SUNY NIAGARA

Engineering Science, A.S.

Chemical Track

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.

Contact

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Division
Business & STEM
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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
CHE 120 - General Chemistry I	4
CHE 111L - General Chemistry I Lab	1
ENG 101 - Writing I	3
ENS 120 - Engineering Data & Applications	3
MAT 120 - Calculus and Analytic Geometry I	4
___ ___ - General Education Elective (DVRS and SOCS OR DVRS and USCV)	3
Total Credit Hours:	**18 Cr.**

Second Semester

CHE 121 – General Chemistry II	4
CHE 113L – General Chemistry II Lab	1
ENG 102 - Writing II OR	
ENG 103 - Writing for STEM	3
MAT 121 - Calculus and Analytic Geometry II	4
PHY 171 - Calculus-Based Physics and Mechanics	4
PHY 171L - Calculus-Based Physics and Mechanics Lab	0
Total Credit Hours:	**16 Cr.**

Third Semester

CHE 234 – Organic Chemistry I	4
CHE 235L – Organic Chemistry I Lab	1
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:	**17 Cr.**

Fourth Semester

BIO 109 - General Biology I AND	
BIO 109L – General Biology I Lab OR	
CHE 236 – Organic Chemistry II AND	
CHE 237L – Organic Chemistry II Lab	4/5
ENS 285 - Engineering Circuit Analysis	3
MAT 223 - Differential Equations	4
MAT 255 - Linear Algebra	3
___ ___ - General Education Elective (ARTS and HUMN)	3
Total Credit Hours:	**17/18 Cr.**

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