## GENERAL ENGINEERING: COMPUTER SCIENCE ENGINEERING, B.S.E. (PHYSICS AND ENGINEERING)

Code	Title	Units	
Lower-Division Requirements			
CSC 2054 and CSC 2054L	Data Structures and Algorithms and Data Structures and Algorithms Lab	4	
EGR 1012 and EGR 1012L	Introduction to Engineering I and Introduction to Engineering I Lab	2	
EGR 1023 and EGR 1023L	Introduction to Engineering II and Introduction to Engineering II Lab	3	
EGR 1043 and EGR 1043L	Introduction to Computer Programming and Introduction to Computer Programming Lab	3	
EGR 1054 and EGR 1054L	Objects and Elementary Data Structures and Objects and Elementary Data Structures Lab	4	
EGR 2024 and EGR 2024L	Circuit Analysis and Circuit Analysis Lab	4	
MTH 1064 and MTH 1064L	Calculus I (FE) and Calculus I Lab (FE)	4	
MTH 1074 and MTH 1074L	Calculus II and Calculus II Lab	4	
MTH 2074	Calculus III	4	
PHY 2044 and PHY 2044L	University Physics I (FE) and University Physics I Lab (FE)	4	
PHY 2054 and PHY 2054L	University Physics II and University Physics II Lab	4	
Upper-Division Requirements			
EGR 3014	Operating Systems	4	
EGR 3023	Software Engineering	3	
EGR 3053 and EGR 3053L	Analog Electronics and Analog Electronics Lab	3	
EGR 3073	Networking and Security	3	
EGR 3093 and EGR 3093L	Digital Electronics and Digital Electronics Lab	3	
EGR 4003	Information and Computer Security	3	
EGR 4054	Computer Architecture and Assembly Language	4	
EGR 4072	Senior Project I	2	
EGR 4082	Senior Project II	2	
EGR 4092	Internship in Engineering	2	
EGR 4103	Electrical Signals and Systems	3	
MTH 3033	Differential Equations	3	
MTH 3063	Calculus Based Statistics with R	3	
or MTH 3083	Mathematical Probability and Statistics		
Total Units		78	

## Recommended:

Code	Title	Units
EGR 4042	Embedded Systems and Robotics	2
and EGR 4042L	and Embedded Systems and Robotics Lab	
MTH 3043	Discrete Mathematics	3