

# ENGINEERING, B.S.E.

## Concentration

- Computer Engineering (p. 1)

### Computer Engineering Concentration<sup>1</sup>

Code	Title	Units
<b>Lower-Division Requirements</b>		
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
<b>Upper-Division Requirements</b>		
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 or MTH 3083	Calculus Based Statistics with R Mathematical Probability and Statistics	3
<b>Total Units</b>		<b>78</b>

<sup>1</sup> Recommended Courses for Computer Engineering Concentration:  
EGR 4042/EGR 4042L and MTH 3043.