Proposed Program Map

	Credit Hours
Semester One	
EGR 100 Engineering Lecture	1
CHM 140 General Chemistry I	5
MAT 131 Calculus & Analytic Geometry I	5
RHT 101 Freshman Rhetoric & Composition I	3
ECO 102 Macroeconomics (General Education Elective and required for degree)	3
	17
Semester Two	
MAT 133 Calculus & Analytic Geometry II	5
PHY 106 General Physics (Mechanics)	5
RHT 102 Freshman Rhetoric & Composition II	3
EGR 195 Programming for Engineers **or** CIS 121 Introduction to Programming	3
	16
Semester Three	
General Education Elective (Social/Behavioral Science or Fine Arts)	3
EGR 152 Engineering Statics	3
MAT 235 Calculus & Analytic Geometry III	5
PHY 107 General Physics (Electricity & Magnetism)	5
	16
Semester Four	
MAT 341 Differential Equations	3
Take Credits Program (Engineering) Electives	9-16
	12-19
AES Degree Total Credit Hours	**61-68**

02/12/25

TRITON COLLEGE ARTS & SCIENCES

Arts & Sciences Associate in Engineering Science Degree Program

(Pending ICCB Approval)

The Associate in Engineering Science (AES) degree at Triton College provides an affordable, local option for students aiming to earn a Bachelor of Science in Engineering. By completing the first two years of their degree at Triton College, students take courses that align with those offered at universities and are transferable to four-year institutions. The AES curriculum is designed to equip students with the foundational knowledge necessary to succeed in demanding engineering programs at four-year universities. This program requires students to take Calculus I in the first semester at Triton College. To be prepared to take Calculus 1, high school students are strongly encouraged to take an additional math course beyond the standard three units earned in high school.

Triton's AES degree offers two pathways for students interested in engineering as a career.

Degree Pathway 1. The Grainger College of Engineering at the University of Illinois at Urbana-Champaign offers a concurrent Engineering Pathways Program with Triton's AES Degree Program. This pathway guarantees admission to the Engineering Pathways Program for qualified students upon successful completion of the AES degree and Grainger-specific requirements.

Degree Pathway 2. The traditional AES degree pathway provides students with the necessary courses to transfer to many four-year universities in Illinois. All courses within Triton's AES degree are aligned with the requirements of these institutions. However, students following the traditional pathway will earn the AES degree without a guarantee of starting as a junior in their engineering program at the transfer institution. Students in this pathway will need to work directly with the transfer institution to determine if additional courses are required to enter the engineering program as a junior.

In addition to the two AES degree pathways, Triton College is a recipient of the FORGE (Fostering Opportunities in Research and Growth Through Engineering) Grant. This grant will provide five students with a full Triton scholarship and a paid internship at Fermilab while they complete their AES degree.

The Associate in Engineering Science degree is a 61-68 credit hour degree program.

I. Associate in Engineering Science–Traditional Pathway

a. Target Audience
   i. Dual Enrollment students (Part-time).
   ii. Current high school seniors graduating in May 2025.

b. Placement requirement to enter program: Calculus I and RHT-101.

II. Associate in Engineering Science & Engineering Pathways at UIUC Grainger College of Engineering

a. Target Audience
   i. Current high school seniors graduating in May 2025.

b. Dual admission to Triton and UIUC.
c. Placement requirement to begin Triton's AES Degree Program: Calculus I and RHT-101.
d. ALEKS placement for UIUC.
e. Maintain a 3.5 GPA throughout the two-year AES Degree Program.
f. Follow UIUC's Engineering Pathways plan of study.
g. Earn a B or better in each required program course.
h. Must take 15 credit hours or more each semester.
i. Successful completion of Triton's AES degree in two years.
j. Guaranteed admission to UIUC's Engineering Pathways upon completion of AES degree in two years.
k. Important note: Dual credit and dual enrollment courses will not be accepted for credit in this pathway.

III. FORGE Traineeship Program

a. Target Audience
   i. Current in-district high school seniors interested in pursuing an engineering degree.
   ii. Current in-district high school seniors with strong academic records in STEM.
   iii. Current in-district high school seniors participating in STEM-focused dual-credit courses.

b. Application Requirements
   i. Submission of Triton application and completion of placement measures; Placement at Calculus I and Rhetoric 101.
   ii. 7th semester academic transcripts (minimum GPA of 3.5, unweighted).
   iii. Personal statement (max two pages) detailing interest in engineering career aspirations.
   iv. Recommendation letter from a STEM high school teacher.
   v. Interview conducted by the selection committee.

c. Additional Requirements (For Eligibility to Intern at Fermi Lab)
   i. Must be a high school graduate and at least 18 years of age by the start of fall 2025 semester.
   ii. Must be a US citizen.
   iii. Must provide proof of medical insurance.

d. Selected students will be notified by May 1, 2025.
e. Orientation for students in May 2025.

IV. Next Steps–In-person information session to be scheduled for interested students.