

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



Effective: **Fall 2016**

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

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

Total credit hours: 123

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