

# B.S. in Engineering

## Concentration: Manufacturing



Engineering  
Accreditation  
Commission

The B.S. Engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

Major Program Guide For: B.S. in Engineering (Concentration: Manufacturing)

Suggested Course Sequence (2022-23 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	EE	200	Computer Utilization	3
MATH	153	Calculus I (C2)	4	MATH	255	Calculus II	4
Wellness (C4)			3	PHYS	230	General Physics I (C5)	4
COMM	201	Foundations Communication	3	ENGR	199	Or ENGL 101	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	Perspective			3
ENGR	201	Engineering Mechanics: Statics	3	Perspective			3
ENGR	231	3D Solid Modeling	3	ENGR	211	Material Science	3
MATH	320	Ord. Diff. Equations	3	ENGL	202		3
PHYS	231	General Physics II	4	MATH	256	Calculus III	4
<i>Semester Total:</i>				<i>Semester Total:</i>			
16				17			

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
Perspective			3	MFE	365	Design of Manufacturing Systems	3
ME	301	Engineering Mechanics: Dynamics	3	MFE	375	Automated Manufacturing Systems	3
MFE	311	Manufacturing Engr Lab I	1	MFE	327	Quality Engineering	3
MFE	324	Computer Aided Des. & Manuf.	3	MFE	312	Manufacturing Engr Lab II	1
MATH	370	Probability and Statistics	3	Perspective			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
MFE	424	Advanced Manuf. Processes I	3	ME	403	Control of Dynamic Systems	3
ENGR	411	Engineering Numerical Analysis	3	MFE	427	Advanced Manuf. Processes II	3
Tech. Elective		ENGR 331 or others	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 2.3 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](http://catalog.wcu.edu)) for the year in which you were admitted prevails, if there is a conflict with the Suggested Course Sequence. **This eight-semester plan should be used for REFERENCE ONLY.**