Mechanical Engineering

Department Information

- **Department Chair:**
  Alan Kallmeyer, Ph.D.
- **Graduate Coordinator:**
  Yechun Wang, Ph.D.
- **Department Location:**
  111 Dolve Hall
- **Department Phone:**
  (701) 231-8671
- **Department Email:**
  ndsu.me.gradprogram@ndsu.edu
- **Department Web Site:**
  [www.ndsu.edu/me/](http://www.ndsu.edu/me/)
- **Application Deadline:**
  February 15 for fall semester; September 15 for spring semester. Applications received after the deadline will still be considered, but preference is given to those submitted by the deadline.
- **Credential Offered:**
  Ph.D., M.S.
- **Test Requirement:**
  GRE required for applicants who have not earned a degree in the U.S. or international applicants who have not earned a degree from an ABET-accredited university.
- **English Proficiency Requirements:**
  TOEFL iBT 71, IELTS 6; Duolingo 105

**Mechanical Engineering - M.Engr**

The Master of Engineering (M.Engr.) degree in Mechanical Engineering (ME) is a coursework-only master’s degree targeted towards working professionals; i.e., those with baccalaureate degrees in mechanical engineering or related disciplines who are working full-time in industry.

To earn the degree, students will be required to complete 30 credits of coursework at the 600 or 700 level, but will not be required to complete a research-based thesis or comprehensive project-based paper. Students pursuing this degree option will be able to enroll in the same courses currently offered by the ME Department for students enrolled in the M.S. options.

Students enrolled in the M.Engr. program will not be eligible to receive a Teaching or Research Assistantship (TA/RA) from the department, nor will they be eligible for a tuition waiver.

**Mechanical Engineering - M.S.**

The minimum credits required for the M.S. degree in Mechanical Engineering is 30. The M.S. degree can be earned with either of two options: the thesis option or the comprehensive study option.

With the thesis option, a student must complete 21-24 credits of graduate courses in mechanical engineering and a master’s thesis of 6 to 9 credits of ME 798 Master’s Thesis. At the conclusion of the graduate program, the student will be examined orally on the thesis and course work.

With the comprehensive study option, a student must complete 27 credits of graduate courses in mechanical engineering and a master’s paper of no more than 3 credits of ME 797 Master’s Paper. At the conclusion of the graduate program, the student must pass a comprehensive oral examination on the master’s paper and course work.

For more detailed information on the requirements for the M.S. degree, contact the department.

**Mechanical Engineering - Ph.D.**

The Ph.D. program requires the completion of 90 credit hours of graduate study beyond the baccalaureate degree (60 credits beyond the M.S. degree). In addition to the credit requirements for the M.S. degree, the Ph.D. degree requires a minimum of 24 course credits and a minimum of 24 credits of research-based dissertation. The remaining 12 credits may consist of any approved graduate level credits.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Didactic Courses</td>
<td>Courses numbered 601-689 or 700-989</td>
<td>24</td>
</tr>
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Dissertation Research

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<thead>
<tr>
<th>ME 899</th>
<th>Doctoral Dissertation</th>
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</thead>
<tbody>
<tr>
<td>Any approved graduate level credits</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>60</strong></td>
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After the majority of course work has been completed, each student is required to pass a series of written qualifying exams on core subjects. After passing the written exams, an oral preliminary exam will be administered focusing on the student’s proposal for the dissertation research. At the conclusion of the Ph.D. program, each student is required to pass a comprehensive oral final examination primarily focused on the dissertation. This exam may also cover material from course work, particularly courses fundamental to the dissertation. For more detailed information on the requirements for the Ph.D. degree, contact the department.

Graduate Seminar Series

In addition to the 30 credits of Master’s coursework and/or 90 credits of Ph.D. coursework, students are required to enroll in the department’s graduate seminar series, ME 790, for each semester of their graduate study but not to exceed three semesters, per degree. ME 790 is offered as a one (1) credit, required course and grades will be given only as pass/fail. The Master of Engineering degree is exempt from this requirement.