Master of Engineering Management

Student Policies

Updated May 2024

MEM Student Policies

The Northwestern University Master of Engineering Management (MEM) Program is a Master's degree within the McCormick School of Engineering and Applied Science. This document has been created to assist MEM students in understanding degree requirements, policies and procedures, and academic information to ensure the successful completion of the Northwestern MEM degree.

Degree Requirements:

- I. Students must have a 3.0 cumulative grade point average (CGPA), with no incomplete grades, to graduate
- II. Students must complete a minimum of 12 courses, consisting of the core courses (7), advanced engineering methods (2), and chosen electives (3)
 - Only two of the chosen electives can be taken outside the McCormick School of Engineering. These
 electives must be pre-approved by the MEM Program.

III. Degree Completion:

- Part-time Students: the degree must be completed in a maximum of 6-years from the first quarter of matriculation.
- Full-time/International Students: the degree must be completed in a minimum of three quarters (9-months) or a maximum of five quarters (15-months) from the first quarter of matriculation.
- Students that do not meet the completion deadline will be academically excluded from the program.

IV. Optional Concentration

- Students may attain an optional concentration by choosing appropriate courses as indicated in a list
 provided by the program. This list is subject to change as courses are retired or added.
- Courses taken to meet concentration requirements can be applied to a single concentration. Students CANNOT earn more than one (1) concentration.
- V. At most three electives can be transferred and counted towards a Northwestern MEM degree. The electives cannot be counted towards the completion of another Master's degree, and only the credits, not the GPA, will transfer. If a student is seeking to transfer any electives, it must be confirmed prior to the first quarter of matriculation.
- VI. The only exceptions made to the posted curriculum requirements will be under extreme cases, such as the need to relocate due to a new job or promotion. Furthermore, in such cases, a course waiver or exception must be granted by the program's director to approve a replacement course credit. It is up to the student to investigate replacement course credit options. A course syllabus, a summary of why the course meets MEM requirements, and details as to why the course content cannot be learned within the MEM curriculum must be included in the request. Students must be in good academic standing for a course waiver or exception to be approved.

Note: Northwestern University uses the course "unit" system (as opposed to the course "hour" system) for keeping track of completed courses. Students may consider one unit of credit equivalent to four quarter hours or two and two-thirds semester hours of credit.

Official Communication:

Upon matriculation, Northwestern University, as well as the MEM Program, will send all official university communication to students via their Northwestern University student email address. Students are responsible for checking their Northwestern student email account on a regular basis and responding to requests in a timely manner.

Academic Policies:

I. **Fall Quarter Start**

All full-time MEM students are required to start their studies in the fall quarter. This requirement allows new MEM students to participate appropriately in MEM student orientation activities and summer MEM classes.

П. **Grades**

The instructor establishes the grading criteria for each course under the following grading scale:

- Α Excellent performance. Advanced mastery of the material. Superior performance in all aspects of the course. This is expected from our outstanding students.
- A-Good performance. Good understanding of the material, but had some difficulties with the most advanced concepts in the course and with solving more challenging problems that required creativity. This is expected from our good students.
- B+ Average performance. Had some trouble with technical/mathematical parts of the course, but still got most concepts right.
- В Below average performance. Had significant trouble with technical/mathematical parts of the course and missed some of the more complex concepts. Weaknesses in student's ability in modeling problems and following rigorous mathematical proofs.
- B-Weak performance. Barely passed the course. Learned simple and basics concepts, but had difficulties with more complex concepts and with almost all technical/mathematical parts of the course. This is an alarming signal. This is below what we expect from our students.
- C+ or below Poor and below-standard performance
- F Failed the course. Needs to retake the course again.

A grade of "F" is not a passing grade and carries no credit, but does impact the cumulative GPA. Only courses that are passed count toward graduation. A grade of "F" in a core course (non-elective) will require the student to register to complete the course again. Furthermore, both grades will count in the cumulative GPA. All Northwestern University McCormick graduate students must have a 3.0 cumulative GPA to graduate.

