

Electro-Mechanical Engineering Technology - Laser Major

Engineering & Information Technologies

2021-2022 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-110 | CAD for Electro-Mechanical Systems | | 2 | 3 | 3 |
| 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 |

15

Semester 2

| | | | | | |
|----------|--------------------------------|------------------------------|---|---|---|
| EET-132 | Circuits Analysis 2 | EET 131, MAT 125 | 3 | 2 | 4 |
| EMET-141 | Programmable Logic Controllers | EET 131, EMET 150, & MAT 125 | 2 | 3 | 3 |
| 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 |

17

Semester 3

| | | | | | |
|---------|--|---------|---|---|---|
| MET-150 | Statics and Strength of Materials for MET | MAT 124 | 2 | 3 | 3 |
| XXX-XXX | Cooperative Education or Transfer Elective 1 | | 1 | 3 | 2 |

5

Semester 4

| | | | | | |
|----------|---|-----------------------------|---|---|---|
| EMET-245 | Laser 1 | MAT 124, EMET 150 | 2 | 3 | 3 |
| EMET-252 | Motors, Motor Controls, & Variable Drives | EET 132, EMET 141, EMET 150 | 2 | 3 | 3 |
| ENG-10X | English Composition Elective | ENG 101 | 3 | 0 | 3 |
| PHY-XXX | Physics Elective | | 3 | 2 | 4 |

13

Semester 5

| | | | | | |
|----------|---|--------------------|---|---|---|
| EMET 246 | Laser 2 | EMET 245 | 2 | 3 | 3 |
| EMET-270 | Robotics and Servomechanisms | EET 132 | 2 | 3 | 3 |
| EMET-275 | Electric Drive Mechanisms | EMET 180, EMET 252 | 2 | 3 | 3 |
| XXX-XXX | Arts/Humanities or Social/Behavioral Sci Elective | ENG 101 | 3 | 0 | 3 |

12

Semester 6

| | | | | | |
|---------|--|--|---|----|---|
| XXX-XXX | Cooperative Education or Transfer Elective 2 | | 1 | 40 | 2 |
|---------|--|--|---|----|---|

2

Total **64**

Arts/Humanities or Social/Behavioral Science Elective: Any ECO, GEO, HST, LBR, LIT, PHI

Cooperative Education or Transfer Elective: EMET 291, EMET 292, EET 121, ESET 251, MET 140, CIT 250. 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