and AI module further covers how to implement databases and connect these to a website. Databases will be covered from introduction to implementation and include some form of SQL for access to the databases. In addition, basic web page development including tools such as CSS and http will be included. Finally, the integration of the website with connectivity to the database will be implemented

Cloud computing and distributed data and systems are major components of many modern systems. The infrastructure as a service (IaaS) and platform as a service (PaaS) cloud computing models will be studied and implemented using cloud computing providers such as Azure, Google Cloud, and AWS. Cloud-based solutions will be designed, developed, and implemented leveraging the strengths of distributed architectures.

MS649 CREDITS: 3 PREREQUISITE(S): NONE

Technology Forecasting and Change Management

(Technology Leadership Module)
This graduate-level course is designed to provide the student with practical and applicable insights, strategies and critical thinking skills to anticipate, manage and embrace periods of rapid and dynamic change, innovation, and uncertainty across all spectrums of the business. Further, this course prepares students to foster and nurture a culture and organizational framework for innovation, creativity, change management, and accelerated go to market strategies.

MS658 CREDITS: 9 PREREQUISITE(S): NONE

Game Production Module

The ability to clearly communicate exactly what a game is, how it plays, what it will feel like, how it will look and, more importantly, how a team will get it done is what makes or breaks projects at both the pitch stage and during review points in actual development. Students will create a game design document representative of professional quality documentation found in leading game studios and master the art of pitching to multiple audiences from team members to executive decision makers.

The Game Production module examines the progress and potential for the marketing and advertising of games. The unique needs of this market and target audience will be analyzed. In addition, the traditional marketing functions of product, price, distribution and promotion as related to the game industry will be discussed and applied.

This module additionally addresses the economics of the game industry. This includes the ways games are funded, marketed and sold and the relationships between publishers, developers, retailers and other companies. Other topics to be covered include legal issues of gaming, intellectual property laws, the social forces that impact games and the governmental and legislative forces that impact game content.

MS668 CREDITS: 9 PREREQUISITE(S): NONE

Technology to Market Module

There is a long-standing debate on whether entrepreneurs are made or born. More and more research suggests the mindset of an entrepreneur is learned, although the skillset is taken far outside their comfort zone. Through trials, failures, learning how to endure, and growing through adversity, students learn to be capable of more than they ever thought possible. The Technology to Market module consists of carefully curated challenges specifically designed to stretch comfort zones of future entrepreneurs, innovators, and domain experts. Students will become mentally tough and will learn skills and behaviors for success—skills that can't be taught from a book

Applying skills in Agile management and the iteration process, students take full ownership of their projects and establish production build out options. Students experience the evaluation process toward an analysis of minimum viable product (MVP) and the entrepreneurial meaning of "done". Assessing hits and misses, students revisit and refine their projects and pre-launch. As an analysis of feasibility and completion, students defend their methods and materials in aiming toward market ready.

The Technology to Market module offers a personalized learning as it takes the students' unique needs and abilities into an entrepreneurial experience of industry standards and trends. Students are informed about field-related businesses that align with their products and/or degree area. This adaptive learning process forms a guidepost for determining what business structure best meet their needs. Through applying strategic practices, students develop skills to write their vision and mission, determine business models, and formalize a Strategic Plan, ready to present to stakeholders and sources of venture capital.

MS675 CREDITS: 9 PREREQUISITE(S): NONE

Robotics and Kinematics Module

This module introduces robotic fundamentals with software and hardware. Students will complete a substantial project related to kinematics by utilizing electrical components, mechanical components, sensors and instrumentation, drives and actuators, intelligent controls, digital processing and hardware, communication and interfacing, and broad cross-topic analysis. Students will write an analytical, in-depth industry whitepaper kinematics utilizing electrical components, mechanical components, sensors and instrumentation, digital processing, communication and interfacing. Each milestone will build upon sought-after technical leadership skills as well as technical expertise.

MS682 CREDITS: 3 PREREQUISITE(S): NONE

Startup Finance and Legal

(Technology Startup Module)
Founding a startup involves building an organization from the ground up without established operating departments. Until a startup matures, founders need operational understanding in areas that will later be filled by chief financial officers and legal counsel. This course guides founders through high level approaches and best practices of organizational finance, accounting, and tax preparation. The course further covers relevant legal issues in areas such as startup legal structure, IP, and contracts.

MS688 CREDITS: 3 PREREQUISITE(S): MS539

Mobile Development

(App Development Module)
This course will introduce and implement mobile development on 2 platforms – iOS and Android. Students will develop apps for both with an emphasis on GUI design for mobile devices, messaging protocols, and application of streaming data sources.

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