

## **SUNY NIAGARA**

# Mechanical Technology: Mechanical Design, A.A.S.

First Semester

#### Overview

Courses include Engineering Drawing,
Computer Aided Drafting (CAD), Robotics,
Hydraulics and Pneumatics, Mechanics of
Materials and Mechanical Design. These
provide students with a solid educational
foundation which enable graduates to pursue
various technical careers and compete in the
global economy. Additional courses in
mathematics, physics and computer applications
establish a base for further advancement.
Assignments in the college laboratories are
intended to simulate industrial situations.

Designed for transfer into a 4-year institution.

#### **Careers**

Careers related to your program of study:

- · Engineering Technician
- · Mechanical Engineering Technician
- · Mechanical Machine Designer
- Mechanical Technician / Technologist
- Meteorologist
- Quality Assurance Technician / Inspector
- Receiving Inspection Clerk
- Specialized Service Technician (office products, precision instruments, industrial robots, welding systems, etc.)

Some careers may require more specialized education.

## **Contact**

### **Program Coordinator**

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#### **Division**

Business & STEM / 716-614-6410

Visit full catalog for specific course offerings for each semester:

www.niagaracc.suny.edu/programs/mech

# **Program Requirements**

	Juito
ENG 101 - Writing I	3
MAT 111 - Advanced Algebra & Trigonometry 4 Cr. OR	
MAT Higher Level of Mathematics by Advisement	4
MET 110 - Engineering Drawing I	2
MET 125/L - Processes w/ Lab	3
TEC 110 - Introduction to Technical Calculations	1
General Ed. Elective (SOCS, USCV, ARTS, HI	JMN,
GLBL, WLNG)	3
Total Credit Hours:	16 Cr.
Second Semester	
DRF 173/L – Intro to Computer Aided Drafting Design w/	Lab 2
ELT 110/L - Principles of Electricity w/ Lab	4
Communication – Oral (COMO) General Educ	ation
elective	3
TEC 102/L - Introduction to 3D Technology w/ Lab	3
TEC 120 - Applied Engineering Mechanics	3
TEC 121L - Applied Engineering Mechanics Lab	1
Health/Physical Education Elective	1
Total Credit Hours:	17 Cr.
Third Semester	
MET 205 - Mechanics of Materials	3
MET 260/L- Hydraulics and Pneumatics w/ Lab	3
MET 270/L - Instrumentation w/ Lab	3
TEC 250/L - Introduction to Robotics w/ Lab	2
Mechanical Design Elective (Selected from CA	DD) 4
Total Credit Hours:	15 Cr.
Fourth Semester	
PHY 131/L – General Physics I w/ Lab	4
- Mechanical Design Elective (Selected from CA	
Technical Elective	3
- Health/Physical Education Elective	1
Diversity: Equity, Inclusion & Social Justice (D\	
General Ed. Elective	3
Total Credit Hours:	15 Cr.

Credits