

Mechanical Engineering, PhD (MEMS)

Degree Requirements

The Mechanical Engineering doctoral degree requires a minimum of 72 credits beyond the bachelor's degree, with a minimum of 36 credits being graduate coursework (including the MEMS curriculum requirements as outlined in the MEMS Doctoral Handbook) and a minimum of 24 credits of doctoral thesis research. To be admitted to candidacy, students must have an overall GAP greater than 3.0 and pass the qualifying examination. All students are required to enroll in the department seminar every semester.

At most, three units of coursework may be taken as graduate independent study, and a maximum of six units of 4000-level courses are allowed (these must be from courses not required for the BS degree). Graduate courses may be transferred in (up to 24 credits) but must be evaluated and approved by the Director of Graduate Studies.

Students enroll in two to three courses each semester and participate in two laboratory rotations during the first year. They must complete their qualifying examination no later than June 30th of their first academic year. During their second and third years, students complete their remaining courses and must complete their thesis proposal by the end of their third year.

After a successful proposal defense, students provide their research updates through annual meetings with their thesis committee. Upon completion of their dissertation, students must present their dissertation research in a public forum and successfully defend the dissertation before their thesis committee. At least one published article is required at the time of defense.

For more detailed guidelines, please refer to the MEMS Doctoral Handbook available on the MEMS PhD program webpage.