Support of Program Outcomes by Technical Courses in the Major
Electrical Engineering Technology
(Electronics Option)

Program Outcomes	Required Courses															
	ENT300 Analytical Methods	ENT301 Mechanics 1	ENT302 Mechanics 2	ENT331 Electrical Circuits and Devices I	ENT 341 Electronics	ENT342 Networks	ENT351 Analog Electronics	ENT352 Digital Electronics	ENT371 Electric Machines	EN345 Digital Systems	ENT346 Microcontrollers	ENT441 Comm. Transmission Tech	ENT 442 RF and Microwave Comm.	ENT 461 Control Systems I	ENT 462 Control Systems II	ENT 465 Electrical Design
a) an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities					X I	X R	X R	X R	X R	X R	X R	X M	X M	X M	X M	X M
b) an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies	X I	X R	X R			X R	X I	X R	X R	X I	X R	X M	X M	X M	X M	X M
c) an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes				X I	X I		X R	X M		X I	X R	X M	X M	X M	X M	
d) an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives								X R			X R					X M

e) an ability to function effectively as a member or leader on a technical team					X I		X R	X M		X R	X M					X M
f) an ability to identify, analyze, and solve broadly-defined engineering technology problems		X I	X R					X I		X I	X R			X M	X M	X M
g) an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature							X I	X R		X I	X R			X M	X M	X M
h) an understanding of the need for and an ability to engage in self-directed continuing professional development											X I					X M
i) an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity																X R
j) a knowledge of the impact of engineering technology solutions in a societal and global context																X R
k) a commitment to quality, timeliness, and continuous improvement														X R	X R	X R
Application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems				X I	X R	X R	X R	X M		X R	X R			X M	X M	X M
Applications of physics to electrical/electronic(s) circuits in rigorous mathematical environment above the level of algebra and trigonometry	X I					X R		X R						X M	X M	

Ability to analyze, design, and implement control systems, communications systems, microprocessor based systems, and power systems												X M	X M	X M	X M	X M
Ability to apply project management techniques to electrical/electronic(s) systems														X I	X R	X M
Ability to utilize statistics/probability, transform methods, and applied differential equations in support of electrical/electronic(s) systems	X I					X R								X M	X M	

Note: I – Introduction, R – Reinforcement, M – Mastery. Color-filled cells indicate that these courses are used for assessment