Electrical Engineering Technology Major

Major Course Requirements AY 2021-2023

66-72 Program Credits

**Support Group (11-14 cr)**
- MATH 161 Technical Calculus I (3 cr) or MATH 171 Calculus I (5 cr)
- MATH 162 Technical Calculus II (3 cr) or MATH 172 Calculus II (4 cr)
- PHYS 171 General Physics I (5 cr) or PHYS 191 General Physics I (5 cr)

**Fundamentals Group (28-29 cr)**
- EGR 105 Engineering Fundamentals (3 cr)
- EGR 110 Engineering Graphics (2 cr)
- EGRT 130 Basic Electrical Circuits I (4 cr)
- EGRT 131 Basic Electrical Circuits II (4 cr)
- COMPSCI/EGRT 142 Intro to Programming (3 cr) or COMPSCI 221 Object Oriented Design & Program I (3 cr) or COMPSCI 216 Problem Solving & Program Techniques C++ (4 cr)
- EGRT 232 Semiconductor Devices (3 cr)
- EGRT 240 Logic & Control Devices (3 cr)
- EGRT 246 Electric Power Systems (3 cr)
- EGRT 260 Automation Controllers (3 cr)

**Advanced Study Group (24-26 cr)**
- EGRT 320 Motors & Drives (4 cr)
- EGRT 325 Signals & Systems (3 cr)
- EGRT 333 Linear Circuits (3 cr)
- EGRT 342 Measure, Control & Data Acq (3 cr)
- EGRT 350 Data Comm & Protocols (3 cr)
- EGRT 360 Project Management (3 cr)
- EGRT 390 Mechatronics (4 cr)
- EGRT 400 Internship (1-3 cr) or EGRT 410 Capstone Project (3 cr)

**Required Elective (3 cr) – choose one of the following**
- EGR 282 Engineering Economics (3 cr)
- EGRT 257 Introduction to the Internet of Things (3 cr)
- EGRT 348 Electromagnetic Fields & Applications (3 cr)
- EGRT 352 Communication Systems (3 cr)
- EGRT 365 Special Topics (3 cr)

**Other Electives (no required credits)**
- EGRT 284 Professional Skills in Engineering (1 cr)
- EGRT 446 Independent Study (1-3 cr)