ADVISING PROCEDURE & FAQ

KEY WORDS TO SEARCH ON

Advising Procedure, BS/MS, Concentration, Coop, Counseling (for CAPS), Courses, Curriculum, Degree Audit, Dual Degree, Flowchart, Graduation, Honors, Internship, MAS, Petition, Study Abroad, Study Plan, Theme, Transfer Credits, Unrestricted Electives, Undergraduate Research, Updated (for MAS)

ADVISING PROCEDURE — This is a faculty-driven process. The advisors need to contact their advisees. The students can also contact their advisors after they receive an email about advising from the Undergraduate Chair, Prof. Manohar Kulkarni.

In addition to this document, both the students and advisors can use ME website (https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/curriculum/) and also MAS (https://mas.mccormick.northwestern.edu) for a productive advising meeting.

Suggested sequence is,

- 1. Each quarter the Undergraduate chair (Prof. Kulkarni) will send a reminder to faculty and students about the advising week.
- 2. Using emailing option in MAS, an advisor can send a group email to all advisees detailing how the advising meetings will be held while reminding them to complete a Study Plan as much as possible prior to the advising meeting.
- 3. During the meeting an advisor can inquire about the current quarter, plans for the next quarter/summer, declaration of a concentration and theme form if within 2-3 quarters of graduation. Finalize the study plan and approve it (advisor needs to click on it twice in their own MAS account). Each Study Plan has a notes section where both student and advisor can write and save the respective notes to document any key points/plans discussed or agreed upon.
- 4. An advisor can also explore as desired items such as Concentrations, Study Abroad, Coop/Internship, Dual Degree, Certificate/Minors, BS/MS, etc. These items are detailed later and may be searched for in this document.
- Note that all concentrations are 6 courses each plus one 3xx level Math/Science course outside of that. Now, a concentration itself may require/allow a Math/Science course but within their 6 courses. Even in that case the plus one 3xx Math/Science course is still needed. For suitable 3xx Math/Science course visit, https://www.mccormick.northwestern.edu/mechanical/documents/pre-approved-list-of-3xx-level-math-science-courses-08192021.pdf
- 6. For any Minor/Certificate/Double Major outside of McCormick (and many times even within, except for double major) we have no role to play. It is a student-driven process, and the students will need to contact the department of interest. Please note that a careful, multi-year planning is required for the Segal Design Certificate (contact Professor David Gatchell regarding that at d-gatchell@northwestern.edu)

BSME CURRICULUM AND CONCENTRATIONS

https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/curriculum/

- 1. At the above link you will find the following:
 - Advising Procedure and FAQ
 - Suggested Undergraduate Concentrations
 - The 3xx Level Math/Science Technical Elective
 - Program of Study Flowchart
 - Explanation of AP/IB and Transfer Credits in McCormick
 - Curriculum Petition Requests Curriculum petitions must be filed no later than the quarter before the student wishes to take the course.
 - Combined Degrees
 - Honors, Electives, and Certificate Programs
- Once decided, the concentration needs to be declared at, https://tinyurl.com/MechConc
 That will trigger MAS updating.
- 3. BSME curriculum comprises of 47 courses while yielding 48 units. The extra unit (in Basic Sciences category) comes by combining all the three fractional lab units.
- 4. Please refer those students who have transferred (AP), but without the lab units, Physics or Chemistry courses to Prof. Kulkarni.

