

WAYNE STATE UNIVERSITY

COLLEGE OF ENGINEERING

Honors Program

The Engineering Honors Program was established to provide exceptional students in the College of Engineering with additional recognition of their academic achievements. Students completing the Honors Program will have this notation placed on their transcripts, documenting to prospective employers and graduate schools their dedication to academic excellence. Engineering Honors students also have access to Honors courses in the College and the University in which they can tackle challenging problems and work on interesting projects in conjunction with other Honors students.

Eligibility Requirements:

In order to enter the Engineering Honors Program, students must meet one of the following criteria:

- Enter the University with a 3.5 overall grade point average from high school and be admitted to one of the pre-professional or professional programs in Engineering¹; **OR**
- Have earned a minimum of a 3.5 grade point average after at least 24 credits of University coursework (at WSU or a transfer institution) and be admitted to one of the pre-professional or professional programs in Engineering¹

In order to remain in the Engineering Honors Program, students must maintain a cumulative grade point average of 3.5 or higher, with at least a 3.3 in the Honors-designated courses, throughout their course of undergraduate study.

Students interested in applying to the Engineering Honors program should complete and submit an Engineering Honors Application (available on the web) to the Office of Academic Affairs. For full benefits of Honors early registration, the form must be submitted before priority registration begins (Fall: February 15; Winter: October 15). Incoming students should submit the application as soon as possible to take full advantage of Honors status in their registration selection.

Engineering Honors Requirements:

Students must satisfactorily complete the following courses, which concurrently satisfy Engineering and University Honors requirements:

- BE 2550 – Basic Engineering IV: Computer and Numerical Applications in Engineering (Honors Section) (3 cr)
- Students must elect the Honors Section of BE 2550 to satisfy this College-wide requirement. The Honors Section will include more challenging problems and projects. This course counts towards the 11 required honors credits in Engineering.
- HON 42XX – Honors Seminar (3 – 4 cr)
Students should select an Honors Seminar that satisfies VP, HS, AI, or FC requirements. This will then meet the student's general education requirement in this area. (NOTE: Students should not select HON 42XX sections that satisfies SS or PL credit, as these must be satisfied through specific courses specified by their department. Students who wish to consider an HON 42XX section that satisfies LS credit should contact the Associate Dean for Academic Affairs for evaluation of the course.)

¹ Admissions requirements to the professional, pre-professional, and Bridge programs can be found in the Pre-Professional Handbook, 2005-2007 Undergraduate Bulletin, or Information for Prospective Students flyers.

- **BE 5998 – Engineering Honors Thesis (4 cr)**
Engineering students must conduct their thesis with a full-time faculty member in Engineering. This course may be substituted for a four-credit technical elective in the student’s home department, similar to a directed study course, based on Departmental policy. This course counts towards the 11 required honors credits in Engineering.
- **Departmental Honors Design Course**
Each department has adopted an honors course in Design, which satisfies both Honors and AGRADE requirements. Students pursuing Honors should select the Honors-designated section. Students must complete the course specified by their major department. These courses will count towards the 11 required honors credits in Engineering.
 - **Chemical Engineering**
 - CHE 6810 – Chemical Process Integration (WI) (4 cr)
 - **Civil Engineering**
 - CE 4995 – Senior Design Project (WI) (4 cr)
[5000-level version to be developed]
 - **Electrical Engineering**
 - ECE 5001 – Advanced Design in Electrical and Computer Engineering (4 cr) **OR**
 - ECE 5002 – Research Projects in Electrical and Computer Engineering (4 cr)
 - **Industrial Engineering**
 - IE 4800 **AND** 4880 – Engineering Design Project 1 and 2 (4 cr)
[5000-level versions to be developed]
 - **Mechanical Engineering**
 - ME 5330 – Advanced Thermofluid Design (4 cr) **OR**
 - ME 5500 – Advanced Engineering Design (WI) (4 cr)

The required courses listed above, which satisfy Engineering and University Honors Requirements, cover 14 to 15 credits of the overall requirement of 24. The remaining 9 to 10 credits can be taken in any Honors-designated or Honors-option courses offered by the University. In order to apply the classes to both the Honors requirements and the Engineering program requirements, the following courses are recommended:

- | | |
|--|---|
| ○ BIO 1510 | ○ MAT 2010 |
| ○ CHM 1410 (in place of CHM 1225/1230) | ○ MAT 2020 |
| ○ CHM 1420 (for Chemical Engineering students) | ○ The second, available departmental-designated Honors Design course (if available) |
| ○ ECO 2010 or ECO 2020 | ○ Honors sections of Engineering courses, as designated in the schedule of classes |
| ○ ENG 1050 (in place of ENG 1020) | |

Honors and the AGRADE Program:

Honors students are expected to be eligible for the College AGRADE programs, which allow them to count up to 16 credits of their undergraduate, 5000-level coursework towards an MS degree – thereby reducing both the time required to earn the MS and the tuition cost associated with the degree. Students may pursue their MS in any of the engineering fields to which they are eligible to apply (for instance, all students may pursue their MS in Biomedical Engineering or Manufacturing Engineering). Selection of the courses taken as part of the AGRADE program will be influenced by the selected graduate field of study. Students should meet with an academic advisor at the beginning of their junior year to begin to develop an AGRADE plan of work in order to take greatest advantage of this program.

Probationary Status:

Students who fail to maintain the required cumulative grade point average will be placed on Probationary Status in the Honors Program. During this time, they will not be eligible to register for Honors classes. They may reapply to the Honors Program any time after raising their grade point average above the minimum level.

For More Information: Contact the Office of Academic Affairs at 313-577-3040 or academicaffairs@eng.wayne.edu.