Grades impact the GPA based on the following scale:



| A = 4.0 | B = 3.0 | C = 2.0 | F | = 0 | .0 |
|----------|----------|----------|---|-----|----|
| A- = 3.7 | B- = 2.7 | C- = 1.7 | | | |
| B+ = 3.3 | C+ = 2.3 | D = 1.0 | | | |

Each quarter the university Registrar posts grades online through CAESAR about a week after the last day of class. Students will need to have their Northwestern University Net ID and password in order to access grades online. This is considered a student's official university grade report – nothing will be mailed to a student from the Registrar's office.

III. **Incomplete Grades/Courses**

Students who receive an "Incomplete" grade of "X" or "Y" in any course will have 12 weeks from the end of the quarter in which the "Incomplete" was received to convert that grade to an acceptable letter grade. After 12 weeks the "X" or "Y" grade becomes a permanent grade on the student's transcript. It is important to note "Incomplete" grades can also affect a student's standing with financial aid due to the fact that "X" or "Y" grades convert to an "F" in GPA calculations. Students must work directly with the faculty member teaching the course in question to formalize a work plan and timeline to submit all outstanding work within those 12 weeks.

- "X" = Failed to earn credit, missed final examination (0 Grade Point)
- "Y" = Failed to earn credit, work incomplete (0 Grade Point)

IV. **Pass/No Pass Grading**

Students may not receive Pass/No Pass (P/NP) grading for MEM courses. However, for any students that transfer in outside electives, we allow one P/NP course to count towards their MEM degree. Receiving a P/NP grade has no impact on a student's GPA.

٧. **Academic Standing and Probation**

Students must maintain a 3.0 cumulative grade point average (GPA) to remain in good academic standing in the program. A student whose cumulative GPA falls below a 3.0 or who has more than one incomplete grade will be placed on academic probation. If a student is on academic probation for more than two consecutive quarters, it is grounds for academic exclusion from the program. A student who fails to resume good academic standing after being placed on probation, who fails to make satisfactory progress toward the degree, or who otherwise fails to meet the requirements needed to graduate will be academically excluded from the program.

Review Appendix 1 McCormick's Statement on Academic Integrity and the McCormick Academic Integrity website for more information should a case of academic probation arise.

VI. **Academic Exclusion**

If a student's cumulative GPA does not rise to a level to be removed from academic probation, the student may be academically excluded from the program as soon as within two consecutive quarters (excluding quarters during which no classes are taken such as the summer quarter) of being placed on academic probation. At the option of the program, a student may be excluded from the program if he/she fails a course. A student may also be excluded from the program if he/she is found guilty of cheating, plagiarism, or other academic integrity issues.

Review Appendix 1 McCormick's Statement on Academic Integrity and the McCormick Academic Integrity website for more information should a case of academic exclusion arise.

VII. Readmission

It is the MEM Program policy that a student who has been dismissed from the program for poor or incomplete grades is not permitted to reapply or be readmitted. Other Master's or Graduate programs in the McCormick School of Engineering may have different policies or processes for readmission. The MEM Program does not have a specific process as readmission is not permitted.

VIII. **Course Registration**

The MEM Program staff will register each student for classes, generally about one-month before any given quarter begins. MEM students are given priority enrollment for all MEM courses; however, certain MEM elective courses may be made available to other McCormick Master's students. This availability includes those involved in the Minor in Engineering Management.

Kellogg Courses:



All students at Northwestern University who are actively enrolled in a graduate program are eligible to enroll in one credit unit per quarter at Kellogg School of Management. The following conditions must be met:

- The student must be active in another graduate program at Northwestern.
- The enrollment request must be in a course that is listed on the Kellogg "open class list" and has seats available at time of processing. (The "open class list" is emailed to the MEM department usually one-week prior to the start of the quarter.)
- The request must be approved and signed by the MEM Program.
- The registration request must be submitted directly by the student to the Kellogg registration survey.
- Kellogg class schedules are subject to change, including but not limited to cancellations.
- All of the classes open to non-Kellogg students have a limited number of seats available. The registration requests will be processed by Kellogg on a first-come, first serve basis.
- Kellogg does not offer any summer courses to non-Kellogg students, including the MEM Program.

