

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)