

The 5 Year BS/MS Plan

The Mechanical and Industrial Engineering Department offers students the opportunity to earn both a Bachelors and Masters of Science Degree over a five-year period. The plan reduces the expected time for earning a degree by beginning graduate-level studies as early as year four. The student can take advantage of the flexibility offered by the new course-work MS option that requires 30 graduate level credits. No thesis is required.

The heart of the plan is a fifth year where students take “four and four”: four graduate classes each semester. The other six credits, either two classes or a six-credit independent study, can come from a variety of sources. These can be transferred from another institution, taken during the summer, or even taken prior to the student’s entry into the MS program.

Instead of the traditional plan, where students only begin graduate studies after completing all BS requirements, students can make full use of any space in their undergraduate schedules by enrolling in graduate classes. This plan is particularly well-suited to students who may have entered the BS program with Advanced Placement (AP) credits, and thus have room in their schedule for extra classes prior to finishing their BS degree. If a student has space in their schedule for any reason, they can start taking graduate classes. Classes offered over the summer, or on-line, can also count.

Structure of the 5 Year BS/MS Plan

The table below shows one possible progression through the program.

Senior year/summer	Student takes six graduate credits
Fall Semester	Twelve graduate credits
Spring Semester	Twelve graduate credits

Because these are the same BS and MS degrees that are awarded to students on the more traditional plan, the course requirements are the same. After their senior year, the student will receive a Bachelor’s Degree, assuming that they have fulfilled all the requirements thereof. At the conclusion of their 30 graduate-level credits, the student will receive their Masters of Science Degree. Note that classes that are used to fulfill the requirements of the Bachelor’s Degree cannot also be counted towards the requirements of the Master’s Degree.

Eligibility

This program welcomes applicants who are pursuing their undergraduate degree at any accredited institution. Successful applicants will have demonstrated a high level of competency in a related undergraduate program. For students wishing to study Mechanical Engineering, the applicant should have a strong background in physics and math. For students who wish to study Industrial Engineering/ Operations Research, knowledge of math is essential and knowledge of computer science or economics is helpful.

Requirements

Students following the 5 year BS/MS plan satisfy the requirements for MS students for the coursework [MS described here](#).

Applying

Students may apply on-line through our [normal admissions process](#). Students should choose the course-work MS for their intended area of study.

FAQs

Q: Is there some short-cut to the admissions process if I am a Five College Engineering undergrad?

A: Yes, we have a fast-track admissions process. Please see [here](#) for more information.

Q: Is this a good idea if I am thinking about continuing on to a Ph.D.?

A: Currently, our Department Head and Graduate Program director studied under similar plans. It apparently worked out well for them.

Q: What classes count towards my course-work MS?

A: Any classes that would normally count towards a graduate degree. These include 500 level and above classes that you take at UMass. You can transfer up to six credits from other institutions. The course requirements [are listed here](#).

Q: Do I have to wait until I am accepted into the MS program before enrolling in graduate classes?

A: No, you do not have to wait. However, there is no guarantee that you will be accepted into the MS program, just because you are taking graduate classes.

Q: Can I qualify for a teaching assistantship or research assistantship while pursuing my 5-year MS/BS.

A: Usually, only students who are doing thesis-oriented degrees can apply for funding.

Q: How much is this going to cost me?

A: It depends on when you take the graduate classes (during your fourth year of undergrad, during the summer between your "4 and 4" semesters etc.) It also depends if you are an in-state or out-of-state student. The costs for graduate school [are listed here](#).

Q: Can I just take "five and five"? (Meaning two semesters of five graduate classes each).

A: This is not recommended. Note that one of the requirements for your MS degree is that you maintain a 3.0 or above for your graduate classes.