Other McCormick Courses:

Students that want to register for Master level courses outside the MEM Program and within the McCormick School of Engineering should work with the associate director to determine enrollment options. Depending on availability and prerequisites, students are permitted to enroll in select courses within the MSIT, MPM, MLDS, MSLOC, IMC, as well as other approved department courses.

IX. Course Overload

The maximum number of course units allowed for a student in a quarter is 4 units. MEM students may not enroll in more than 4 units each quarter.

X. Course Auditing

Course auditors are not given formal recognition or academic credits by either the MEM Program or the Registrar. An MEM student in good academic standing is permitted to audit an MEM course depending on the limitations of space and facilities, permission of the instructor, and approval by the MEM Program. No formal registration will occur.

Students should contact the course instructor to request an MEM course audit. Approved students are required to attend all classes, and the instructor can dismiss an auditing student at any time of the quarter. Students cannot request retroactive credit nor take the audited course again in the future for credit.

Note: Students outside the MEM Program are not allowed to audit MEM courses. If an MEM student seeks to audit a course outside the MEM Program, the student must abide by that program/department's audit policy.

XI. Course Waivers / Exceptions



Due to unforeseen circumstances, a student may request a course waiver or exception to meet the core, advanced engineering method, or elective degree requirements. All requests must be submitted in writing and be approved by the MEM Director. A course syllabus, a summary of why the course meets MEM requirements, and details as to why the course content cannot be learned within the MEM curriculum must be included in the request. Students must be in good academic standing for a course waiver or exception to be approved.

XII. Optional Independent Study

Students may earn up to one course unit worth of independent study, called an MEM499, in place of an MEM offered course. The independent study will be considered as any one of the three electives for degree requirements. The topic of the independent study must be chosen so that the student maintains a balance between technical and business courses.

Independent study projects require significant independent initiative on the part of the student and must be of graduate level quality, representing a substantial effort at research, analysis, and organization, and must adhere to traditional academic formats and language usage. The program director must approve both the project and the faculty teaching the independent study in advance. A student must submit a project proposal form and outlined plan at least one month before the start of the quarter in which you will conduct the independent study. Once a plan has been approved by the program director, completion of the work is the responsibility of the student. A final report must be prepared and submitted by the end of the quarter in which the project is conducted.

XIII. Attendance Policy

The program recognizes that students must balance work, school, and family commitments, and that occasional absences from class are inevitable. In order for all students to benefit from the program, however, class attendance is required. If you miss more than two classes in a 10-week course or one class in a 5-week course, your grade may be affected. Professors also reserve the right to establish a more stringent attendance policy for their specific course and set specific grade implications for absences. If you know you are going to miss more than two courses in a given quarter, the MEM Program requests that students do not register for classes during that quarter. If a student must miss a class, please notify the instructor by email as far in advance as possible to communicate make-up requirements. Students should make arrangements with the instructor directly to complete any missed assignments. In addition, it is expected that students will be on time for each class. Arriving late is disruptive to fellow students and to the professors.

XIV. Travel for Course Work

Students who elect to take an independent study or any other course which requires their presence at an offcampus site are responsible for their own transportation and are not eligible for reimbursement of travel costs to the site. Students should keep this policy in mind when deciding whether to pursue such a course.

For policies on Northwestern University travel, please visit the Financial Operations website.

XV. Medical Leave of Absence



Students are permitted to request a leave of absence due to medical conditions. Re-entrance into the program and timelines to finish the degree requirements after a medical leave will be reviewed by the director and associate director on a case by case basis.

For additional guidelines and resources on Northwestern University medical leave, please visit the Dean of Students Office website.

XVI. Additional Leave of Absence

Full-time Students:

In extenuating circumstances, a leave of absence request may be approved by the program. Such requests must be made in writing and are subject to the approval of the program director and associate director. Students must be in good academic standing to be considered for a leave of absence.

