

Bachelor of Science in Civil Engineering (BSCE) Degree
Department of Civil & Mechanical Engineering



Effective: **Fall 2019**

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

Course sequencing follows the academic year, and assumes beginning the program in the fall Semester.

The math and physics departments require a C- or better in some pre-requisite courses.

Consult with the most recent bulletin at <http://bulletin.pfw.edu>

For more information visit <http://www.pfw.edu/cme>

P = Pre-requisite, C = Co-Requisite, GE = General Education with Categories A, B, and C, and Competencies 1– 8.

1 st Semester 15 credits	MA 16500 *(4) P: MA 15400 or MA 15900 with C- or better or placement GE A3 <small>Analytical Geometry & Calculus I</small>	CHM 11500 *(4) P: CHM 11100 or 1 yr. H.S. C: MA 15400 GE B4 <small>General Chemistry</small>	ENGR 12700 (4) C: MA 15400 <small>Engineering Fundamentals I</small>	ENGL 13100 *(3) P: ENGL 12900 with C or better or placement GE A1 <small>Elementary Composition</small>		
2 nd Semester 16 credits	MA 16600 (4) P: MA 16500 with C- or better <small>Analytical Geometry & Calculus II</small>	PHYS 15200 *(5) C: MA 16600 GE B4 <small>Mechanics</small>	ENGR 12800 (4) P: ENGR 12700 C: MA 16500, COM 11400, or ENGL 13100 <small>Engineering Fundamentals II</small>	COM 11400 *(3) GE A2 <small>Fund of Speech Communication</small>		
3 rd Semester 18 credits	MA 26100 (4) P: MA 16600 with C- or better <small>Multivariate Calculus</small>	MA 35100 (3) P: MA 16600 with C- or better <small>Elementary Linear Algebra</small>	PHYS 25100 (5) P: PHYS 15200 with C or better C: MA 26100 <small>Heat Electricity and Optics</small>	CE 25000 (3) P: PHYS 15200 C: MA 26100 <small>Statics</small>	CE 21000 (3) P: MA 16500 (Summer & Fall only) <small>Introduction to Geomatics</small>	
4 th Semester 15 credits	MA 36300 (3) P: MA 26100 with C- or better C: MA 35100 <small>Differential Equations</small>	CE 25100 (3) P: CE 25000 C: MA 36300 <small>Dynamics</small>	CE 25200 (3) P: CE 25000 <small>Strength of Materials</small>	CE 31500 (3) C: CE 25200 (Spring only) <small>CE Materials</small>	General Education Elective *(3) GE B5 <small>GE list (Table B5)</small>	
5 th Semester 16 credits	CE 31800 (3) P: CE 25100, and MA 36300 <small>Fluid Mechanics</small>	CE 36500 (3) P: CHM 11500 (Fall only) GE B4 <small>Environmental Engineering</small>	CE 37500 (3) P: CE 25200 (Fall only) <small>Structural Analysis</small>	CE 31600 (1) P: CE 31500 (Fall only) <small>CE Materials Lab</small>	CE 33000 (3) P : 12800, C : CE 21000 & junior standing (Fall only) <small>Construction Management</small>	General Education Elective *(3) GE B6 <small>GE list (Table B6)</small>
6 th Semester 12 credits	CE 31900 (1) P: CE 31800 <small>Fluid Mechanics Lab</small>	CE 36600 (1) P: CE 36500 (Spring only) <small>Environmental Engineering Lab</small>	CE 47800 (3) P: CE 37500 CE 31500 (Spring only) <small>Design of Concrete Structures</small>	CE 34500 (3) P: CE 21000 (Spring only) <small>Transportation Engineering</small>	CE 38000 (3) P: CE 25200 C: CE 31800 & 38100 (Spring only) <small>Soil Mechanics</small>	CE 38100 (1) C: CE 38000 (Spring only) <small>Soil Mechanics Lab</small>
7 th Semester 16 credits	CE 41800 (3) P: CE 31800 (Fall only) <small>Hydraulics Engineering</small>	STAT 51100 (3) P: MA 16600 with C- or higher <small>Statistical Methods</small>	CE 40100 (1) C: Senior Standing (Fall only) <small>CE Profession and Practice</small>	CE 48700 (3) P: Senior standing and advisor approval. (Fall only) GE C8 <small>CE Design Project</small>	CE 48100 (3) P: CE 38000 & 38100 (Fall only) <small>Foundation Engineering</small>	Technical Elective (3)
8 th Semester 12 credits	Technical Elective (3)	Technical Elective (3)	General Education Elective *(3) B7 <small>GE list (Table B7)</small>	CE 48800 (3) P: CE 48700 OR Technical Elective (3) <small>CE Design Project II</small>		

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

Total credit hours: 120

Key: Math & Science Freshmen Engineering Civil Engineering Mechanical Engineering General Education