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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Computing devices are all around us and computer algorithms support almost every aspect of our daily activities, decisions, and transactions. Our majors are at the center of these exciting activities; in envisioning new forms of services, in applications to address existing or emerging needs, in formulation and evaluation of algorithms to build the necessary computer and networking systems, and in development of the necessary software infrastructures to deploy the resulting solutions. In this, they rely on skills learned in our degree programs; skills that include algorithm design and analysis, programming languages, computer system design, artificial intelligence and machine learning, graphics, human-computer interaction, and many more. Our graduates are found in a wide range of industries, both public and private, reflecting the ubiquity of computing in society.

The Department of Computer Science and Engineering prepares our students to become computing experts who are equipped to address the many and varying challenges that they will encounter in their careers. We offer three degree programs, which are designed to address a variety of student goals and industry demands.

Mission

The mission of the Department of Computer Science is to develop the human and intellectual resources needed to meet the future technological challenges in the field of computing. This includes developing computer scientists and computer engineers for positions of leadership in industry, government, and academia.

BS in Computer Science

The curriculum in Computer Science is designed to prepare students to enter the rapidly expanding computer field. Curricula and courses are based upon recommendations by the Institute of Electrical and Electronic Engineering Computer Society and the Association for Computing Machinery. The Computer Science program is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

BS in Computer Engineering

The Computer Engineering curricula provide a balanced view of hardware, software, hardware-software trade-offs, analysis, design, and implementation techniques. It is a dynamic and broadly interdisciplinary field that continues to experience rapid growth that impacts every area of human endeavor. The Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

BA in Computer Science

The Bachelor of Arts in Computer Science allows students to couple foundational skills in computing, both theoretical and practical, with a sound knowledge of an intersecting area of interest.

Faculty

Azad, Ariful, Associate Professor Computer Science & Engineering PHD, Purdue University, 2014 Beideman, Calvin J, Instructional Assistant Professor Computer Science & Engineering PHD, University of Illinois at Urbana-Champaign, 2023

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Majors

- Bachelor of Arts in Computer Science (https://catalog.tamu.edu/ undergraduate/engineering/computer-science/ba/)
- Bachelor of Science in Computer Engineering (https:// catalog.tamu.edu/undergraduate/engineering/computer-science/ computer-engineering-bs/)
- Bachelor of Science in Computer Science (https://catalog.tamu.edu/ undergraduate/engineering/computer-science/bs/)

Minors

- Computer Science Minor (https://catalog.tamu.edu/undergraduate/ engineering/computer-science/minor/)
- Cybersecurity Minor (https://catalog.tamu.edu/undergraduate/ engineering/computer-science/cybersecurity-minor/)
- Game Design and Development Minor (https://catalog.tamu.edu/ undergraduate/engineering/computer-science/game-designdevelopment-minor/)

Certificates

 Cyber Operations Certificate (https://catalog.tamu.edu/ undergraduate/engineering/computer-science/cyber-operationscertificate/)