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## Electronics/Engineering Technology with Emphasis in Mechatronics

<b>Required Core Courses (37 units):</b>		<b>Course Units</b>
COM SC 121	Fundamentals of Programming 1	4
EL/COM EL/ET 104	Intro to Robotics & Mechatronics	3
EL 111 and 112 (8 wk courses)	Fund. of DC Circuit Analysis with Lab	2.5
EL 113 and 114 (8 wk courses)	Fund. of AC Circuit Analysis with Lab	2.5
EL 122 and 123	Electronic Devices & Circuits with Lab	5
COM SC 141 or EL 125	Digital Devices & Circuits	3
COM SC 142 or EL 126	Digital Devices & Circuits Lab	2
MT 330 or WLD T 306	Print Reading & Interpretation	3
EL 146 or WLD T 189	Elect Product Design & Fabrication	2
MT 109	Survey of Machining	4
ET 140	Engineering Drawing	3
SPACE 128	Materials and Processes	3
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<b>Plus specialty courses (15 units), selected from among the following:</b>		
COM SC 122	Fundamentals of Programming 2	3
COM SC 175	Object-Oriented Programming	3
COM SC 164	Software Engineering	3
EL/COM SC 105 or EL/COM SC 320	PC Preventive Maintenance & Upgrade A+ Certification	3
EL/ COM SC 106	Networking Essentials 1	3
EL/ COM SC 107	Networking Essentials 2	3
EL/COM EL/ET 128	Renewable Energy	3
EL/COM EL/ET 131	Programmable Logic Controllers	3
EL/COM EL/ET 133	Transducers & Sensors	3
EL 135	Electronic Measurement & Instr.	3
EL 136	Electronic Measurement & Instr. Lab	2
EL/COM SC 137	Microcomputer Arch. & Software Design	4
EL/COM EL/ET 138	Intro to MC 68000 Microprocessor Family	3
EL/COM EL/ET 139	Elect Power, Motors & Controls	3
EL/COM EL/ET 162	Fluid Power & Control	2
ET 100	Computer Aided Drafting & Design	3
MT 110	Machine Tool Practices	4
PHYS 100 or 110 or PHY SC 111	Concepts in Physics Matter, Energy & Molecules	3 4
SPACE 104	Quality Management Control & Safety	3
WLD T 106	Beginning Welding	3
WLD T 107	Advanced Welding	3
WLD T 307 or 308	GMAW or TIG Welding	3
WLD T 315	Metal Fabrication	4
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<b>Total units for Certificate of Completion</b>		<b>52</b>
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<b>Total units for A.S. Degree (requires 21 general education units)</b>		<b>73</b>