A student who takes a leave of absence from the program must re-enter within the following academic year to ensure his/her ability to meet all degree requirements. A student who takes a leave of absence from the program must be in touch with the program to make re-entrance plans one full quarter before the MEM quarter in which they wish to re-enter. International students must abide by all visa requirements when considering a leave of absence.

Part-time Students:

Part-time students do not need to make a formal request if they are taking 1-3 quarters away from school. If a part-time student is away from school for over one-year, a meeting with the program director will be required to confirm a student's commitment to complete the degree. Part-time students that are away from school for over a year may be required to reapply to join the program.

XVII. **Managing Conflicts**

The McCormick School of Engineering recognizes that conflicts among professional graduate students and between students and faculty sometimes arise during the course of graduate study. Outlined below are steps professional graduate students can take to address such conflicts, and an order of escalation for resolution.

- 1. The first step is to try to address the issue with the person or people directly involved, such as the instructor or other student. If additional escalation is necessary;
- 2. Contact your Academic Advisor or Associate Director of your program. If additional escalation is necessary;
- 3. Contact your Program Director. If additional escalation is necessary;
- 4. Contact the Assistant Dean, Office of Professional Education.

Students and graduate faculty are expected to conform to all Northwestern University policies and graduate program and/or departmental policies that are published in each graduate program handbook. Students and advisers are encouraged to use the principles outlined in the Guidance for Positive Graduate Student and



<u>Faculty Adviser Relationships</u> authored by the Graduate School to prevent conflicts that may arise from miscommunication or differences regarding expectations.

XVIII. Cell Phone and Laptop Use

Turn off your cell phone or place it on vibrate during class and in the common space so as not to disturb your classmates and instructors.

Laptops are allowed in class for the purpose of note-taking, following along with PowerPoint slides, or for required class activities such as using software, internet searches for class materials, or as described by the instructor. Students should not use their laptop for outside activities during class if unrelated to the current instruction. The intention of this policy is to prevent internet surfing and visual distractions to surrounding students during class.

Academic Integrity and Professionalism:

I. Integrity, Honor, and Dignity

Integrity, honor, and dignity are fundamental characteristics of the engineering profession. Engineers strive to exhibit these characteristics while using their knowledge, skills and experience to improve the world around them. By being honest, straightforward, and impartial in serving the public, their employers and clients, engineers continuously increase the excellence and prestige of the engineering profession. These principles cannot be described by an equation or an integral, but they are rooted in the curricula of the best engineering schools. Adherence to these fundamental principles, essential not only in engineering but also in our entire society, is the responsibility of the students.

Students and faculty are guided in matters of academic integrity at the University, The Graduate School, and the McCormick School of Engineering & Applied Science levels, so it is the responsibility of every member of the engineering academic community to be familiar with the specific policies of our school. McCormick's procedures, described here, operate within the broader Northwestern policy framework detailed in the document *Academic Integrity, A Basic Guide*, available on the <u>Provost's website</u>.

Standards of academic honesty are violated whenever a student engages in any action that jeopardizes the integrity of scholarly work. Such actions include:

- Cheating in the classroom or on examinations
- The intentional and deliberate misuse of data in order to draw conclusions that may not be warranted by the evidence
- Fabrication of data
- Omission or concealment of conflicting data for the purpose of misleading others
- Use of another's words, ideas, or creative productions without citation
- Paraphrasing or summarizing another's material in such a way as to misrepresent the author's intentions
- Use of privileged material or unpublished work without permission

Academic dishonesty is a serious matter, and it will be adjudicated in accordance with procedures approved by the <u>McCormick School of Engineering and Applied Science</u> and, if applicable, <u>The Graduate School</u>. There are many aspects to this topic that you need to be familiar with and there is a very rigorous procedure for dealing with cases of violation of academic integrity that are investigated by the dean's office. The MEM program director is involved in the process but has very little input on the outcome or consequences.



Review Appendix 1 *McCormick's Statement on Academic Integrity* and the <u>McCormick Academic Integrity</u> <u>website</u> for more information should an issue of academic integrity arise.

