

# Computer Science

www.cs.uaf.edu

## Degree Programs

The Department of Computer Science offers undergraduate and graduate degrees in computer science and software engineering. Research interests in computer science include computer security, computer graphics, parallel computation, databases, expert systems, software engineering, simulation, networks, formal language theory and computability.



*Dr. Jon Genetti and a graduate student use the Powerwall to examine a terrain model of Fairbanks, Alaska. Photo courtesy UAF Computer Science Department*

### B.S. Computer Science (ABET Accredited)

The B.S. degree is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

The computer science undergraduate program introduces the fundamentals of computer programming, hardware and theory. It emphasizes the application of general principles to real-world problems. Mathematics and engineering play critical roles in the core. A solid background in fundamentals enables graduates to understand the uses of today's computers and to participate in future developments.

### B.S./M.S. Computer Science (5-Year Fast Track)

The B.S. and M.S. degrees follow the recommendations of the Association for Computing Machinery (ACM) and the Institute for Electrical and Electronic Engineers (IEEE).

### M.S & M.S.E. Computer Science

The M.S. degree follows the recommendations of the Association for Computing Machinery (ACM) and the Institute for Electrical and Electronic Engineers (IEEE).

The program provides breadth and depth in course work and culminates with a major unifying project. This program is available to students who have completed a B.S. degree in computer science at most institutions. Students from other universities who have completed a substantial portion of a bachelor's level computer science program may be admitted to the M.S. program. In such cases, undergraduate courses may be required to remedy deficiencies.

## About the Department

The UAF Department of Computer Science offers undergraduate and graduate degrees in computer science and software engineering.

Research interests in computer science include:

- Computer security
- Computer graphics
- Parallel computation
- Databases
- Artificial intelligence
- Software engineering
- Simulation
- Networks
- Robotics

You can design, build and test a new computer game or apply a new algorithm to analyze the spread of an infectious disease.

You can use digital forensic technologies to catch a criminal or apply recent advancements in robotics to build a robot that can safely explore the ocean floor.

As an added bonus, computer science is one of the fastest growing fields in Alaska and the world, having one of the highest rates of job opportunities and placements at UAF.

The possibilities are limitless.



*The ASSERT Lab - Photo by Kara Nance*

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