

Electro-Mechanical Engineering Technology - Laser Major

Center for Innovative Technologies Division

2016-2017 Curriculum

Course	Title	Pre-Reqs	Lec	Lab	Credit Hours
Semester 1					
CIT-105	OSHA 10 General Industry Safety		1	0	1
EET-131	Circuits Analysis 1		3	2	4
EMET-150	Introduction to Controls and Robotics		1	2	2
FYE-1XX	First Year Experience Elective		1	0	1
MAT-XXX	Mathematics Elective 1		3	2	4
PSET-110	Power Systems CAD		2	3	3
					15

Semester 2					
EET-132	Circuits Analysis 2	EET 131, MAT 125	3	2	4
EMET-180	Process Instrumentation	EET 131, EMET 140	2	3	3
ENG-101	English Composition 1		3	0	3
MAT-XXX	Mathematics Elective 2		3	2	4
MET-150	Statics and Strength of Materials for MET	MAT 121 or MAT 125	2	3	3
					17

Semester 3					
XXX-XXX	Cooperative Education or Transfer Elective 1		1	40	2
					2

Semester 4					
EMET-240	PLCs, Motors, Motor Controls, and Kinematics	EET 132	2	3	3
EMET-245	Laser Foundations and Safety	MAT 121, EMET 140	2	3	3
ENG-10X	English Composition Elective	ENG 101	3	0	3
PHY-XXX	Physics Elective		3	2	4
					13

Semester 5					
EMET-255	Optical Components, Geometrical and Wave Optics	EMET 245	3	3	4
EMET-265	Industrial Laser Systems	EMET 245	3	3	4
EMET-270	Robotics and Servomechanisms	EET 132	3	3	4
XXX-XXX	Humanities Elective	ENG 101	3	0	3
					15

Semester 6					
XXX-XXX	Cooperative Education or Transfer Elective 2		1	40	2
					2
					Total 64

Arts/Humanities Elective: CULT 105, CULT 110, PHI 110

Cooperative Education or Transfer Elective: EMET 291, EMET 292, EET 121, ESET 251, MET 140. Program

Chair approval is required for students planning to take a Transfer Elective course rather than participate in cooperative education

English Composition Elective: ENG 102, ENG 104

First Year Experience Elective: FYE 100, FYE 105, FYE 110

Math Electives: Take one of the following series: MAT 125 and MAT 126; or MAT 251 and MAT 252

Physics Elective: PHY 151, PHY 201