

**Bachelor of Science in Civil Engineering**  
**Department of Civil & Mechanical Engineering**

Fall 2022 – Total of 120 Credit Hours

P = Pre-requisite, C = Co-requisite

1 <sup>st</sup> Semester 15 credits	<b>MA 16500 *(4)</b> Analytical Geometry & Calculus I P: MA 15400 or MA 15900 with C- or better or placement	<b>CHM 11500* (4)</b> General Chemistry P: CHM 11100 or 1-year high school chem C: MA 15400	<b>ENGR 12700 (4)</b> Engineering Fundamentals I C: MA 16500	<b>ENGL 13100* (3)</b> Elementary Composition P: ENGL 12900 with C- or better or placement		
2 <sup>nd</sup> Semester 16 credits	<b>MA 16600 (4)</b> Analytical Geometry & Calculus II P: MA 16500 with C- or better	<b>PHYS 15200* (5)</b> Mechanics C: MA 16600	<b>ENGR 12800 (4)</b> Engineering Fundamentals II P: ENGR 12700 with C- or better C: MA 16500 & COM 11400 or ENGL 13100	<b>COM 11400* (3)</b> Fund of Speech Communication		
3 <sup>rd</sup> Semester 18 credits	<b>MA 26100 (4)</b> Multivariate Calculus P: MA 16600 with C- or better	<b>MA 35100 (3)</b> Elementary Linear Algebra P: MA 16600 with C- or better	<b>PHYS 25100 (5)</b> Heat Electricity and Optics P: PHYS 15200 with C- or better C: MA 26100	<b>CE 25000 (3)</b> Statics P: PHYS 15200 C: MA 26100	<b>CE 21000 (3)</b> Introduction to Geomatics P: MA 16500  (Summer & Fall only)	
4 <sup>th</sup> Semester 15 credits	<b>MA 36300 (3)</b> Differential Equations P: MA 26100 with C- or better C: MA 35100	<b>CE 25100 (3)</b> Dynamics P: CE 25000 with C- or better C: MA 36300	<b>CE 25200 (3)</b> Strength of Materials P: CE 25000 with C- or better	<b>CE 31500 (3)</b> CE Materials C: CE 25200  (Spring only)	<b>General Education Elective* (3)</b> Category B.5	
5 <sup>th</sup> Semester 16 credits	<b>CE 31800 (3)</b> Fluid Mechanics P: CE 25100 with C- or better & MA 36300	<b>CE 36500 (3)</b> Environmental Engineering P: CHM 11500 with C- or better  (Fall only)	<b>CE 37500 (3)</b> Structural Analysis P: CE 25200  (Fall only)	<b>CE 31600 (1)</b> CE Materials Lab P: CE 31500  (Fall only)	<b>CE 33000 (3)</b> Construction Management P : ENGR 12800 C : CE 21000 & junior standing (Fall only)	<b>General Education Elective* (3)</b> Category B.6
6 <sup>th</sup> Semester 12 credits	<b>CE 31900 (1)</b> Fluid Mechanics Lab P: CE 31800	<b>CE 36600 (1)</b> Environmental Engineering Lab P: CE 36500  (Spring only)	<b>CE 47800 (3)</b> Design of Concrete Structures P: CE 37500 & CE 31500  (Spring only)	<b>CE 34500 (3)</b> Transportation Engineering P: CE 21000  (Spring only)	<b>CE 38000 (3)</b> Soil Mechanics P: CE 25200 C: CE 31800 & 38100 (Spring only)	<b>CE 38100 (1)</b> Soil Mechanics Lab C: CE 38000  (Spring only)
7 <sup>th</sup> Semester 16 credits	<b>CE 41800 (3)</b> Hydraulics Engineering P: CE 31800  (Fall only)	<b>CE 40100 (1)</b> CE Profession and Practice C: Senior Standing  (Fall only)	<b>CE 48700 (3)</b> CE Design Project I P: CE 45000, CE 36500, CE 38000, CE 48100, or CE 47800 & Approval (Fall only)	<b>CE 48100 (3)</b> Foundation Engineering P: CE 38000 & 38100  (Fall only)	<b>Technical Elective (3)</b>	<b>STAT 51100 (3)</b> Statistical Methods P: MA 16600 with C- or higher
8 <sup>th</sup> Semester 12 credits	<b>Technical Elective (3)</b>	<b>Technical Elective (3)</b>	<b>CE 48800 (3)</b> CE Design Project II P: CE 48700  OR <b>Technical Elective (3)</b>	<b>General Education Elective* (3)</b> Category B.7		

\*All courses used to fulfill General Education Requirements require a grade of C- or better.

All engineering & technical elective courses must have a combined minimum GPA of 2.0.

Consult [catalog.pfw.edu](http://catalog.pfw.edu) and [pfw.edu/cme](http://pfw.edu/cme) for more information.