MAS DEGREE AUDIT

https://mas.mccormick.northwestern.edu

- 1. MAS is updated on a rolling basis, with priority being given to those graduating soon. It is a good idea to have the graduation term in place in MAS at least one quarter prior!
- 2. If a course has AP or Ex (for Exemption) noted, course requirement has been met.
- Any Ex-notations reduce the number of units required for graduation per Ex notation. For example, someone getting Exempted from two courses (on the right side in Degree Audit mode),

Total Credits Available: 34.0 Used: 30.0 Degree Requirements: 46 Left: 16

4. For Transfer students, pay attention to the University Residency Requirements (URR) that are listed separately in MAS Degree Audit (on the right side). For URR, only the Quarters and Credits at Northwestern are used for being able to receive a Northwestern degree. An example,

URR

Quarters Required: 6 **Left:** 2 **Credits Required:** 21 **Left:** 1.6

TRANSFER CREDITS

- It is better to seek prior approval from ME UG Curriculum Chair (UGCC) chair before taking a
 course elsewhere. The undergraduate chair will need name of the university and the course
 description. Currently Manohar Kulkarni (Manohar.kulkarni@northwestern.edu) is the
 undergraduate chair.
- 2. Make sure to have all transfer credits are transferred to Northwestern! Work with Assistant Dean for Academics and Personal Development, Joseph Holtgreive (jjh@northwestern.edu). At one time a student had to delay her graduation because she had forgotten to get once course transferred to Northwestern. It is a good idea to have the graduation term in place in MAS at least one quarter prior!

STUDY ABROAD

https://www.northwestern.edu/abroad/

Also, https://www.mccormick.northwestern.edu/global/

- Keep some of the Unrestricted Electives spots open. That will help finding more opportunities (including non-engineering universities) and it may make a combination of engineering and non-engineering courses possible.
- Make sure to visit Heather Bacon (<u>h-bacon@northwestern.edu</u>) in the McCormick
 Undergraduate Office. She will explain the credit transfer process and then send you back to
 Prof. Kulkarni.
- 3. Complete the Study Abroad Petition at https://www.mccormick.northwestern.edu/students/undergraduate/forms.html#curriculum

BS/MS

https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/curriculum/combined-degrees.html

- 1. Make sure your MAS is updated by writing to McCormick Undergraduate Office (mccormick-school@northwestern.edu).
- 2. If you have 5 units or less remaining for BSME you can apply for BS/MS.
- 3. A quarter **before** the graduation quarter is the LAST opportunity to apply for BS/MS.
- 4. Please see Dean Bruce Lindvall (b-lindvall@northwestern.edu) first and then Prof. Kulkarni
- 5. No double counting of courses is permitted between BS and MS. MS requires 12 additional units.
- 6. It is extremely important to make sure that none of your MS courses are being used for BS in the Degree Audit in MAS. After graduation, all BS courses are 'locked in place' and thus none would be available for MS.

USEFUL WEB LINKS

- 1. Main ME https://www.mccormick.northwestern.edu/mechanical/
- 2. BS Curriculum

https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/curriculum/

3. Honors Program

https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/curriculum/honors-electives-certificates.html

4. Courses Schedule (this academic year)

https://www.mccormick.northwestern.edu/mechanical/academics/courses/

- Courses Schedule (previous years which is useful to estimate frequency)
 https://www.mccormick.northwestern.edu/mechanical/academics/courses/course-listing-previous-years.html
- 6. ABET Partitioning (useful to determine if a course is 100% Math/Science)

 https://www.mccormick.northwestern.edu/academics/undergraduate/abet/course-partitioning.html
- 7. Student Organizations

https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/student-organizations/

8. Career Development

https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/care er-resources.html

9. BS/MS

https://www.mccormick.northwestern.edu/mechanical/academics/undergraduate/curriculum/combined-degrees.html

MCCORMICK RESOURCES

- Personal Development Courses (PRDV)
 https://catalogs.northwestern.edu/undergraduate/courses-az/prdv/
- PATH

https://path.mccormick.northwestern.edu/

Tutoring

http://www.mccormick.northwestern.edu/students/undergraduate/tutoring.html

CAMPUS RESOURCES

- Emergency fund for students who need financial assistance for treatment, etc. https://northwestern.academicworks.com/opportunities/244
- CAPS (Counseling):

https://www.northwestern.edu/counseling/about-us/what-is-caps/index.html

847-491-2151- daytime and after-hours consultation; List of off-campus service providers (inquire with CAPS)

