



THE UNIVERSITY OF ARIZONA

College of Applied
Science & Technology





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Position Profile – Department Head, Applied Technology

The University of Arizona's (UArizona) College of Applied Science and Technology (CAST) is seeking applicants for a Department Head with excellent leadership skills, enthusiasm for world class research, innovative teaching, and industry and government collaborations. The future Applied Technology Department Head must be an innovative and visionary academic leader who can spearhead the growth and transformation of the Applied Technology Department for the challenges of the 21st century and 4th Industrial Revolution. The Department Head is responsible for leading a dynamic department with a diverse group of faculty, staff, and students. This position will work in Sierra Vista, Arizona at the only Branch Campus of UArizona. This position will travel throughout the state.

CAST is committed to excellence in research and education in all its programs and equally committed to bridging the digital divide through accessible education for our diverse, post-traditional student population. Candidates are requested to include in their letter of interest and/or teaching philosophy how they will assist the college in furthering these goals.

The Applied Technology Department Head will report to the Associate Dean for Academic and Faculty Affairs. This position will be hired to a tenure-track Assistant or Associate Professor level, depending on the final candidate's level of education and experience.

Outstanding UArizona benefits include health, dental, and vision insurance plans; life insurance and disability programs; sick leave and holidays; UA/ASU/NAU tuition reduction for the employee and qualified family members; state and optional retirement plans; access to UA recreation and cultural activities; and more! The University of Arizona has been recognized for our innovative work-life programs. For more information, please [click here](#).

Position Duties and Responsibilities

- Collaboratively lead the Applied Technology Department. Develop and regularly review the department plans that support the CAST Strategic Plan, Mission, and Vision; and the UArizona Strategic Plan.
- Ensure stakeholders are informed on progress and changes.
- Make equity-informed decisions on faculty recruitment, diversity, development, performance, retention, and promotion.
- Lead the department in achieving student and faculty recruitment goals.
- Keep the department focused on developing students that are equipped to be future focused and career ready in a 4th industrial revolution world.
- Demonstrate effective managerial leadership, clear communication, and a commitment to shared governance, community engagement, and diversity, equity, and inclusion.



- Demonstrate high ethical standards and operate in a transparent and collegial way.
- Be responsive in a timely manner to the needs of faculty, staff, and students in the department.
- Coordinate and foster faculty development and growth and conduct effective annual reviews of department staff and faculty with input from CAST Personnel Committee and college administration.
- Review and coordinate faculty course releases, sabbaticals, or leave of absence requests with the Associate Dean.
- Assure implementation of UArizona and CAST policies pertaining to faculty governance and evaluation.
- Manage departmental compliance of University and College policies and procedures as well as ensure Higher Learning Commission and other accreditation guidance are met.
- Working with the Associate Dean for Applied Research and Development, identify and promote undergraduate and graduate research opportunities and actively facilitate and participate in interdisciplinary research.
- Working with the Associate Dean for Applied Research and Development, maintain existing and create new relationships with alumni.
- Foster a sense of community and maintain an inclusive, positive workplace environment. Inspire and recruit a diverse group of exceptional students, faculty, and staff.
- Act entrepreneurially to manage and enhance the department's financial condition through increasing enrollments and initiating new programs that capitalize on other revenue streams.
- Implement new initiatives and oversee current commitments with respect to bachelor's degrees, international micro campus programs, online programs, and accelerated master's degree options.
- Build on existing ties and build new relationships with government and industry with respect to funded research such as laboratory testing and participation on research teams.
- Oversee the department's operations including budgets, resources, and fiscal management.

Qualifications

Successful candidates are expected to have extensive teaching and research experience with broad online experience highly desired. The successful candidate should also demonstrate effective managerial leadership, strong verbal and written communication skills, and a commitment to shared governance, community engagement, and diversity, equity, and inclusion. The successful candidate must demonstrate high ethical standards and is expected to operate in a transparent and collegial way. The successful candidate must be responsive in a timely manner to the needs of faculty, staff, and students in the department and should be able to mentor and retain a diverse group of faculty, staff, and students.



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Minimum Qualifications

- Ph.D./D.Sc. in Computer Science, Information Science, Artificial Intelligence, Data Analytics, or closely related field
- Demonstrated leadership skills with multidisciplinary teams
- Strong oral and written communication skills

Preferred Qualifications

- Administrative experience as a head or associate head, center director, or equivalent leadership position.
- Experience teaching online or directing online programs
- Experience working with industry through direct employment or cooperative research and development activities.
- Demonstrated successful research or applied experience with the U.S. Government

Procedure for Candidacy

Submit applications online at talent.arizona.edu. Include the following:

- Cover Letter
- Curriculum Vitae
- Statement of teaching philosophy
- Leadership statement, including commitment to diversity

Questions should be directed to Melody Dugie, CAST HR Manager at mdugie@arizona.edu. The initial review of applications will commence on or around December 1, 2021 until the position is filled.



