
Mechanical Engineering Graduate Program

Master's Degree Requirements

REQUIREMENT:

- 1) **Thesis option:** Confirm the name of your thesis advisor by the end of the first semester. Only a regular member of the UVM Graduate Faculty can serve as primary thesis advisor.

Primary thesis advisor name: _____

(optional) Co-thesis advisor name: _____

- 2) Complete following **core** courses:

ME 5040 – Advanced Engineering Analysis I (3 CR)

ME 5160 – Continuum Mechanics (3 CR)

- 4) Complete **one numerical method course** (3 CR):
One of ME 5980 (Numerical Methods for Engineer), ME 5990 (AST: Computational Fluid Dynamics), ME 5520 (Computational Solid Mechanics), ME 6550 (Multiscale Modeling); or equivalent.
- 5) Complete **two courses in the same area of specialization in mechanical engineering** from the table below (6 CR), but different from course chosen in 4). Note that the courses may have prerequisites as specified in the catalogue which must be satisfied

Specialization Course

THESIS OPTION REQUIREMENTS:

- 1) Complete **6 - 9 hours of thesis credits (ME 6391)** prior to the Master's thesis defense, with the expectation that:

To obtain **6 credits**, the student's research must culminate in an original piece of work publishable as a conference proceedings paper or a peer-reviewed journal article.

To obtain **9 credits**, the student's research must culminate in an original piece of work publishable as a peer-reviewed journal article.

- 2) Pass **written report and oral defense of your Master's thesis**. The Thesis Defense Committee consists of three UVM faculty members, at least two of whom must be regular members of the UVM Graduate Faculty. Ordinarily, two committee members will be from the mechanical engineering graduate program, including the thesis advisor. The third member, who acts as chair of the committee, must be a member of the Graduate Faculty and from outside the Mechanical Engineering program. The Thesis Defense committee will decide on the pass/fail status of the candidate's thesis credits.

NON-THESIS OPTION REQUIREMENTS:

- 1) Non-thesis students must complete **three additional courses in mechanical engineering at the 5000 level or above (9 CR.) from the table of areas of specialization**.
- 2) Non-thesis students must present

