Montana Tech has a strong heritage in engineering, science, and technology, blending theory with practice to meet the changing needs of society, foster responsible development, and support sustainable use of natural resources. We opened as the Montana State School of Mines in 1900 under the same Act of Congress that granted statehood to Montana.

Overlooking Butte, Montana, once a mining town known as “the richest hill on earth,” Montana Tech is close to leisure opportunities ranging from historical sites to hunting, fishing, hiking, skiing, hot springs, and major parks to explore. Our strongest attributes, however, are the exemplary graduate education, workforce development, research, and service opportunities we offer on campus and in many field locations.

Aspire Advance Achieve
Continue your journey
toward a successful career
by checking out
Montana Tech!

For more information, contact
Montana Tech’s graduate school:

GraduateDean@mtech.edu
406-496-4304

http://www.mtech.edu/academics/gradschool
Graduate Programs at Montana Tech

PhD and Interdisciplinary Programs

PhD Program in Materials Science – A collaborative, interdisciplinary program with the University of Montana-Missoula and Montana State University-Bozeman. Research specialties include biomaterials; electronic, photonic and magnetic (EPM) materials; materials for energy storage, conversion and conservation; and materials synthesis, processing and fabrication. The curriculum cohesively integrates relevant science and engineering disciplines with a broad range of applications, from health and medicine to nanotechnology, energy, environment, and natural resources.

Interdisciplinary MS/PhD – Work with faculty to design a graduate curriculum tailored to your unique academic, creative, and professional objectives. Available to both engineering and science graduate students.

Master of Science (MS) Programs

Electrical Engineering – Research opportunities include developing battery diagnostic instrumentation systems for NASA, improving the efficiency of wind turbines by blade pitching-control algorithms, and improving power grid performance to prevent blackouts by developing innovative control schemes.

Environmental Engineering – Coursework emphasizes water, waste water, soil and subsurface remediation, stream restoration, air pollution engineering, health risk analysis, and environmental sustainability. The thesis option focuses on research projects involving nanotechnology, novel water and waste water treatment technologies, bio sampling, contaminant impacts, air quality, and modeling. A non-thesis option is also available.

General Engineering – Concentrations include: Civil Engineering – Structural, geotechnical, and soil/waste water treatment. Mechanical Engineering – Mechanical power and machines, energy studies, automated manufacturing, and nanotechnology. Welding Engineering – Automated welding, welding design, and nondestructive evaluation.

Technical Communication – Practical communication curriculum includes writing, presentation, and multimedia skills, and theoretical courses in semantics and rhetoric to prepare for career advancement or doctoral study.


Mining Engineering – Graduates design, construct, and manage surface mines, underground mines and quarries. The program is currently developing a new Underground Mine Education Center on campus that enables students to conduct research in drilling, blasting, equipment, rock mechanics, ventilation, instrumentation, and automation.

Petroleum Engineering – A research or project-based degree, in which students publish a thesis or report based on original research. The program focuses on enhanced oil recovery processes, especially those of miscible and thermal methods applicable to Rocky Mountain oil reservoirs. An additional research focus is on hydraulic fracture and stimulation proppants important to unconventional reservoir development.

Online Programs

Healthcare Informatics Certificate – Offered entirely online, this 15-credit program can be completed in two semesters. It merges information technology and health care to fill the need in an expanding industry of electronic health records, health information exchanges, and other Healthcare IT tools. The certificate gives working professionals management and leadership skills within this field.

Industrial Hygiene Distance Learning MS – Enables working professionals to earn their graduate degrees without leaving their jobs. The web-based non-thesis curriculum includes not only the traditional IH rubrics but also a safety core and completion of a research-based IH report. One on-campus component is required – the laboratory section of the Sampling and Evaluation of Health Hazards course.

Project Engineering Management MS – A web-based non-thesis curriculum that helps working engineers advance into management. The 30-credit program covers three areas: advanced engineering applications, industrial and management engineering, and business and organizational management. Each course meets weekly in a virtual classroom for lectures, questions, and discussion.

Financial Support: Montana Tech has competitively awarded graduate teaching and research assistantships available, as well as tuition waivers. Scholarships include the Ron and Jessie Little Scholarship and Sloan Indigenous Graduate Fellowship. US citizens and permanent residents are also eligible for Federal financial aid (in the form of loans).