II. Student Responsibilities

As a community, Northwestern has defined certain <u>Community Standards</u> that set expectations for students. In particular, it is the responsibility of every student in the McCormick School of Engineering & Applied Science to be familiar with and to adhere to the policies of academic integrity for <u>Northwestern University</u>,

The Graduate School, and the McCormick School of Engineering & Applied Science.

We want you to be proud of your degree, your program (MEM) and your school (McCormick). We take seriously any misrepresentation of your degree as coming from any other school in the university including Kellogg. This will include the representation in your resume and any online service such as LinkedIn. Taking a class in another program does not change the origin of your degree. Misrepresentation can have many consequences, in particular with future employers, that could have dire consequences for those who misrepresent their credentials.

Northwestern believes strongly in the equitable treatment of others. There are substantial policies and procedures in place that have evolved over the years to be both fair and balanced for the victim and the accused. The Office of Civil Rights and Title IX Compliance offers resources and a full description of these policies. It is to your benefit to be familiar with these policies and to abide by them at all times.

III. Professionalism at Northwestern and with Employers

Professional ethics and ethical treatment of others are essential for the long-term health of your career and your reputation. The National Society of Professional Engineers has developed a <u>Code of Ethics for engineers</u> which we believe forms merely a foundation of normative ethical behaviors that we would expect of all engineers whether in the engineering school or as practicing engineers in industry.

Professionalism is essential for the equitable treatment of others in the workplace and for maintaining a high standard and reputation in the community. Your behavior in the classroom, on campus and in the community at large including the business community is a reflection on both you as an individual and upon the community of MEM students and alumni that you are joining. Your actions reflect on the entire MEM community. Some basic professionalism practices:

- Showing up on time and well prepared for scheduled appointments on campus, focusing on the person in front of you rather than being distracted with your phone or other devices.
- If you cannot attend a scheduled session either cancel it or reschedule. Give people proper notice for your requests.
- Don't expect the university to change deadlines or make exceptions for your situation.
- Signing up for the courses you intend to complete and not signing up for an overload only to drop the classes you don't like.
- Glassdoor: A Guide to Professionalism in the Workplace: https://www.glassdoor.com/blog/guide/a-guide-to-professionalism-in-the-workplace/

It is essential that you are transparent with employers and not misrepresenting your skills, capabilities, or training. It is important that you honor the commitments you have made. Reneging on a job that has been accepted is a very serious matter and should be undertaken <u>only under extreme conditions</u>. Reneging with employers is highly discouraged.

IV. MEM Honor Code



In addition to the University policies and procedures outlined above, the MEM program has an Honor Code that students are required to abide by:

- 1. The students and faculty of the MEM program regard honesty and integrity as essential qualities for the practice and profession of engineering management.
- 2. The purpose of this Honor Code is to promote these qualities so that each student can fully develop his or her individual potential.
- 3. This code is not a list of rules and sanctions but is instead directed toward expressing the moral and ethical standards of the program and governs student conduct pertaining to all academic, placement, and extracurricular activities associated with the programs.
- 4. This Honor Code is administered jointly by students and faculty, and it demands strong adherence to the ideals of honesty, integrity, and equal opportunity.
- 5. It requires that each student manifest these qualities at all times and hold his or her peers to the same standard.
- 6. Each student agrees to:
 - Not seek an unfair advantage over other students, including, but not limited to, giving or receiving unauthorized aid during the completion of academic requirements.
 - Truthfully represents facts and self at all times.
 - Respect the property and personal rights of others.
 - Report all observed violations and cooperate fully with the ensuing proceedings.
- 7. Upon admission, each student makes an agreement with his or her fellow students to abide by this Honor Code and students who violate the code violate this agreement and must accept the sanction imposed by the Program Director after consultation with all parties involved.
- 8. In addition, all students must adhere to all policies and requirements of Northwestern University and abide by all applicable laws and regulations.

Tuition and Billing:

Each student is responsible for paying each quarter's tuition in full by the due date, even if an employer does not reimburse a student until after the term ends. Also, if a student has a student loan, a student must pay the difference between the loan amount and tuition amount. Late fees are automatically added to any outstanding balance, and the University places a hold on a student's registration for the subsequent quarter. Thus, a student will not be able to attend classes in the new quarter until overdue tuition and fines are paid.

