

Engineering, AS Mechanical Specialization



Western Wyoming Community College

FRESHMAN YEAR ¹

Fall Semester			Hrs	Spring Semester			Hrs
PHYS	1310	College Physics	4	ES	1060	Intro to Engineering Computing *	3
MATH	2200	Calculus I *	4	CHEM	1020	General Chemistry I	4
ENGL	1010	English Composition	3	MATH	2205	Calculus II *	4
		US Government ²	3	PHYS	1320	College Physics II	4
HMDV	1005	First Year Success	1	ES	2110	Statics *	3
TOTAL			<u>15</u>	TOTAL			<u>18</u>

SOPHOMORE YEAR ¹

Fall Semester			Hrs	Spring Semester			Hrs
ES	2120	Dynamics *	3	ES	2310	Thermodynamics I *	3
ES	2210	Electric Circuit Analysis *	3	ES	2330	Fluid Dynamics *	3
ENGL	2005	Technical Writing	3	ES	2410	Mechanics of Materials *	3
COMM	2010	Public Speaking ³	3	MATH	2310	Applied Differential Equations	3
MATH	2210	Calculus III *	4	G&R	1050	Intro to Natural Resources ⁴	3
				HMDV	2411	Assessment Requirement	0
TOTAL			<u>16</u>	TOTAL			<u>15</u>
TOTAL WWCC AS DEGREE HOURS							<u>64</u>

Successful completion of the 2+2 plan requires that a student remain continuously enrolled and graduate with the associate's degree from his or her respective community college. • 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. • Not all courses are offered every semester and some electives may have prerequisites. Students should review the course descriptions in the catalogs of their respective institutions and consult with their academic advisor to plan accordingly. • Academic plans and course schedules may need to be altered if ACT or Math Placement scores require a student to take pre-college courses (e.g., MATH 0900, 0921, or 0925) before taking required math or English courses.

Western Wyoming Community College requirements:

In order to graduate, students must have a cumulative grade point average of 2.00 (a "C" average) or better in all hours attempted at Western Wyoming Community College. • At least 15 credit hours must be completed through WWCC. • Generally, no courses taken from WWCC for S/U grades may be used for graduation hours. • Students may not receive credit for courses which are prerequisite to course they have already completed. • A maximum of six (6) hours of studies or workshop courses may be applied toward the Associates Degree. • A maximum of four (4) hours of internship may be allowed for AA or AS degrees.

WWCC Program Notes:

¹ The following courses may be advisable to support student academic and career goals. They are not required, and are not replacements for the required WWCC coursework listed above. Consult with an academic advisor before taking.

- ES 1000 in order to explore career opportunities in engineering
- ES 1070 and ES 1080 in order to gain solid modeling/drafting experience
- CHEM 1030 and MATH 2250, as they can be counted towards courses in the UW Mechanical Engineering (ME) curriculum

² The US Government requirement can be fulfilled by taking HIST 1211, 1221, 1251, or POLS 1000.

³ COMM 1020 will also satisfy this requirement.

⁴ This requirement can also be fulfilled by taking ECON 1010, PSYC 1000, SOC 1000, or ANTH 1200.

* A minimum cumulative GPA of 3.0 is required in these 10 courses in order to enroll in UW ME courses. See page 2 for details.

Mechanical Engineering, BS



University of Wyoming

JUNIOR YEAR

Fall Semester			Hrs	Spring Semester			Hrs
ME	3005	Engineering Experimentation	3	ME	3160	Fluids Laboratory	3
ME	3060	Numerical Methods	3	ME	3170	Machine Design	3
ME	3010	Intermediate Mechanics of Materials	3	ME	3360	Transport Phenomena	3
ME	3020	System Dynamics	3	ME	3450	Properties of Materials	3
ME	3040	Thermodynamics II	3	ME	4020	Design of Mechanical & Electrical Systems	3
		Math/Science Elective **	3				
TOTAL			<u>18</u>	TOTAL			<u>15</u>

SENIOR YEAR

Fall Semester			Hrs	Spring Semester			Hrs
ME	4060	Systems Design I	C3 3	ME	4070	Systems Design II	3
ME	4150	Mechanical Behavior of Materials	3	3000+	ME Electives ***		6
	3000+	ME Electives ***	6		Business Elective ****		3
		CHEM 1030, PHYS 2310, or PHYS 2320	4		Technical Elective *****		3
TOTAL			<u>16</u>	TOTAL			<u>15</u>
TOTAL UW HOURS							<u>64</u>
TOTAL UW BS DEGREE HOURS							<u>128</u>

University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 48 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. • The USP Communication 3 (C3) requirement must be completed with a grade of C or better.

UW College of Engineering and Applied Science requirements:

Students must have a minimum cumulative GPA of 2.0 in all engineering courses for graduation. • Students must also achieve a grade of C or better in MATH 2200, MATH 2205, MATH 2210, ES 2110, and ES 2120.

UW Mechanical Engineering Program Notes:

Degree candidates must meet academic requirements of the college and have a 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 MATH 2310, ES 1060, ES 2210, ES 2310, ES 2410, and ES 2330.

* 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 3.00 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.

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

*** Mechanical Engineering (ME) Electives. 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.