SUNY NIAGARA

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

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
- Metrologist
- 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
Braidy Barnes
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Division
Business & STEM / 716-614-6410

Visit full catalog for specific course offerings for each semester:
https://sunyniagara.edu/courses/mechanical-technology-mechanical-design-a-a-s/

Program Requirements

First Semester

	Credits
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, HUMN, 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 Education elective	3
TEC 102/L - Introduction to 3D Technology w/ Lab	3
___ ___ - Diversity: Equity, Inclusion & Social Justice (DVRS) General Ed. Elective	3
Total Credit Hours:	**15 Cr.**

Third Semester

TEC 120 - Applied Engineering Mechanics	3
TEC 121L - Applied Engineering Mechanics Lab	1
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 CADD)	4
Total Credit Hours:	**16 Cr.**

Fourth Semester

MET 205 - Mechanics of Materials	3
PHY 131/L – General Physics I w/ Lab	4
___ ___ - Mechanical Design Elective (Selected from CADD)	4
___ ___ - Technical Elective	3
___ ___ - Health/Physical Education Elective	2
Total Credit Hours:	**16 Cr.**