

B.S. in Engineering

Concentration: Mechanical

Major Program Guide For: B.S. in Engineering (Concentration: Mechanical) Suggested Course Sequence (2020-21 Catalog)

Freshman Year							
Fall				Spring			
Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs	Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs
ENGL	101	Or ENGR 199	3	ENGR	132	Engineering Graphics	3
CHEM	139	General Chemistry I (C5)	4	ENGR	199	Or ENGL 101	3
MATH	153	Calculus I (C2)	4	MATH	255	Calculus II	4
Wellness (C4)			3	PHYS	230	General Physics I (C5)	4
Perspective			3	EE	200	Computer Utilization	3
<i>Semester Total:</i>				<i>Semester Total:</i>			
17				17			

Sophomore Year							
Fall				Spring			
Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs	Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs
ENGR	200	Eng/Prac/Prin. II	3	COMM	201	Communications (C3)	3
ENGR	201	Engineering Mechanics: Statics	3	ENGR	202	Mechanics of Materials	3
ENGR	231	3D Solid Modeling	3	ENGR	211	Material Science	3
MATH	320	Ord. Diff. Eqns (or MATH 256)	3	ENGL	202		3
PHYS	231	General Physics II	4	MATH	256	Calculus III (or MATH 320)	3
				ME	211	ME Lab I	1
<i>Semester Total:</i>				<i>Semester Total:</i>			
16				16			

Junior Year							
Fall				Spring			
Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs	Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs
ENGR	315	Electrical Engr. Fundamentals	3	ENGR	350	Eng/Prac/Prin. III	3
ENGR	411	Engineering Numerical Analysis	3	ME	302	Design of Machine Elements I	3
ME	301	Engineering Mechanics: Dynamics	3	ENGR	353	Thermodynamics	3
ME	311	ME Lab II	1	ME	332	Heat Transfer: Analysis & Applications	3
ME	321	Fluid Dynamics	3	ME	312	ME Lab III	1
MATH	370	Probability and Statistics	3	ME	402	Control of Dynamic Systems	3
<i>Semester Total:</i>				<i>Semester Total:</i>			
16				16			

Senior Year							
Fall				Spring			
Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs	Course Prefix or Liberal Studies Requirement	Course Number	Course Title	Cr Hrs
ENGR	400	Engineering Capstone I	3	ENGR	450	Engineering Capstone II	3
ME	401	Design of Machine Elements II	3	Perspective			3
Perspective			3	Perspective		Or Tech Elective	3
Tech. Elective		Or Perspective	3	Upper Level Perspective			3
Perspective			3				
<i>Semester Total:</i>				<i>Semester Total:</i>			
15				12			

NOTES:

- Total for Degree: 126 Credit Hours
- Students need to maintain a GPA of 2.2 in the major
- Upper Level Perspective (ULP): An approved Upper Level Liberal Studies Perspectives course is required in one of the Liberal Studies Perspectives categories.

Information in the Course Catalog (catalog.wcu.edu) for the year in which you were admitted prevails, if there is a conflict with the Suggested Course Sequence.