

Department of Engineering Science
Sonoma State University

Four-Year BSES Curriculum

Semester 1	Units	Semester 2	Units
ES 110: Intro. Engg. & Lab Experience	2	PHYS 114: Introduction to Physics I	4
CS 115: Programming I	4	PHYS 116: Introductory Lab. Experience	1
MATH 142E: Discrete Math for Engg.	2	MATH 211: Calculus II	4
MATH 161: Calculus I	4	GE	6
ENGL 101: Exposit. Writ. & Analy. Read.	3	Total	15
Total	15		
Semester 3		Semester 4	
PHYS 214: Introduction to Physics II	4	ES 210: Dig. Cir. & Logic Design (w/lab)	4
ES 220: Electric Circuits	3	ES 230: Electronic I	3
ES 221: Electric Circuits Laboratory	1	ES 231: Electronics I Laboratory	1
MATH 241: Calculus III	4	MATH 261: Calculus IV	4
GE	6	GE	6
Total	18	Total	18
Semester 5		Semester 6	
ES 314: Adv. Prog. Mod. and Sim.	4	ES 310: Microproc. & Sys. Design (w/lab)	4
ES 330: Electronics II (w/lab)	3	ES 440: Analog & Dig. Commun. I (w/lab)	3
ES 400: Linear Systems Theory	3	ES 430: Electromag. Theo. & Applications	3
MATH 345: Probability Theory	4	GE	6
GE	3	Total	16
Total	17		
Semester 7		Semester 8	
ES 441: Anal. & Dig. Commun. II (w/lab)	3	ES 493: Senior Design Project	3
ES 443: Intro. Optical Fiber Commun.	3	Approved Technical Elective I	3
ES 465: Intro. to Networking and Network Management	3	Approved Technical Elective II	3
ES 492: Senior Design Project Planning	2	GE	6
ES 497: Engg. Science Colloquium	1	Total	15
GE	6		
Total	18		

Minimum Graduation Units: 132