

What if I want an MS degree in Civil Engineering and do not have a BS in engineering—what can I do?

If you would like to enter the MS in Civil Engineering program at Michigan Tech and do **not** have a BS degree in an engineering discipline, you will need to make up some missing coursework.

MS degree in Civil Engineering (MSCE)

The Master of Science in Civil Engineering is designed for the pursuit of advanced civil engineering studies. This program is designed as a pathway to a career in civil engineering and requires the student to complete coursework approximately equivalent to an undergraduate degree in engineering.

The minimum courses (or equivalents) required for MS or PhD students who do **not** have an undergraduate degree in an engineering discipline and associated prerequisites are as follows:

Complete the following prerequisite courses:

Course	Course Title	Prerequisites
CH 1150/51	University Chemistry I and Lab	
MA 1160	Calculus I	MA 1032
MA 2160	Calculus II	MA 1160
MA 2321/3521	Lin Alg/Diff Eq	MA 1160 + MA 2160 + MA 2321
MEEM 2110 AND MEEM 2150 OR ENG 2120	Statics AND Mechanics of Materials Statics & Mech. Of Mat'ls	MA 2160 MEEM 2110 MA 2160 + PH 2100 + ENG 1102
PH 1100/2100	University Physics I - Mechanics	MA 1160
ENG 3200	Thermo/Fluids	MA 2160 + CH 1150/1151 + PH 2100 + ENG 1102

AND Select **4** from the following **7** courses **AND** a **CEE Design Course**:

CEE 3101	CE Materials	MEEM 2150 or ENG 2120
CEE 3202	Structural Analysis	(MEEM 2150 or ENG 2120) AND MA 2321
CEE 3332	Construction Engineering	
CEE 3401	Introduction to Transportation	
CEE 3501/3503	Introduction to Env. Eng.	MA 2160 + CH 1150/51
CEE 3620	Water Resources Engrg.	ENG 3200 + MA 3710(C)
CEE 3810	Soil Mechanics	GE 2000 + (MEEM 2150 or ENG 2120) + ENG 3200

CEE Design Course: CEE 4213 or CEE 4223 or CEE 4401 or CEE 4407 or CEE 4620 or CEE 4640 or CEE 4665 or CEE 4820	Depends on course chosen.
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Example: For an incoming student who is missing all math and science courses, the easiest path forward would be:

Math	Basic Sci.	Engrg. Sci.	4 of 7 (Example)	CEE Design Course
MA 1160 (4 cr.)	PH 1100/2100 (4 cr.)	ENG 2120 (4 cr.)	CEE 3101 (3 cr.)	Pick from list
MA 2160 (4 cr.)	CH 1150/1151 (4 cr.)	ENG 3200 (4 cr.)	CEE 3202 (3 cr.)	
MA 2321/3521 (4 cr.)			CEE 3332 (3 cr.)	
			CEE 3401 (3 cr.)	

Note:

(1) Engineering Fundamentals will waive ENG 1102 as a prerequisite for ENG 2120 and ENG 3200 for graduate students. They may even waive the other prerequisites.

(2) All 3000 and 4000 level CEE courses listed above (up to 12 credits) can be used toward the MS degree requirements as well.