MEM tuition rates are set for an entire academic year (fall-summer quarters), and may change year to year. Each spring the Northwestern University Board of Trustees reviews and confirms MEM tuition rates for the next academic year. MEM students will pay the MEM tuition rate for all registered courses, including all electives taken outside of the MEM program.

FERPA (Family Educational Rights and Privacy Act of 1974):

Unless a student specifies otherwise, some contact information will appear in the Northwestern University online directory. Students can control this in two ways:

- If a student does not want their name to appear at all, the student needs to complete a Request to Invoke or Revoke FERPA Block of Directory Information form.
- A student can be listed in the online directory but specify what information to appear. To do this, go to http://directory.northwestern.edu/," then click "update your Directory Information."
- Note that the University does not sell any student information or lists to outside vendors or telemarketers.



Full-time Student Internships:

The full-time student course of study provides the opportunity for an optional internship during the summer quarter. Most students seek industry related internship positions, but some students choose to focus on project based work or even personal start-up initiatives. There are no common paths or industries for our full-time students due to their breadth of experience and diverse backgrounds. Students are responsible for securing their own summer internships.

I. Final Fall Quarter Internship Option for MEM International Students Graduating in 15-Months

The MEM program structure allows students graduating in 15-months the opportunity to obtain an internship during their final quarter (5th quarter) while also continuing their enrollment in courses. Each student is responsible for their own course schedule as well as balancing their academic and internship workload to meet degree requirements.

Part-time Internship Requests (20 hours/week):

- All full-time MEM students on F1 visa are allowed to participate in Curricular Practical Training
 activities only after successfully completing at least 3 MEM courses and at least one quarter of study
 in the MEM program. No MEM student on academic probation will receive approval for Curricular
 Practical Training.
- An MEM international student that is in good academic standing will be allowed to apply for part-time Curricular Practical Training or Academic Training during their final fall quarter (5th quarter) without any specific MEM program approval.
- Any student seeking part-time Curricular Practical Training or Academic Training must register for the proper CRDV course and obtain work authorization approval through the Engineering Career Development office and Office of International Student and Scholar Services.

Full-time Internship Requests (More than 20 hours/week):

- An MEM international student that is in good academic standing and enrolled in either 1 or 2 courses during their final fall quarter (5th quarter) will be allowed to apply for full-time Curricular Practical Training or Academic Training without any specific MEM program approval.
- An MEM international student that is enrolled in 3 or more courses during their final fall quarter (5th quarter) will be allowed to apply for full-time Curricular Practical Training or Academic Training with the following criteria being met:
 - A minimum CGPA of 3.60
 - Obtaining written program approval from the MEM Associate Director. The program approval must be shared with the Engineering Career Development office.
- Any student seeking full-time Curricular Practical Training or Academic Training must register for the proper CRDV course and obtain work authorization approval through the Engineering Career Development office and Office of International Student and Scholar Services.

Waivers:

The MEM Program may request students to sign specific waivers during their academic career that include a multimedia release (e.g. the use of a student's photo in marketing material) as well as a liability waiver and release (e.g. waiving claims for injuries sustained during voluntary student activities.)

VA Pending Payment Policy:



For Northwestern students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, the University will not prevent enrollment, assess a late fee, deny access to resources available to other students, or require they secure additional funding while payment from the United States Department of Veterans Affairs is pending to the University.

To qualify for this provision, students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies

Additional University Policies Resources:

Northwestern strives to create an environment that fosters innovation, excellence, and collaboration, seeking always to do so responsibly, ethically, and with integrity. To this end, we must have in place thoughtful, strategic guidelines and policies that promote the success of our students, faculty, and staff in their daily work. Our University policies thus are meant to guide and enable our community members to uphold Northwestern's values and expectations. We encourage all community members to use the Northwestern University Policies website as the main source for University-wide policies, as it will feature the most current information and updates on all policy-related items.

The Master of Engineering Management Program will do its best to update this document as new policies and procedures are approved by the program, school, and/or university.