ACCESSIBLE NORTHWESTERN

https://www.northwestern.edu/accessiblenu/

Unlike high school, seeking disability-based accommodation is a student driven process. If an advisee mentions any form of learning difficulties tell them about the above office. The office is committed to providing a supportive & challenging environment for all Northwestern students with disabilities

BSME GRADUATION PROCEDURE

- 1 "Do graduating seniors need a Petition to Graduate?"
 - So long as there is the graduation term in MAS, no other application is required. It is a good idea to have the graduation term in place at least one quarter prior. Students can themselves change their graduation term in MAS as needed.
- 1. "Is there a different petition to graduate for students getting the Design Certificate?"
 - For BSME, so long as the MAS has a Graduation Term, they are fine for BSME.
 - For any another certificates/minors, etc. they need to check with them to see what is required.
- 2. "Do students who are in a new concentration need to petition for 314 to replace 202?"
 - No. So long as concentration is declared at, https://tinyurl.com/MechConc
- 3. Those graduating beyond Spring 2022, must declare a concentration. Those graduating in Spring 2022 or before, may also elect a concentration (ME Breadth is very similar to the old curriculum)
- 4. It is recommended that at least TWO quarters prior to graduation, students should declare a concentration and complete the on-line theme form (in MAS) using both completed and intended courses. This is also a good timeframe to make sure that the Unrestricted Electives are properly allotted in MAS. For any issues write to McCormick Undergraduate Office at mccormick-school@northwestern.edu with Cc to manohar.kulkarni@northwestern.edu
- 5. Once declared, any changes to the chosen concentration must be sent via email to manohar.kulkarni@northwestern.edu
- 6. The theme form may be changed often as needed and resubmitted on-line in MAS

FAQ – Commonly Asked Questions and Answers

- 1."ME 340-1 and ME390 are only offered in the Fall. I was wondering if there is any way I can substitute these courses for another ME course or simply get permission to take them in the winter or spring quarters virtually. I imagine they have been taught online at some point due to Covid."
 - No substitutions but you could take equivalent courses elsewhere and transfer them, while making sure your URR is satisfied. Please get any external courses preapproved by Prof. Kulkarni by sending him course description(s) and name of the university.
- 2."Additionally, would it be possible for me to receive course credit for my internship?"
 - No credit towards BSME is possible but please contact the Engineering Career Development office (https://www.mccormick.northwestern.edu/career-development/) and register for zero-unit CRDV.
- 3. Double Major within McCormick requires a minimum of 6 additional courses. Have the advisee complete the appropriate Dual Engineering Degree form at https://www.mccormick.northwestern.edu/students/undergraduate/forms.html#curriculum, get it signed by the advisor, and then to see Prof. Kulkarni.
- 4. For Double Major outside of McCormick, the advisee needs to contact that other department for their requirements. Sometimes additional 40 or more units are required to accomplish this.
- 5.Any minors or certificates are governed by their rules regarding double counting, etc. We have nothing to do with them. The only time we do **not** allow double counting is for the BS/MS.
- 6.Undergraduate Research opportunities (Research can be done for credit under ME 399. Note that a maximum of two ME 399 courses are allowed for BSME degree.
- 7. Some may want to use the Unrestricted Electives block strategically for either Study Abroad or a Minor/Double Major/Certificate.
- 8.Caesar is the only official record of student's enrollment and not Canvas. Please note that being in Canvas you may feel that you are enrolled in the class but that is not the case. I even had a graduating senior who was caught in this Canvas illusion! It is imperative for you to check your Unofficial transcript in Caesar before end of first week of classes every quarter to ensure that you are enrolled in the classes that you think you should be in!!
- 9. Five critical courses (Required but are offered only once a year!): ME 222, ME 233, ME 240, ME 340-1, and ME 390
- 10. Typically, the curriculum should be looked as:

1xx Freshmen Year2xx Sophomore Year

3xx Junior/Senior Year