

BSET in Electromechanical Engineering Technology

4-Year Plan of Study (traditional student)

Catalog: 2025-2026

| CFY | Fall Classes | | Spring Classes | |
|--|------------------------------------|--|---|-----|
| | Course Title | SCH | Course Title | SCH |
| | ENGR 1300 Exploring Eng. and Tech. | 2 | ENGR 1302 Logic and Comp. Prob. Solving | 3 |
| ENGR 1301 Foundations of Math and Sci. | 3 | ENGR 1303 Eng. Vis. and Graphical Com. | 3 | |
| MATH #1 (MATH1103 or MATH1241) | 3 | Math #2 (MATH1241 or MATH1242) | 3 | |
| XXXX 1501 Social Science (Global Theme) | 3 | PHYS 2101 Physics I | 3 | |
| XXXX 1502 Arts / Humanities (Global Theme) | 3 | PHYS 2101L Physics I Lab | 1 | |
| | | WRDS 1103 Writing & Inquiry | 3 | |
| Semester Total: | | 14 | Semester Total: 16 | |

| 2nd Year | ETEM 2101 Circuit Fundamentals | 3 | ETEM 2271 Digital Fundamentals | 3 |
|----------|---|---|---|--------------------|
| | ETEM 2161 Foundations of Mechanics | 3 | ETEM 2281 Doing and Making | 3 |
| | ETEM 2171 Algorithms and Programming | 3 | ETEM 2291 Practical System Design | 3 |
| | ETEM 2181 Circuits and Machines in Action | 2 | ETGR2272 or MATH1242 (If credit, Math/Sci Elective) | 3 |
| | ETME 2111 CAD Fundamentals | 3 | Natural Science General Education (see list) | 3 |
| | Semester Total: | | 14 | Semester Total: 15 |

| 3rd Year | ETEM 3101 Principles of Control | 3 | ETEM 3191 From Concept to Product | 3 |
|-----------------|---|----|---------------------------------------|---|
| | ETEM 3131 Electromechanical Devices | 3 | ETEM 3231 Power, Machines, and Energy | 3 |
| | ETEM 3171 Digital Devices | 3 | ETEM 3261 Applied Control Systems | 3 |
| | ETEM 3181 Exploring Devices | 1 | ETEM 4161 Elements of Automation | 3 |
| | ETEM 4141 Digital Manufacturing Methods | 3 | XXXX 1511 or XXXX 1512 Local Theme | 3 |
| | CTCM 2530 Critical Thinking & Communication | 3 | | |
| Semester Total: | | 16 | Semester Total: 15 | |

| 4th Year | ETEM 3281 More Doing and Making | 3 | ETEM 4200 Electromechanical Capstone Design II | 2 |
|-----------------|---|----|--|------------|
| | ETEM 4100 Electromechanical Capstone Design I | 2 | ETEM 4261 Robotics and Cyber-Physical Systems | 3 |
| | ETEM 4131 Intelligent Industrial Systems | 3 | ETEM 4600 Technology Seminar | 1 |
| | ETGR 3295 Multidisc. Prof Development | 1 | Restricted Elective | 3 |
| | Restricted Elective | 3 | Restricted Elective | 3 |
| | Restricted Elective | 3 | XXXX 1575 American Democracy | 3 |
| Semester Total: | | 15 | Semester Total: 15 | |
| | | | Total Student Credit Hours: | 120 |