

# ACADEMIC REGULATIONS FOR THE COLLEGE OF ENGINEERING

---

For complete information regarding the academic rules and regulations of the University, students should consult the Academic Regulations (<http://bulletins.wayne.edu/graduate/general-information/academic-regulations/>) section of this bulletin. The following additions and amendments pertain to the College of Engineering.

## Matriculation

After receiving credentials from the Office of Admissions, and before registration, a student should contact the graduate advisor in his/her major department (see the following list) for details of program planning and to discuss requirements and course work.

## Academic Scholarship

A graduate degree is evidence of scholarly achievement, academic excellence, critical and creative abilities, the capacity to apply and interpret what has been learned, and proper use of the work of others. Continuance in graduate status is contingent on satisfactory scholarship with grades of 'B' or better. Every effort is made to assist the student whose work suffers as a result of conditions beyond his/ her control.

Graduate students are required to earn a g.p.a. of 3.0 ('B' average) or better in all graduate-level subjects taken at WSU in order to satisfy degree requirements. Students whose cumulative g.p.a. falls below 3.0 are placed on probation, and the performance of these students is closely monitored by the departmental graduate committee. Students who fail to remediate this probationary status within eight credits after being placed on probation are subject to termination from the graduate program.

Any grade lower than 'B-minus' in a core course MUST be repeated. (The Industrial and Systems Engineering Department requires students to repeat core courses in which they have received a grade of 'B-minus' or lower. The Biomedical Engineering Department will not count any course with a grade lower than a 'B-minus' towards degree requirements.) No more than two courses may be repeated in a graduate program (the Electrical and Computer Engineering and the Mechanical Engineering Departments permit the repetition of only one course), and a student must have the appropriate approvals BEFORE the repeat registration takes place. These two repeats may consist of a second attempt of two separate courses or two repeat attempts of a single course. Per University policy, any course in which a mark appears on the student's transcript (including WN, WP, or WF) counts as an attempt to earn credit in that course. These attempts are therefore factored into the assessment of allowed repeats unless an exception is granted during the semester of the withdrawal (see below). 'F' grades earned while in the College of Engineering may be the basis for immediate termination. Consult each department for additional requirements.

All course work must be completed in accordance with the academic procedures of the College of Engineering and the Graduate School (<http://bulletins.wayne.edu/graduate/general-information/academic-regulations/>) governing graduate scholarship and degrees. University rules require an overall g.p.a. of 3.0 or higher for graduation, in all graduate work completed at Wayne State.

## Plan of Work

Students who have been admitted into a graduate program in the College of Engineering are required to meet with their graduate program advisor

before registering for their first term, and then to enroll in those courses mutually decided upon. During the first semester of their graduate program, in consultation with their graduate advisor, all graduate students must develop a Plan of Work that determines their anticipated schedule for each term.

Students who fail to meet with their graduate advisor before registration or who do not have an approved Plan of Work may be administratively withdrawn from their classes if, in the opinion of the graduate program advisor, they are not taking classes appropriate to their program.

If a student has been admitted to one graduate program and decides not to pursue that program, the student MUST obtain admission to another graduate program, or he/she must withdraw from the University. To obtain admission into another program, the student must meet all the admission requirements for that program and must provide the required admission documents. Approval of the transfer of program by the original admitting program is required. International students on a student visa must also amend their I-20 form at the University Office of International Students and Scholars to reflect the change in program.

## Directed Study

Independent study may be authorized and applied to completion of degree requirements provided the area of interest is an integral part of the student's graduate program and is not covered by scheduled courses. Students who elect a directed study are required to submit a Directed Study Authorization Form, which includes a description of the proposed directed study, with the necessary signatures, prior to registration.

## Withdrawal from Courses

Engineering students are expected to assess early in the semester if they have appropriate time and background to successfully complete a course. Therefore, following University policy, all courses for which a grade or mark (including WN, WP, and WF) appears on the transcript will count as an attempt at a course. Students may drop a course within the first two weeks of the semester without a notation appearing on the transcript. Starting with the fifth week of the semester, a withdrawal will be noted on a student's transcript. If a student feels that extenuating circumstances beyond his or her control justify the withdrawal and support its not being counted as an attempt at the course, a petition must be submitted for consideration to the Associate Dean for Academic Affairs during the semester in which the course is taken. If the petition is approved, the withdrawal mark will remain on the transcript but a notation will be made in the student's advising record to not count it as an attempt for assessment of allowed repeats.

## Cross-Registration Opportunities

Students are encouraged to consider incorporating into their course of study up to two courses elected in any of three exchange arrangements: the Michigan Intercollegiate Graduate Studies Program (MIGS) (<http://bulletins.wayne.edu/graduate/general-information/admission/>), the University of Windsor – WSU, Exchange Program Agreement (<http://bulletins.wayne.edu/graduate/general-information/admission/>), and Dual Enrollment with the University of Michigan (<http://bulletins.wayne.edu/graduate/general-information/admission/>). The latter enrollment may be utilized at both the Ann Arbor and Dearborn campuses. Consult the graduate advisor and the Dean's Office for information and application forms applicable to these programs.

The Master of Science is offered in alternative energy technology, biomedical, chemical, civil, computer, and electrical engineering; engineering management, engineering technology; industrial, manufacturing, and mechanical engineering; and materials science and engineering.

