

M.Eng. in Mechanical Engineering

Admission

Applicants must present evidence of graduation with a bachelor's degree in engineering with ability to maintain a "B" average. Graduates in other fields may be accepted, but generally these students have to make up background material in certain subject areas. Refer to this page for detailed admission and application requirements for degrees in the Department of Mechanical Engineering: <http://www.montana.edu/mie/grad/>.

Program Learning Outcomes

- Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- Communicate effectively with a range of audiences.
- Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- Acquire and apply new knowledge as needed, using appropriate learning strategies.

General Requirements

- 30 credits total
- At least 18 of the total credits required for degree must be at 5xx level
- 3xx level courses are not allowed
- 4xx level courses may be used (maximum allowed is 12 credits)
- Courses with grades below C cannot be used to satisfy graduation requirements
- Three credits (min.) registration required during term of graduation (1 credit with in absentia graduation request on file)
- A maximum of six credits of individual problems courses (570) are allowed
- In addition to the required courses, the Master of Engineering requires additional coursework in lieu of the 10 thesis credits.

Course Requirements

The program of study will be customized for each student based on desired professional outcomes and will include engineering and advanced science courses.

The following courses are required for every MEng-Mechanical Engineering student:

Required Courses

The following courses are required of each MEng-ME student:

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| EM 525 | Continuum Mechanics | 3 |
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Choose at least one approved 4xx-level or 5xx-level course from each topic:

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| Advanced math, statistics or numerical methods | 3 |
| Materials | 3 |
| Thermo/Fluids | 3 |
| Solid Mechanics | 3 |
| Remaining coursework must come from the approved list of 4xx-level and 5xx-level courses. | |
| Total Credits | 30 |