



ASSOCIATE OF APPLIED SCIENCE
ELECTRICAL/ELECTRONIC ENGINEERING
TECHNOLOGY – ELECTRO-MECHANICAL
MAJOR

2021 Catalog
Effective Summer 2020

4101

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Engineering Technologies Division

Engineering Technology Department

| TECHNICAL Course Number | Course Title | Credits | Pre- and Co-Requisites | Completed Sem./Year |
|---------------------------|--|-----------|---|---------------------|
| EET120 | DC Circuit Analysis | 4 | Pre-Co-MTH125 or Pre-Co-MTH135 | |
| EET122 | AC Circuit Analysis | 4 | (Pre-Co-MTH130 or Pre-Co-MTH135) and EET120 | |
| EET123 | Electronic Devices and Circuits | 4 | EET120 and Pre-Co-EET122 | |
| EET126 | Electrical Machines | 4 | Pre-Co-EET122 | |
| EET227 | PLCs and Industrial Controls I | 3 | EET120 or EST230 | |
| MET124 | Statics and Strength of Materials | 4 | Pre-Co-PHY121 or Pre-Co-PHY221 | |
| MET228 | Machine Design | 4 | MET124 | |
| MET226 | Technical Project – Mechanical and Design | 2 | Pre-Co-MET228 and Pre-Co-DET125 | |
| MET227 | Thermodynamics and Heat Transfer | 3 | PHY121 | |
| MET123 | Material Science | 3 | | |
| Total | | 35 | | |
| NON-TECH Course Number | Course Title | Credits | Pre- and Co-Requisites | Completed Sem./Year |
| SSC101 | Student Success Seminar ^{^^} | 1 | <i>Take first semester</i> | |
| CSE122 | Programming Logic and Problem Solving [^] | 3 | (IDS102 or Proficiency) and (ITD100 or Proficiency) | |
| DET125 | Basic AutoCAD | 3 | | |
| EET263 | Industrial Sensors and Advanced Applications | 2 | EET120 or EST230 | |
| MET225 | Manufacturing Processes | 3 | | |
| MTH135 | Precalculus [^] – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement. | 5 | MTH025 or Proficiency | |
| PHY121 | College Physics I with Algebra (lab) [^] | 4 | MTH135 or (MTH125 and MTH130) or Proficiency | |
| ENG124 | College Composition [^] | 3 | Co-ENG024 or Co-ENG011 or Proficiency | |
| ENG221 | Technical Report Writing | 3 | ENG124 | |
| | Select one (1) Arts & Humanities Elective from list below ^l | 3 | Check for pre-requisites | |
| Total | | 30 | | |
| TOTAL CREDIT HOURS | | 65 | | |

[^]Based on SSC placement scores

^{^^}To promote student success, this course should be taken in the first semester

^lArts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

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| 2021 Catalog Effective Summer 2020 | ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – ELECTRO-MECHANICAL MAJOR | 4101 |
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PART-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for part-time associate degree students who plan to finish in eight semesters.

| <u>First Semester</u> | | <u>Credit Hours</u> | <u>Pre- or Co-requisite</u> |
|---|---|---------------------|---|
| SSC101 | Student Success Seminar^^ | 1 | <i>Take first semester</i> |
| CSE122 | Programming Logic and Problem Solving^ | 3 | (IDS102 or Proficiency) and (ITD100 or Proficiency) |
| MTH135 | Precalculus^ – <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.</i> | <u>5</u> | MTH025 or Proficiency |
| | | 9 | |
| <u>Second Semester</u> | | | |
| ENG124 | College Composition^ | 3 | Co-ENG024 or Co-ENG011 or Proficiency |
| EET120 | DC Circuit Analysis | <u>4</u> | Pre-Co-MTH125 or Pre-Co-MTH135 |
| | | 7 | |
| <u>Third Semester</u> | | | |
| EET122 | AC Circuit Analysis | 4 | (Pre-Co-MTH130 or Pre-Co-MTH135) and EET120 |
| PHY121 | College Physics I with Algebra (lab)^ | <u>4</u> | MTH135 or (MTH125 and MTH130) or Proficiency |
| | | 8 | |
| <u>Fourth Semester</u> | | | |
| MET124 | Statics and Strength of Materials | 4 | Pre-Co-PHY121 or Pre-Co-PHY221 |
| EET126 | Electrical Machines | <u>4</u> | Pre-Co-EET122 |
| | | 8 | |
| <u>Fifth Semester</u> | | | |
| MET123 | Material Science | 3 | |
| EET123 | Electronic Devices and Circuits | 4 | EET120 and Pre-Co-EET122 |
| EET227 | PLCs and Industrial Controls I | <u>3</u> | EET120 or EST230 |
| | | 10 | |
| <u>Sixth Semester</u> | | | |
| MET227 | Thermodynamics and Heat Transfer | 3 | PHY121 |
| ENG221 | Technical Report Writing | 3 | ENG124 |
| DET125 | Basic AutoCAD | <u>3</u> | |
| | | 9 | |
| <u>Seventh Semester</u> | | | |
| EET263 | Industrial Sensors and Advanced Applications | 2 | EET120 or EST230 |
| MET228 | Machine Design | 4 | MET124 |
| MET226 | Technical Project – Mechanical and Design | <u>2</u> | Pre-Co-MET228 and Pre-Co-DET125 |
| | | 8 | |
| <u>Eighth Semester</u> | | | |
| MET225 | Manufacturing Processes | 3 | |
| <i>Arts & Humanities Elective¹</i> | | <u>3</u> | <i>Check for prerequisites</i> |
| | | 6 | |
| | TOTAL CREDITS | 65 | |

^^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester

¹Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122