## Admission Requirements

Admission to these programs is contingent upon admission to the Graduate School (<http://bulletins.wayne.edu/graduate/general-information/admission/>). Applicants to the engineering master's degree programs must also satisfy the following criteria.

In addition to the minimum requirement for admission of an overall grade point average of 2.8 from an institution accredited by the Accreditation Board for Engineering and Technology (ABET), a minimum grade point average of 2.8 in all junior and senior year (upper division) courses is required. Applicants from abroad will be judged on the basis of their academic record and on the credentials of the school from which they graduated. Individual departments and interdisciplinary programs may require a higher minimum upper division or cumulative g.p.a.; please refer to the departmental sections of the Graduate Bulletin. Regular admission may also be granted to applicants with undergraduate degrees from regionally (non-ABET) accredited institutions in engineering, physics, chemistry, mathematics and computer science who meet the equivalent of the above minimum standards. Additional course work will generally be required of such applicants.

## Degree Requirements

The College of Engineering's minimum requirement for the master's degree is thirty credits. Some programs require more than this minimum. Master of Science degrees are offered under the following degree plans approved by the College:

**Plan A:** A minimum of twenty-four to twenty-six credits in course work, a minimum of six credits of thesis, and a seminar or an oral presentation on the thesis research.

**Plan B:** A minimum of thirty to forty-two credits, including a four to six credit project. (Engineering Management and Engineering Technology ONLY.)

**Plan C:** A minimum of thirty to forty credits in course work. A thesis is not required.

## Major Credits

Credits earned in the student's major field are designated as major credits. Of the minimum of thirty credits required for the master's degree, at least one-half of the course work, exclusive of thesis credit, must be in the major field. At least six credits in the major must be in upper level graduate courses, as designated by the graduate program.

## Thesis Degree Plan

Students who elect the thesis degree plan (Plan A) are required to file a Thesis Outline Approval Form for approval by the advisor and the program's Graduate Officer before writing the thesis. Final recommendation of approval for the thesis requires an oral defense of the thesis material in the presence of a departmental faculty committee of at least three persons, including the advisor and one faculty member from outside the department.

## Transfer Credits

Every Wayne State student pursuing the M.S. degree must complete at least twenty-four credits in residence. As a privilege, a student may file a Petition for Transfer of Graduate Credit, provided that the credits were earned in residence at another accredited graduate school, are certified as graduate credit with grades of 'B' or better on an official transcript, and are certified by the advisor to be acceptable in the student's degree program. Courses transferred may NOT have been used as applicable credit toward any other degree. In order to transfer

grades from another institution, that institution has to be listed on the student's WSU Admissions Application, or specifically mentioned in correspondence to the College prior to matriculation. Special documentation is necessary to transfer credits earned outside of North America. A student whose Petition to transfer credits is denied may still receive credit by examination.

All transcripts supporting the transfer of credits must be for credits earned prior to the student's first semester at WSU. While enrolled in a degree program in the College of Engineering, graduate-level courses taken at another institution may not be applicable to the College of Engineering degree without approval prior to registration for any such courses. A Transfer of Credit request should not be submitted before the completion of eight credits in residence at Wayne State. All credits transferred must conform to the six-year time limitation for completion of requirements.

Since twenty-four credits of any M.S. program must be earned at WSU, the number of transfer credits from a related, uncompleted graduate program at another institution are limited to eight credits for a thirty credit M.S. program and twelve credits for a thirty-six credit M.S. program. Exceptions to this limit are made only for identified collaborative programs with partner universities.

The Doctor of Philosophy (Ph.D.) degree is offered by the College of Engineering in the following major areas: biomedical engineering, chemical engineering, civil engineering, computer engineering, computer science, electrical engineering, industrial engineering, materials science and engineering, and mechanical engineering.

## Admission Requirements

Admission to the doctoral programs of the College is contingent upon admission to the Graduate School (<http://bulletins.wayne.edu/graduate/general-information/admission/>). For admission into an engineering doctoral program, the student's overall grade point average must be 3.2 or better, with a 3.5 in the last two years as an undergraduate student if being admitted directly from a bachelor's program. Students who do not satisfy these minimum standards will not be considered for admission to the program until they have completed a master's degree and have earned a grade point average in courses taken for graduate credit that is not less than 3.5. Individual departments may have higher admission requirements.

Generally, students applying for admission to the doctoral program should have first achieved an M.S. degree. Students completing their M.S. degree programs who wish to enter the doctoral program must have a minimum grade point average of 3.5 at the graduate level.

## Degree Requirements

A minimum of ninety credits beyond the bachelor's degree is required for the doctoral program, including thirty credits for the dissertation. The thirty credit dissertation registration requirement is fulfilled by registering for the courses 9991, 9992, 9993, and 9994 (Doctoral Dissertation Research and Direction I, II, III, and IV, respectively) offered under various subject area codes, in consecutive academic year semesters. For specific course requirements, students should consult the departmental sections of this bulletin, which follow.

There are no general foreign language requirements for the doctoral degree. Specific requirements can be made by the Ph.D. advisory committee and are designed to suit individual Ph.D. applicants.

If the student fails to meet the doctoral requirements, he/she may transfer appropriate credits toward the Master of Science degree program in the discipline in which credits were accrued.