

# Department of Engineering Science Sonoma State University

## A Course Plan For SRJC Engineering Students For Transfer as a Junior into the BSES Program at SSU

### I. Complete the following Lower Division courses at SRJC to complete the first two years of BSES Program at SSU:

Lower Division Courses at SRJC	Units	(Equivalent Courses at Sonoma State)	Units
ENGR 10: Intro. To Engineering Profession	1.5	ES 110: Intro to Engg. Lab Experience	2
ELECT 68B: Pulse and Digital Circuits	4	ES 210: Digital Circuits & Logic Design	4
ENGR 16: Electric Circuits and Devices	4	ES 220/221: Electric Circuits Lecture/Lab	4
ELEC 62: Electronic Circuits Theory	4	ES 230/231: Electronics I Lecture/Lab	4
CIS 10: Intro. To Computer Programming	4	CS 115: Programming I	4
PHYS 40 Classical Mechanics	4	PHYS 114/116/214: Intro to Physics I/II	9
PHYS 41 Waves, Optics, Thermo	4		
PHYS 42 Electricity & Magnetism	4		
Math 4: Discrete Mathematics	4	Math 142: Discrete Structures I	3
MATH 1A&1B+MATH 2A&2B+Math 5: Calculus I/II/III/IV & Linear Algebra	19	Math 161/211/241/261: Calculus I/II/III/IV	16
ENGL 1A: Reading and Composition	4	ENGL 101: Exposit. Writ. & Analy. Read.	3
GE	18	GE	18
<b>Total</b>	<b>74.5</b>	<b>Total</b>	<b>67</b>

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### II. The remaining 2 years at SSU will be:

<b>Semester 5</b>		<b>Semester 6</b>	
ES 314: Adv. Prog., Mod. And Simulation	4	ES 310: Microprocessors & System Design	3+1
ES 330: Electronics II (w/lab)	2+1	ES 430: Electromagnetic Theory & Applications	3
ES 400: Linear Systems Theory (MATH 430)	3	ES 440: Analog & Digital Commun. I (w/lab)	2+1
Math 345: Probability Theory	3	GE	6
GE	3	<b>Total</b>	<b>16</b>
<b>Total</b>	<b>16</b>		
<b>Semester 7</b>		<b>Semester 8</b>	
ES 441: Analog & Digital Commun. II (w/lab)	2+1	ES 493: Senior Design Project	3
ES 443: Intro. to Optical Fiber Communications	3	Approved Technical Elective I	3
ES 465: Introduction to Networking	2+1	Approved Technical Elective II	3
ES 492: Senior Design Project Planning	2	GE	6
*ES 497: Engg. Science Colloquium	1	<b>Total</b>	<b>15</b>
GE	6		
<b>Total</b>	<b>18</b>		

\*Not required but strongly recommended.