MECHANICAL ENGINEERING

The objectives of the department are that graduates from the mechanical engineering program must be able to apply the knowledge of mathematics, science and engineering; be able to design and conduct experiments, as well as to analyze and interpret data; be able to design a system, component or process to meet desired needs; be able to function on multi-disciplinary teams; be able to identify, formulate and solve engineering problems; understand professional and ethical responsibility; be able to communicate effectively; have the broad education necessary to understand the impact of engineering solutions in a global and societal context; recognize the need for, and be able to engage in, life-long learning; understand contemporary issues; and be able to use the techniques, skills and modern engineering tools necessary for engineering practice. The department ensures that each course in the curriculum plays a meaningful role in satisfying one or more of these objectives.

M.S. Degree

1. Complete the following admission requirement:
   a. Submit GRE scores.
2. Complete the general university requirements (page 236).
3. Complete the master's degree requirements (page 236).
4. Complete the following:
   ME F631—Advanced Mechanics of Materials......................................3
   ME F634—Advanced Materials Engineering.............................................3
   ME F641—Advanced Fluid Mechanics.....................................................3
   ME F642—Advanced Heat Transfer........................................................3
   ME F608—Advanced Dynamics.............................................................3
5. Complete the thesis or non-thesis requirements:
   **Thesis**
   a. Complete the following:
      ME F699—Thesis ................................................................................6
      Electives* .........................................................................................9
   **Non-Thesis**
   a. Complete the following:
      Electives* .......................................................................................12
      ME F698—Non-thesis Research/Project .............................................3
   b. Minimum credits required ................................................................30

* ME or other engineering, science, or mathematics courses approved by the student's advisory committee.

See Engineering for Ph.D. degree program.