

Computer Engineering

Bachelor of Science

What is Computer Engineering?

Think of computer engineering as a marriage between electrical engineering and computer science. Computer engineers focus on computer hardware and the interaction between hardware and software. This contrasts with computer scientists, who focus on software and programming.

What does a computer engineer do?

Computer engineers design and develop computer systems and other tech devices.

With a computer engineering degree from South Dakota Mines, you'll become proficient in writing software and firmware for embedded microcontrollers, designing VLSI microchips, analog sensors, mixed-signal circuit boards, and real-time operating systems. Computer engineers also work in robotics and intelligent systems research.

Some of the things a computer engineer might do include:

- Design new computer hardware
- Create mobile applications
- Drive new types of artificial intelligence
- Update computer equipment
- Research and design computer chips, circuit boards, and computer systems

South Dakota Mines computer engineering graduates typically earn some of the highest starting salaries of any major, taking home an average starting salary of \$71,750. The average job placement rate for these same graduates is 94%. The average job placement rate for 2018-19 South Dakota Mines computer engineering graduates was 94%.

Careers

Careers for South Dakota Mines computer engineering graduates might include:

- Robotics, Search and Rescue
- IoT, Edge, and Fog Computing
- Military Reconnaissance and Surveillance
- Intelligent Automation and Specialized Systems
- Mobile, Web, and Software Engineering
- Alternative Energy Production and Control
- Avionics
- Manufacturing Automation
- Supercomputing
- Smart Antennas

For more information: <https://www.sdsmt.edu/Academics/Degrees/Computer-Engineering/>



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