



## Northwestern Michigan College

2021/22

### Western Michigan University Engineering Curriculum Guide

#### IMPORTANT NOTES

- The engineering department has useful, easy-to-read, and understandable [transfer guides](#) which include prerequisites, course requirements, and much more.
- Engineering advisors are concerned that transfer students complete the right courses. Please feel free to email one of the [advisors](#) or call (269) 276-3270 to make an appointment.
- Mathematics is the language of engineering and applied sciences, and it serves as the basis for where students begin their academic career at WMU (see table below).
- Bachelor of Science Degree in Engineering and Applied Sciences:
  - All Engineering programs require successful completion of four Calculus courses.
  - Engineering Technology programs require a minimum of Pre-Calculus and Calculus I
  - Computer Science requires Calculus I, Linear Algebra, Discrete Math, and Statistics.

Math courses completed at your previous institution(s) will determine your math placement at WMU.

If you have completed the equivalent of:*	And received a grade of:	Then you are ready to take:
MATH 1180 (Precalculus) or higher	'C' or better (2.0 on a 4.0 scale)	<b>Calculus I or higher</b> Student begins Calculus I (or higher) in Pre-Engineering, Pre-Engineering Technology or Computer Science curriculum.
MATH 1110 (Algebra II)	'B' or better (3.0 on a 4.0 scale)	<b>Precalculus</b> Student begins Precalculus in Pre-Engineering, Pre-Engineering Technology or Computer Science curriculum.
MATH 1110 (Algebra II)	Below 'B' on first attempt	<b>Algebra II</b> <ul style="list-style-type: none"> <li>• Student begins CEAS Exploratory Advising.</li> <li>• Must pass Algebra II with a B or better in no more than two attempts before advancing to Pre-Engineering or Pre-Engineering Technology curriculum.</li> </ul>
MATH 1100 (Algebra I)	'B' or better (3.0 on a 4.0 scale)	<ul style="list-style-type: none"> <li>• Must earn at least a C in first attempt for a second attempt.</li> </ul>
MATH 1100 (Algebra I)	Below 'B' on first attempt	<b>Algebra I or Computational Math Skills</b> <ul style="list-style-type: none"> <li>• Student placed in Exploratory Advising through the Center for Academic Success Programs at WMU.</li> <li>• Must pass Algebra I with a B or better in no more than two attempts before advancing to CEAS Exploratory Advising.</li> </ul>
No Math; place into Pre-Algebra or Algebra I per WMU placement test		Exploratory Advising: <a href="http://www.wmich.edu/unv/">www.wmich.edu/unv/</a>

\* If you have no college math then ACT scores will be used to determine placement. If you have no ACT scores, then you will need to arrange a placement test with the Department of Mathematics at WMU.