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College Profile

The University of Arizona's College of Applied Science and Technology (CAST) is the only college at UArizona that offers the Bachelor of Applied Science (BAS) Degree. CAST education is facilitated by the college's one-of-a-kind Virtual Learning Environment that includes CyberApolis, a unique virtual city of 15,000 AI-drive bots that conduct business, engage in cybermedia, and demonstrate human vulnerabilities that support scenarios in our classes. BAS students are transfer, post-traditional students who take all their course work in CAST's enhanced, online education model. This model offers a hybrid combination of synchronous and asynchronous online education with opportunities to have face-to-face interactions with student service staff and faculty at UArizona locations throughout the state. CAST's majors feature a common core of courses that develop writing, math, analysis, ethics, and critical thinking skills and include a senior capstone experience.

CAST's Cyber Operations program was ranked the #1 online, undergraduate cybersecurity program by Academic Influence in 2021. In addition, CAST is a National Security Agency (NSA) designated Center of Academic Excellence in Cyber Operations (CAE-CO) and an Office of the Director of National Intelligence (ODNI) designated Intelligence Community Center of Academic Excellence (IC-CAE).

CAST is the University of Arizona's only college headquartered in Sierra Vista. Sierra Vista is located 75 miles southeast of the Tucson campus and is the home to Fort Huachuca and the Army's Military Intelligence School. CAST enjoys a robust education and research partnership with city, county, state, and government partners to include multiple relationships with Fort Huachuca's many education, test, and evaluation organizations.



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CAST houses three unique departments across the college. Each department has its own exceptional set of programs with interdisciplinary work that crosses into each of the other departments. In addition to the college's exceptional program, it boasts 9 excellent Undergraduate Certificates.

Programs

Department of Applied Technology

- Applied Computing
- Computer Science

Department of Applied Science

- Government & Public Service
- Administration of Justice
- Early Childhood
- Human Services
- Organizational Leadership & Regional Commerce

Department of Cyber, Intelligence and Information Operations

- Cyber Operations
- Intelligence and Information Operations

Undergraduate Certificates

- Cybersecurity
- Cyber Operations
- Cyber Defense
- Cloud Computing
- Digital Forensics
- Information Warfare
- Security Computing
- Organizational Leadership
- Military Families





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Department Profile

The Applied Technology Department is a unique academic department preparing students for 21st Century careers applied computing, computer science, and artificial intelligence. These programs offer a wide variety of emphasis areas and certificates such as software development, information management, network operations, digital design, and cloud computing. All CAST departments collaborate to ensure students in all



departments are immersed in both the technical and human aspects of living in a digital world. The future Applied Technology Department Head must be able to work at the convergence of social science and technology to deliver rigorous, 4th Industrial Revolution applied education & research to our region and our world.

Applied Technology Department includes the Information Management, Software Development, Network Operations, Applied Artificial Intelligence, Cloud Computing and DevOps emphases. Each features unique, program-specific courses and learning opportunities. All are offered fully online with instructor-optional video conferencing and face-to-face components.

SOFTWARE DEVELOPMENT EMPHASIS

Students in the Software Development emphasis learn a variety of software fundamentals, including object-oriented and system programming, UNIX, mobile app development, web programming and secure computing. Students learn by doing and create a variety of software applications under the guidance of faculty. The Software Development emphasis prepares students for a variety of positions, including Software and Web developer, Data Engineer, Mobile App Developer and Data Analyst positions.

NETWORK OPERATIONS EMPHASIS

Network Operations students develop the engineering and operational skills required to create, operate, and defend complex computing and information networks. The program curriculum includes theory, operational labs, modern network architecture, advanced routing and switching, systems administration, cloud



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computing, network defense, wireless networking and network security. Security is a prevailing theme across all of these areas of study. Network Operations graduates are prepared to take on a wide variety of IT-related positions in the private, public and government sectors.

INFORMATION MANAGEMENT EMPHASIS

The Information Management emphasis prepares students for careers in database administration, data analysis and engineering, web development and information architecture. Students learn the foundations of database systems, web design and programming, data visualization and analysis, as well as methods for visualizing, managing, and analyzing information.

APPLIED ARTIFICIAL INTELLIGENCE (AI) EMPHASIS

The Applied Artificial Intelligence (AI) emphasis focuses on AI algorithm development and applying AI to approach practical application problems. Master concepts and tools to include machine learning, statistical analysis and data analytics in applied computing. This emphasis will prepare graduates to pursue careers such as AI Specialist/Developer, Data Engineer and Security Programmer.

CLOUD COMPUTING EMPHASIS

In the Cloud Computing emphasis, students will become familiar with the complicated infrastructure related to virtualization, Amazon Web Services and Microsoft Azure. The course outline provides a baseline on virtualization technologies, introduction to cloud technologies, as well as courses focusing on Amazon and Microsoft, with advanced discussion topics on cloud computing.

