

VISION

The Applied Computing degree at ASU's New College of Interdisciplinary Arts and Sciences prepares students to be successful professionals, well-equipped to tackle the challenges of the rapidly expanding information age — fully skilled in the location, creation, organization, filtering, manipulation, presentation, and dissemination of information.

The Applied Computing degree is substantially different from a traditional computer science degree in that it offers a focused intensity in its concentrations. The program and its coursework properly prepare students in a number of areas that have defined the field of computer technology — the collection and analysis of data; efficient, effective, and ethical user interaction with systems; successful engagement in creative efforts; and the development of the quality of information and its value to those who will use it.

The program has both a technical component, concerned with the design and use of appropriate systems and technologies, and a social sciences component, concerned with understanding how people seek, obtain, evaluate, use, and categorize information. It rests on a solid foundation of work in mathematics, technology, and humanities and social sciences; and offers a choice of concentrations.

Rigorous core courses, a well-designed concentration, and an internship within the industry keep this degree program on top of and ahead of the times. Since it is located within New College, students leave with not only the technical knowledge, but a strong liberal arts background that better prepares them for a dynamic, ever-changing business community or their continued education and graduate school.

dedication

ABOUT ARIZONA STATE UNIVERSITY

Arizona State University is one of the premier comprehensive universities in the nation. We are leading the transformation of American higher education through a model that is academically rigorous and embraces the educational needs of the entire population, not just a select group. We are a force for discovery, turning students into innovative leaders who will shape the future. We take responsibility for the economic, social, cultural and environmental health of the communities we serve, and we conduct research by considering its impact on the public good.

ASU's New College of Interdisciplinary Arts and Sciences prepares students to take their place as independent thinkers and active participants in a rapidly changing world. Its programs provide the skills necessary for effective expression and a greater understanding and appreciation of diverse cultures, both past and present. New College imparts to its students a sensitivity to the artistic dimension of human expression and the natural environment, as well as providing them with a greater understanding of scientific inquiry. The integrating theme of New College is a focus on social concern and community engagement.

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 New College of
Interdisciplinary Arts & Sciences
ARIZONA STATE UNIVERSITY

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NEW COLLEGE

OF INTERDISCIPLINARY ARTS
AND SCIENCES

APPLIED COMPUTING

BACHELOR OF SCIENCE

 ARIZONA STATE
UNIVERSITY

PROGRAM OVERVIEW

The Applied Computing program offers students the foundations of computer science in the lower-level courses and the opportunity to specialize at the upper level in one of the following three concentration areas: databases, digital media and graphic design, and networks and distributed processing. These concentrations are complementary to each other and focus on various aspects of information, art, and communication in the digital age. There are five courses offered at the upper level for each concentration area, and the degree requires that a student has six credits of an internship and/or independent research study as a senior.

Another distinctive feature of the program is the strong emphasis on experiential learning. The curriculum of the program provides students with both theoretical foundations and hands-on applications in a cooperative learning environment, where students work in diverse teams. The application of theory to practice provides students with a basis for life-long learning and an exposure to industry best practices.

PROGRAM REQUIREMENTS

Requirements for Applied Computing include core courses, concentration courses and an internship.

Core requirements (24 units) include:

- Math Foundation/Core
- Applied Computing Foundation/Core

Concentration requirements (21-22 units) include courses in one of the following tracks:

- Database systems
- Digital media and graphic design
- Network and distributed processing

INTERNSHIP

The internship and/or individualized instruction experience is an integral and required component of the Applied Computing program. At the close of the program, the student must submit a significant paper documenting the experience and make a formal presentation.

CAREER POTENTIAL

Students who complete a BS in Applied Computing are prepared to integrate technology with human activities and to respond to global changes, solve problems, and create and manage the technological production of information and creative products. Core information technology industries are among the fastest growing sectors in the U.S. economy. Graduates of the Applied Computing program will find employment opportunities with corporations and businesses, nonprofit and government agencies, digital arts media industries, and in the academic world.

A bachelor's degree in Applied Computing provides the foundational skill of computational thinking, which involves solving problems using concepts fundamental to computer science. One can major in applied computing and go on to a career in law, medicine, politics, business, any type of science or engineering, and even the arts. It is also an excellent foundation for graduate study and advanced degrees. With respect to the concentration areas within Applied Computing, graduates can look forward to career opportunities in public and private sectors, such as:

- Database Analyst
- Database Architect
- Network Specialist
- Network Administrator
- Design Specialist
- Information Technology Specialist
- Software Developer
- Software Engineer

adaptability

PRECISION
resourcefulness

INNOVATION