

Engineering

	1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics (CC: CT)	2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	3. an ability to communicate effectively with a range of audiences (CC: OC, WC, IL)	4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions (CC: QR)	7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
CSC 2054 - Data Structures and Algorithms	R			R			
CSC 2054L - Data Structures and Algorithms Lab	R		I	R	R		
EGR 1012 - Introduction to Engineering I	I	I		I			I
EGR 1012L - Introduction to Engineering I Lab	I	I	I	I	I		
EGR 1023 - Introduction to Engineering II	I	I		I			I
EGR 1023L - Introduction to Engineering II Lab	I	I	I	I	I		
EGR 1043 - Introduction to Computer Programming	I			I			
EGR 1043L - Introduction to Computer Programming Lab	I			I	I		
EGR 1054 - Objects and Elementary Data Structures	R			R			
EGR 1054L - Objects and Elementary Data Structures Lab	R			R	I		
EGR 2014 - Engineering Mechanics: Statics	R	R					
EGR 2014L - Engineering Mechanics: Statics Lab	R	R	R		R	R	
EGR 2024 - Circuit Analysis	R	R					
EGR 2024L - Circuit Analysis Lab	R	R	R		R	R	
EGR 3013 - Nuclear Physics	R			R			
EGR 3013L - Nuclear Physics Lab	R		R	R	R	R	
EGR 3014 - Operating Systems	R				R		
EGR 3023 - Software Engineering	M				M		R
EGR 3034 - Mechanics of Materials	R	R					
EGR 3034L - Mechanics of Materials Lab	R	R	R		R	R	
EGR 3043 - Analytical Mechanics: Dynamics	M	M	R				
EGR 3053 - Analog Electronics	R	R					
EGR 3053L - Analog Electronics Lab	R	R	R		R	R	
EGR 3063 - Electricity, Magnetism, and Waves I	R						
EGR 3073 - Networking and Security	R						
EGR 3083 - Electricity, Magnetism, and Waves II	M						
EGR 3093 - Digital Electronics	R	R			R		
EGR 3093L - Digital Electronics Lab	R	R	R		R	R	
EGR 4003 - Information and Computer Security	M	M	R	M			
EGR 4013 - Thermodynamics	R						
EGR 4042 - Embedded Systems and Robotics	M	M					R
EGR 4042L - Embedded Systems and Robotics Lab	M	M	M		M		R
EGR 4054 - Computer Architecture and Assembly Language	M	M			R		
EGR 4063 - Solid State Physics	M		R				M
EGR 4072 - Senior Project I	R	R	R	R	R	R	R
EGR 4082 - Senior Project II	M	M	M	M	M	M	M
EGR 4092 - Internship in Engineering	M	M	M	M	M	M	R
EGR 4103 - Electrical Signals and Systems	M	M					
MTH 1064 - Calculus I	I		I	I			
MTH 1064L - Calculus I Lab	I		I	I	I		
MTH 1074 - Calculus II	I		I	I			
MTH 1074L - Calculus II Lab	I		I	I	I		
MTH 2074 - Calculus III	R		I				
MTH 3033 - Differential Equations	R					R	
MTH 3063 - Calculus Based Statistics With R	R					R	
MTH 3083 - Mathematical Probability and Statistics	R					R	
PHY 2044 - University Physics I	I	I					
PHY 2044L - University Physics I Lab	I	I	I		I	I	
PHY 2054 - University Physics II	I	I					
PHY 2054L - University Physics II Lab	I	I	I		I	I	
PHY 3004 - Modern Physics	R	R					
PHY 3004L - Modern Physics Lab	R	R	R		R	R	