

# Bachelor of Science in Mechanical Engineering

## Department of Civil & Mechanical Engineering

Fall 2016 – total 120 credit hours

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.

Please consult the bulletin and <http://www.pfw.edu/cme> for more information.

P = Pre-requisite, C = Co-requisite, DC = Design Content

1 <sup>st</sup> semester 15 credits	<b>MA 16500* (4)</b> P: MA 15400 or 15900 with C- or better or placement  Analytical Geo. & Calculus I	<b>CHM 11500* (4)</b> P: CHM 11100 or 1 yr. H.S. C: MA 15400  Chemistry	<b>ENGR 12700 (4)</b> C: MA 15400  Engineering Fundamental I	<b>ENGL 13100* (3)</b> P: ENGL 12900 with C or better or placement  Elementary Composition I		
2 <sup>nd</sup> semester 18 credits	<b>MA 16600* (4)</b> P: MA 16500 with C- or better  Analytical Geo. & Calculus II	<b>PHYS 15200* (5)</b> C: MA 16600  Mechanics	<b>ENGR 12800 (4)</b> P: ENGR 12700 C: MA 16500, ENGL 13100 or COM 11400  Engineering Fundamental II	<b>ME 16000 (2)</b> P: MA 16500 C: ENGR 12800  Solid Modeling	<b>COM 11400* (3)</b>  Fundamentals of Speech	
3 <sup>rd</sup> semester 17 credits	<b>MA 26100 (4)</b> P: MA 16600 with C- or better  Multivariate Calculus	<b>MA 35100 (3)</b> P: MA 16600 with C- or better  Elementary Linear Algebra	<b>PHYS 25100 (5)</b> P: PHYS 15200 with C or better C: MA 26100  Heat, Electricity, & Optics	<b>ME 25000 (3)</b> P: PHYS 15200 C: MA 26100  Statics	<b>CS 22700 (2)</b> P: ENGR 12800  Intro to C Programming	
4 <sup>th</sup> semester 15 credits	<b>MA 36300 (3)</b> P: MA 26100 with C- or better C: MA 35100  Differential Equations	<b>ME 25100 (3)</b> P: ME 25000 C: MA 36300  Dynamics	<b>ME 20000 (3) DC</b> P: CHM 11500 C: MA 26100  Thermodynamics I	<b>ME 25200 (3) DC</b> P: ME 25000  Strength of Materials	<b>ECE 20100 (3)</b> C: MA 26100  Linear Circuit Analysis I	
5 <sup>th</sup> semester 13 credits	<b>ME 31800 (3) DC</b> P: ME 20000, ME 25100, MA 36300  Fluid Mechanics	<b>ME 36100 (3) DC</b> P: ME 16000, ME 25100, MA 36300  Kinematics & Dynamics Mach	<b>ME 30300 (2)</b> P: CHM 11500, PHYS 25100 C: ME 25200  Materials Science and Engr	<b>ME 33100 (3) DC</b> P: ME 25100, MA 36300  System Dynamics	<b>ME 29300 (2)</b> P: COM 11400, ENGL 13100, ECE 20100  Measurement & Instrument	
6 <sup>th</sup> semester 14 credits	<b>ME 30100 (3) DC</b> P: ME 20000  Thermodynamics II	<b>ME 30400 (1)</b> P: ME 29300, ME 30300  Mechanics & Materials Lab	<b>ME 31900 (1) DC</b> P: ME 29300, ME 31800  Fluid Mechanics Lab	<b>ME 32100 (3) DC</b> C: ME 31800  Heat Transfer	<b>ME 36900 (3) DC</b> P: ME 36100, ME 25200, ME 30300 C: ME 30400  Design of Machine Elements	<b>ME 33300 (3) DC</b> P: ME 33100  Automatic Control Systems
7 <sup>th</sup> semester 13 credits	<b>ME 48700* (3) DC or ENGR 41000* (3) DC</b> P: ME 32100, ME 36900 C: ME 32200 Senior Design I	<b>ME 32200 (1)</b> P: ME 29300, ME 32100 C: ME 31900  Heat Transfer Lab	<b>Technical Elective (3)</b>  Group 1	<b>Technical Elective (3)</b>  Group 1	<b>General Education Elective* (3)</b>  Category B.5	
8 <sup>th</sup> semester 15 credits	<b>ME 48800 (3) DC or ENGR 41100 (3) DC</b> P: ME 48700 or ENGR 41000 Senior Design II	<b>Technical Elective (3)</b>  Group 1	<b>Technical Elective (3)</b>  Group 1 or 2	<b>General Education Elective* (3)</b>  Category B.6	<b>General Education Elective* (3)</b>  Category B.7	

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

For information about the combined BSME/MSE degree contact Dr. Hosni Abu-Mulaweh ([mulaweh@pfw.edu](mailto:mulaweh@pfw.edu)).

For information about the Advanced Manufacturing Engineering certificate and Bio-Mechanical Engineering certificate, contact Dr. Don Mueller ([don.mueller@pfw.edu](mailto:don.mueller@pfw.edu)).