

Wilkes University

Mechanical/Electrical Engineering Double-Major Curriculum

First Semester		Credits	Second Semester		Credits
MTH 111	Calculus I	4	MTH 112	Calculus II	4
CHM 117	Chemistry Lab for Engineers	1	PHY 201	General Physics I	3
CHM 118	Chemistry for Engineers	3	PHY 204	General Physics I Lab	1
EGR 180	CADD Lab	1	EGR 140	Scientific Programming	3
ENG 101	Composition	4	EE 216	Circuit Analysis I	3
FYF 101	First-Year Foundations	3	EGR 200	Materials Science	3
Total Credits 16			Total Credits 17		
Third Semester		Credits	Fourth Semester		Credits
MTH 211	Differential Equations	4	EGR 222	Mechatronics	3
PHY 202	General Physics II	3	EE 251	Electronics I	3
PHY 205	General Physics II Lab	1	EE 241	Digital Design	4
EE 217	Circuit Analysis II	3	ME 322	Thermodynamics	3
EE 285	Electrical Circuits Lab	1	ME 232	Strength of Materials	3
ME 231	Statics	3	ME 175	Machining	1
Total Credits 15			Total Credits 17		
Fifth Semester		Credits	Sixth Semester		Credits
EE 252	Electronics II	4	ME 234	Dynamics	3
EE 271	Semiconductor Devices	4	MTH 212	Multivariable Calculus	4
EE 381	Microfabrication Lab	3	PHY 203	Modern Physics	3
ME 321	Fluid Mechanics	3	PHY 206	Modern Physics Lab	1
ME 333	Machine Design	3	ME 323	Fluid Mechanics Lab	1
Total Credits 17			ME 324	Heat Transfer	3
			General Education		3
			Total Credits 18		
Seventh Semester		Credits	Eighth Semester		Credits
EE 314	Control Systems	3	EGR 201	Ethics	1
EE 337	Electromagnetics I	3	PHY 214	Applied Physics	3
ME 326	Heat Transfer Lab	1	EGM 320	Engineering Project Management	3
ME 215	Manufacturing Processes	3	ME 332	Vibrations	3
ME 335	Finite Element Methods	4	ME 330	Vibrations Lab	1
General Education		3	EE 339	Electromagnetics II	4
Total Credits 17			General Education		3
			Total Credits 18		
Ninth Semester		Credits	Tenth Semester		Credits
EE 325	Energy Conversion Devices	3	EE 339	Electromagnetics II	4
EGR 391	Senior Projects I	1	EE 382	Modern Communication Systems	4
ME 384	Mechanical Design Lab	3	EGR 392	Senior Projects II	2
ME 317	Robotics	3	General Education		3
General Education		3			
General Education		3			
Total Credits 16			Total Credits 13		

TOTAL CURRICULUM CREDITS 164

Rev 6.21.23

This chart is for illustration purposes only. See Undergraduate Bulletin for specific requirements.