

# Mechanical Engineering Technology Major

## Course Requirements

### 70-75 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 (32 cr)

EGR 105 Engineering Fundamentals (3 cr)  
EGR 110 Engineering Graphics (3 cr)  
EGRT 116 Basic Manufacturing Processes (3 cr)  
EGRT 118 Fluid Control (3 cr)  
EGRT 130 Electrical Circuits I (4 cr)  
EGRT 207 Parametric Modeling (3 cr)  
EGRT 221 Machine Components (3 cr)  
EGR 201 Engineering Mechanics: Statics (3 cr)  
EGR 202 Engineering Mechanics: Dynamics (3 cr)  
EGR 203 Mechanics of Materials (4 cr)

#### Advanced Study Group (24-26 cr)

EGRT 320 Motors & Drives (4 cr)  
EGRT 322 Design Problems (3 cr)  
EGRT 330 Thermodynamics (3 cr)  
EGRT 335 Heat Transfer (3 cr)  
EGRT 342 Measurement, Control & Data Acq (3 cr)  
EGRT 360 Project Management (3 cr)  
EGRT 390 Mechatronics (4 cr)  
EGR 400 Internship (1-3 cr)                                or        EGR 410 Capstone Project (3 cr)

#### Required Elective (3 cr) – choose one of the following

EGR 282 Engineering Economics (3 cr)  
EGRT 308 Finite Element Analysis (3 cr)  
EGRT 318 Fluid Mechanics (3 cr)  
EGRT 365 Special Topics (3 cr)

#### Other Electives (no credits required)

EGRT 284 Professional Skills in Engineering (1 cr)  
EGRT 446 Independent Study (1-3 cr)