

Mechanical Engineering, BS



University of Wyoming, 2016-17

Freshman Fall Semester			Hrs	Min	Grade	Notes
		USP First-Year Seminar	3		C	FY
		USP US & Wyoming Constitutions	3			V
CHEM	1020	General Chemistry I *	4			PN
ENGL	1010	College Composition and Rhetoric	3		C	C1
MATH	2200	Calculus I ^ **	4		C	Q
Credit hours subtotal:			<u>17</u>			

Freshman Spring Semester			Hrs	Min	Grade	Notes
		USP Human Culture	3			H
COJO	2010	Public Speaking	3		C	C2
ES	2110	Statics ^	3		C	
MATH	2205	Calculus II ^	4		C	
		Math/Science Elective ***	3			
Credit hours subtotal:			<u>16</u>			

Sophomore Fall Semester			Hrs	Min	Grade	Notes
ES	1060	Introduction to Engineering Problem Solving ^	3		C-	
ES	2120	Dynamics ^	3		C	
ES	2210	Electric Circuit Analysis ^	3		C-	
MATH	2210	Calculus III ^	4		C	
PHYS	1220	Engineering Physics II	4			PN
Credit hours subtotal:			<u>17</u>			

Sophomore Spring Semester			Hrs	Min	Grade	Notes
ES	2310	Thermodynamics I ^	3		C-	
ES	2330	Fluid Dynamics ^	3		C-	
ES	2410	Mechanics of Materials ^	3		C-	
PHYS	2320	Physics IV: Modern Physics	3			Can substitute PHYS 2310 (Physics III: Wave & Optics) or CHEM 1030 (General Chemistry II).
MATH	2310	Applied Differential Equations I	3		C-	
ENGL	2005	Technical Writing	3			
Credit hours subtotal:			<u>18</u>			

This is a guide for course work in the major; actual course sequence may vary by student. Please refer to the online student degree evaluation, and consult with an academic advisor. • Not all courses are offered every semester and some electives may have prerequisites. Students should review the course descriptions in the *University Catalog* and consult with their academic advisor to plan accordingly.

University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Engineering and Applied Science requirements:

Students must have a minimum cumulative GPA of 2.0 in all engineering courses for graduation. • A grade of C or higher is required for all prerequisite courses. Students must also achieve a grade of C or better in all required mathematics courses.

Mechanical Engineering Program Notes:

Degree candidates must meet academic requirements of the college and have an minimum grade point average of 2.00 (C) in all mechanical engineering courses completed at UW. A grade of C- or better must be earned in all engineering science and required math courses.

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Junior Fall Semester			Hrs	Min Grade	Notes
ME	3005	Engineering Experimentation	3		
ME	3010	Intermediate Mechanics of Materials	3		
ME	3020	System Dynamics	3		
ME	3040	Thermodynamics II	3		
ME	3060	Numerical Methods for Engineers	3		
		Math/Science Elective ***	3		
Credit hours subtotal:			18		

Junior Spring Semester			Hrs	Min Grade	Notes
ME	3160	Thermal/Fluids Science Lab	3		
ME	3170	Machine Design	3		
ME	3360	Fundamentals of Transport Phenomena	3		
ME	3450	Properties of Materials	3		
ME	4020	Design of Mechanical/Electronic Systems	3		
Credit hours subtotal:			15		

Senior Fall Semester			Hrs	Min Grade	Notes
		USP Human Culture	3		H
ME	4060	Systems Design I	3	C	C3
ME	4150	Mechanical Behavior of Materials	3		
		Mechanical Engineering Electives ****	6		
Credit hours subtotal:			15		

Senior Spring Semester			Hrs	Min Grade	Notes
ME	4070	Systems Design II	3		
		Business Elective *****	3		
		Mechanical Engineering Electives ****	6		
		Technical Elective *****	3		
Credit hours subtotal:			15		

TOTAL CREDIT HOURS: 131

Mechanical Engineering Program Notes con't:

^ **Mechanical Engineering Success Curriculum.** The Mechanical Engineering Success Curriculum must be successfully completed prior to enrolling in any upper division (3000-level or above) courses taught by the Mechanical Engineering Department. A student must earn a minimum 3.0 gpa in these 10 courses. AP courses are excluded from the gpa calculation, but grades transferred from other institutions will be used in evaluating the success curriculum gpa.

* Requires MATH ACT ≥ 23 , MATH SAT ≥ 600 , Math Placement Exam ≥ 3 , or concurrent enrollment in MATH 1400, 1405, or 1450. (University standard)

** Requires MATH ACT ≥ 27 , MATH SAT ≥ 600 , Math Placement Exam ≥ 5 , or $\geq C$ in MATH 1405 or 1450. (University standard)

*** The **math/science elective** must be chosen from a department approved list. The list can be found at www.uwyo.edu/mechanical/undergraduate%20students/2014-2015/electives%202014-2015.pdf Please consult with an academic advisor.

**** **Mechanical Engineering Elective:** Choose from any upper division mechanical engineering course or EE 4620 (Automatic Control Systems).

***** The **business elective** must be chosen from a department approved list. Please consult with an academic advisor.

***** The **technical elective** may be selected from any engineering course or approved math/science or business course. Please consult with an academic advisor.