DEVOPS EMPHASIS

The DevOps emphasis uses the core of Applied Computing enabling students to develop a solid foundation in statistics, programming, networking, and cybersecurity. Courses focus on DevOps development and applying DevOps to approach practical application problems in secure computing. Students will study applying DevOps in a hands-on from an interdisciplinary approach with peers and faculty.

MAVRX Lab

The **M**ixed **A**ugmented **V**iRtual **e**Xtended (Reality) Laboratory (referred to as the MAVRX Lab, pronounced *mavericks*) is space in which we drive innovation through alternative reality modalities and research. It came about in early 2021 as an entity, though its physical location had existed for some time. MA{VR}X Lab is intended as a collaborate effort, meant to be interdisciplinary and reside in a place of praxis and innovation.

Commitment to Diversity and Inclusion

At the College of Applied Science and Technology (CAST), we believe it is crucial for the success of the College to have a diverse community comprised of individuals with different ideas, strengths, interests and backgrounds that embrace efforts towards diversity in experience, thought, and action.

We see great benefit in the diversity of our students, faculty and staff, as this helps us to better fulfill the wishes and multi-faceted demands of our students, faculty, staff, and communities, to provide a dynamic environment that yields academic excellence.

We strive to create an environment where all our students, faculty and staff are heard and appreciated – regardless of gender, nationality, ethnic origin, religion, world view, differently-abled abilities, age, sexual orientation or identity, or military affiliation. In action, we will work hard to create policies, programs, and opportunities that will ensure that diversity, equity, and inclusion thrive and are at the center of all that we do.

Our goal is to assist all CAST stakeholders by facilitating efforts that address critical issues related to diversity, equity and inclusion that result in positive outcomes where students, faculty and staff feel respected, are treated fairly, provided work-life balance, and have opportunities for professional development at CAST and throughout the University of Arizona community.

Our CAST values are aligned with the values of the University as a whole.

- INTEGRITY – Be honest, respectful, and just.
- COMPASSION – Choose to care.
- EXPLORATION – Be insatiably curious.
- ADAPTATION – Stay open-minded and eager for what's next.
- INCLUSION – Harness the power of diversity.
- DETERMINATION – Bear Down.





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At the University of Arizona, we value our inclusive climate because we know that diversity in experiences and perspectives is vital to advancing innovation, critical thinking, solving complex problems, and creating an inclusive academic community. As a Hispanic-serving institution and a Native American/Alaska Native-serving institution, we translate these values into action by seeking individuals who have experience and expertise working with diverse students, colleagues, and constituencies. Because we seek a workforce with a wide range of perspectives and experiences, we provide equal employment opportunities to applicants and employees without regard to race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information. As an Employer of National Service, we also welcome alumni of AmeriCorps, Peace Corps, and other national service programs and others who will help us advance our Inclusive Excellence initiative aimed at creating a university that values student, staff, and faculty engagement in addressing issues of diversity and inclusiveness.

Community Profile

Sierra Vista is located 75 miles southeast of the Tucson campus and is the home to Fort Huachuca and the Army's Military Intelligence School. CAST enjoys a robust education and research partnership with city, county, state, and government partners to include multiple relationships with Fort Huachuca's many education, test, and evaluation organizations. Sierra Vista sits at 4,600 feet at the foot of the Huachuca mountains and enjoys a moderate climate, extensive parks and trails, and a reputation as one of the best birding locations in the state. Here is a snapshot of our community. You can learn more at <https://www.sierravistaaz.gov/>.

Discover soaring mountain peaks under extraordinary skies, rich history, and room to roam. With 275 days of sunshine and a temperate climate, Sierra Vista is a year 'round destination for outdoor adventure, authentic history, and global cuisine.

With picturesque mountain views in all directions and a temperate four-season climate, Sierra Vista beckons visitors with clear skies, fascinating history, and world-class birding.

Surrounded by towering 10,000-foot mountains and known as the "Hummingbird Capital of the U.S.," Sierra Vista is primed for outdoor exploration.

From its early days as a community growing under the protective wing of neighboring [Fort Huachuca](#) during the Apache Wars, Sierra Vista has blossomed into the recreational and cultural hub of Cochise County.



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Thanks to the Fort, Sierra Vista is a melting pot of ethnic cuisine, where independent restaurants serve authentic dishes from around the globe.

Sierra Vista's climate and southern location make it a major stop for rare birds. Though you can spot resident and migrating birds year-round, the annual Christmas Bird Count regularly records one of the nation's highest tallies of inland species.



While you're outside, take in the scenic panoramas, rolling byways, and outdoor trails by bike, boot, or hoof. With a 360-degree mountain view, you'll see why Sierra Vista (literally "mountain view" in Spanish) is so aptly named.

When the sun sets, a thick blanket of stars blaze across the dark night. These views have paved the way for Sierra Vista as a center for amateur astronomy; the city has more than a dozen amateur observatories as well as the Patterson Observatory at University of Arizona's Sierra Vista Campus, which offers public viewing.