### **APPLIED ENGINEERING & TECHNOLOGIES**

# Mechanical Engineering Technology

# Mechanical Engineering Technology Degree - A40320

The Mechanical Engineering Technology curriculum provides a board and diverse educational experience. Course work includes computer-aided drafting and design, applied mechanics, materials engineering, quality control, manufacturing methods and processes, computer usage, mathematics, physics and oral and written communications. The courses will stress critical thinking, planning and problem solving.

The diversity of Mechanical Engineering Technology degree enables students to pursue exciting careers in following fields:

- Engineering/Architectural
- Mechanical Design
- Manufacturing
- Quality
- Service

If elected, students can pursue a 4 year Engineering Technology degree after graduation.

## Mechanical Design Certificate - C40320B

Study of design elements for CAD users.

#### Thermal Mechanics Certificate - C40320C

The Thermal Mechanics Certificate provides a refresher or a concentration in thermal sciences.

#### Materials Engineering Certificate - C40320D

The Materials Engineering Certificate will provide students with an understanding of engineering materials and processes.

#### Additive Manufacturing Certificate - C40320G

The Additive Manufacturing Certificate will help students understand modeling and manufacturing processes used in additive manufacturing such as 3D printing.

#### Mechanical Drafting Certificate - C40320H

#### Mechatronics Certificate - C40320I

#### **Program Sequence**

First DFT EGR MEC ENG MAT	115 161 111	ter CAD I Introduction to Technology Manufacturing Processes I Expository Writing Algebra/Trigonometry I	3 3
Secon DFT DFT MEC ENG PHY	153 130 114	nester  CAD II  CAD III  Mechanisms  Professional Research and Reporting  Physics-Mechanics	3 3
TDP	<b>Seme:</b> 110 118	Intro to 3D Printing	

Fourth Semester           DFT 154 Intro to Solid Modeling         3           EGR 251 Statics         3           MEC 180 Manufacturing Materials         3           MEC 265 Fluid Mechanics         3           Elective List I         3			
Complete Mechanical Design Certificate (C40320B): DFT 151, DFT 154, MEC 130, MEC 180			
Complete Materials Engineering Certificate (C40320D): DFT 151, MEC 130, MEC 161, MEC 180			
Complete Additive Manufacturing Certificate (C40320G): DFT 151, DFT 154, MEC 161, MEC 180, TDP 110			
Complete Mechanical Drafting Certificate (C40320H): DFT 151, DFT 152, DFT 153, DFT 154, TDP 110			
Complete Mechatronics Certificate (C40320I): ELN 260 + MEC 130, MEC 161, MEC 265			
Fifth Semester           EGR 252         Strength of Materials         3           EGR 285         Design Project         2           ISC 121         Env Health and Safety         3           MEC 267         Thermal Systems         3           HUM 110         Technology and Society         3			
Complete Thermal Mechanics Certificate (C40320C): DFT 154, MEC 180, MEC 265, MEC 267			
ARC         225         Architectural BIM I         2           ARC         225A         Architectural BIM I         1           CEG         111         Introduction to GIS and Gnss         4           ELC         128         Introduction to PLC         3			
WBL 111         Work-Based Learning I			

Graduation Requirements ......66 Credit Hours