

Guidance for Mechanical Engineering Majors

- ❖ The guidance here is based on the [2020 MechE degree requirements](#). You can find Data Science & Engineering (DSE) Minor curriculum details on the [DSE website](#).
- ❖ The DSE Minor requires 8 courses. McCormick requires that each minor consist of 5 courses that are **not** used towards any of your major requirements.
 - “Major Requirements” are those designated as “Major Program (16 units)” in the catalog. They are also designated with purple banners in your MAS degree audit:

▸ MechE Major Requirements	1/8 units
Major Requirement	
▸ MechE Capstone Requirement	0/2 units
Major Requirement	
▸ Technical Electives	0/6 units
Major Requirement	

- Talk to your advisor, or to Prof. Kulkarni, about how to choose DSE electives that can be used towards your MechE major.
 - The best scenario to earn the DSE minor is to use CS 211 (for ME 224) and two appropriate DSE Electives towards the ME major. You can use the remaining five required DSE units as **Unrestricted Electives**.
- ❖ Double counting rules also apply to minors and certificates.
 - This means your DSE minor must use 5 courses that do not apply to your major program, or to any other minors and certificates.
 - Take advantage of flexibility in some of the minor requirements.
Example: if you have credit for both COMP_SCI 349 and IEMS 304, you can use either of them to fulfill the machine learning requirement.
- ❖ Be mindful of prerequisites, both for DSE Core Courses and for DSE Electives. Declaration of the minor does not imply that any prerequisites will be waived for you.

Data Science and Engineering Minor

The guides below represents a possible path for MechE majors who are pursuing the DSE minor. Students are strongly encouraged to consult the [ME undergraduate curriculum document](#), and to consult with an ME advisor on the selection of DSE electives.

DSE Minor Requirements	Course Selection	How does this count for my major?		Notes
		Not Major Requirement	Major Requirement	
Data Science Core: 4 courses				
Statistics Foundations	Any DSE Option	Unrestricted Elective		
Programming Foundations	CS 211		Replaces ME 224	Double Count
Intermediate Programming	Any DSE Option	Unrestricted Elective		
Applied Machine Learning	Any DSE Option	Unrestricted Elective		
Data Science Studio Courses: 2 courses				
	DATA_ENG 200	Unrestricted Elective		
	DATA_ENG 300	Unrestricted Elective		
Electives: 2 courses				
	Two DSE electives		Chosen to fulfill ME concentration	Double Count
				Double Count