



Overview

If you enjoy problem solving and have an interest in design, technology, and advanced materials, the Engineering Science program is for you. It provides a strong foundation in Aerospace, Mechanical, Civil, Chemical, Environmental, or Industrial Engineering. With a few course substitutions, you can also meet SUNY seamless transfer requirements for Computer or Biomedical Engineering. Core courses in mathematics, science and engineering emphasize both theory and practical application

Designed for transfer into a 4-year institution.

Tracks

This is one of five tracks in Aero / Mechanical, Civil, Chemical, Environmental & Industrial

Careers

Careers related to Engineering Science:

- Engineer (Design, Manufacturing, Process, Research, Structural, Sustainability, Test)
- Construction Management
- Engineering Mgmt., Project Mgmt.
- Logistics, Operations, Supply Chain Mgmt.
- Patent Attorney, Medical Doctor
- Technical Sales, Marketing
- Entrepreneur, Engineering Consultant

All careers require more education.

SUNY NIAGARA

Engineering Science, A.S. Aerospace/Mechanical Track Contact

Program Coordinator

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Division

Business & STEM
716-614-6410

Visit full catalog for specific course offerings for each semester:

<https://sunyniagara.edu/courses/engineering-science-a-s/>

<https://tinyurl.com/4razkz3a>

Program Requirements

First Semester

Credits

MAT 120 - Calculus and Analytic Geometry I	4
CHE 120 - General Chemistry I	4
CHE 111L - General Chemistry I Lab	1
ENG 101 - Writing I	3
ENS 120 - Engineering Data & Applications	3
____ - General Education Elective (ARTS and HUMN)	3

Total Credit Hours:**18 Cr.**

Second Semester

ENG 102 - Writing II OR	
ENG 103 - Writing for STEM	3
MAT 121 - Calculus and Analytic Geometry II	4
MET 110 - Engineering Drawing I	2
PHY 171 - Calculus-Based Physics and Mechanics	4
PHY 171L - Calculus-Based Physics and Mechanics Lab	0
____ - General Education Elective (DVRS and SOCS OR DVRS and USCV)	3
Total Credit Hours:	16 Cr.

Third Semester

ENS 217 - Statics	3
ENS 283 - Thermodynamics	3
ENS 110 - Computer Programming for Engineers	4
MAT 222 - Calculus and Analytic Geometry III	4
PHY 172 - Calculus-Based Physics II	4
PHY 172L - Calculus Based Physics II Lab	0
Total Credit Hours:	18 Cr.

Fourth Semester

MAT 223 - Differential Equations	4
ENS 218 - Dynamics	3
ENS 219 - Engineering Mechanics of Materials	3
ENS 285 - Engineering Circuit Analysis	3
MAT 255 - Linear Algebra OR	
MAT 164 - Introduction to Statistics	3
Total Credit Hours:	16 Cr.

The information provided is subject to change throughout the academic year. 3/9/2026