

# B.S. in Engineering

## Concentration: Electrical Power



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: Electrical Power)  
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		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
ENGR	199	Engr/Prac/Prin. I	3	COMM	201	Communications (C3)	3
			<i>Semester Total:</i>				<i>17</i>

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
EE	221	Logic Systems Design I	3	Perspective			3
ENGR	201	Engineering Mechanics: Statics	3	Perspective			3
EE	201	Network Theory I	3	ENGR	200	Engr/Prac/Prin. II	3
MATH	320	Ord. Diff. Equations	3	EE	212	Instrumentation & Networks Lab	1
PHYS	231	General Physics II	4	MATH	256	Calculus III	4
EE	211	Logic & Networks Lab	1	EE	202	Network Theory II	3
			<i>Semester Total:</i>				<i>17</i>

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
EE	331	Fund. Electronics & Semiconductors	3	ENGR	350	Eng/Prac/Prin. III	3
Perspective		Or ENGR 350	3	ENGR	211	Materials Science	3
ME	301	Engineering Mechanics: Dynamics	3	ENGL	202		3
EE	311	Electronics Devices Lab	1	ENGR	402	System Dynamics & Control	3
Perspective			3	ME	211	ME Lab I	1
MATH	370	Probability and Statistics I	3	Perspective			3
			<i>Semester Total:</i>				<i>16</i>

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
EE	471	Power Electronics: Design and Analysis	3	EE	452	Electric Machines and Drives	3
EE	451	Electric Power Systems	3	EE	472	Advanced Power Electronics and Drives: Design and Analysis	2
ENGR	411	Engineering Numerical Analysis	3	Upper Level Perspective Tech Elective			3
			<i>Semester Total:</i>				<i>14</i>

**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](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.