

Associate in Engineering Science (320)

Engineering programs are highly structured to meet the Accreditation Board for Engineering and Technology (A.B.E.T.) standards required for registration as a professional engineer. Community College students are strongly encouraged to complete an Associate in Engineering Science (A.E.S.) degree. You are unlikely to earn the bachelor's degree within 2 more years after transfer if you enter with less than 68 semester credits.

You should decide on an Engineering specialty and your preferred transfer institution by the beginning of your sophomore year since course requirements vary by specialty and by institution. Be sure to select your courses in consultation with an Engineering advisor. Students should decide on an Engineering specialty and a preferred transfer school by the beginning of their sophomore year since course requirements vary by specialty and by transfer school.

A grade of "C" or better may be required for physics, chemistry, mathematics, and engineering science courses to transfer. A similar policy may exist for general education courses. The student is advised to check directly with his/her preferred transfer school.

Click here for career information: <https://www.svcc.edu/academics/programs/individual/320.html>

IMPORTANT NOTE TO STUDENTS: The Engineering major panel recommends students complete the general education requirements of the AES instead of the traditional GECC requirement of the AA degree. If students pursuing an engineering major choose to complete the full GECC, it is likely that students will have too many hours in transfer and/or will miss important prerequisites/major courses that will prolong the time it takes to obtain the bachelor's degree.

Students who have already chosen the university to which they plan to transfer should consult that institution's catalog or department advisor and an SVCC academic advisor in planning their program.

Program Contacts at Sauk Valley Community College

Academic Advising, 815/835-6354

Steven McPherson, Associate Professor, 815/835-6347

Engineering - IAI Recommended Baccalaureate Curriculum

Suggested Specialty Programs Chart

[Associate in Engineering Science Degree Chart](#)

Total Hours Required - 66-67 Hours

Suggested Program

First Semester - 16 Hours

- **Humanities/Fine Arts 3 Semester hour(s)
- CHE 105 - General Chemistry I (5 Semester Hours)
- ENG 101 - Composition I (3 Semester Hours)
- FYE 101 - First Year Experience (1 Semester Hours)
- MAT 203 - Calculus & Analytic Geometry I (4 Semester Hours)

Second Semester - 18 Hours

- ***Approved Computer Programming Language 3 Semester hour(s)
- *Engineering Specialty Course 3 Semester hour(s)
- ENG 103 - Composition II (3 Semester Hours)

- MAT 204 - Calc & Analytic Geometry II (4 Semester Hours)
- PHY 211 - Engineering Physics I (5 Semester Hours)

Third Semester - 14-18 Hours

- *Engineering Specialty Courses 3-7 Semester hour(s)
- ECO 212 - Principles of Microeconomics (3 Semester Hours)
- MAT 211 - Differential Equations (3 Semester Hours)
- PHY 212 - Engineering Physics II (5 Semester Hours)

Fourth Semester - 15-18 Hours

- *Engineering Specialty Courses 6 Semester hour(s)
- **Humanities/Fine Arts or Social/Behavioral Science 0-3 Semester hour(s)
- MAT 205 - Calc & Analytic Geometry III (4 Semester Hours)
- PHY 213 - Engineering Physics III (5 Semester Hours)

Footnotes

- *Engineering specialty courses-See chart on the following page for specific course listings.
- **If only three hours are completed in Humanities/Fine Arts, then six hours are required in Social/Behavioral Sciences and vice versa. Certain specialty areas in engineering require only three hours (1 course) from both Humanities/Fine Arts and Social/Behavioral Sciences. In turn, more credit hours are required in engineering specialty courses. Refer to AES degree chart in the SVCC catalog for specific course recommendations by specialty area. Also, see an counselor or academic advisor to complete required paperwork (substitution form) to document this combination of courses. A non-Western or minority course is recommended. If two courses are selected in a field, a two-semester sequence in the same discipline is recommended.
- ***MAT 150 or 207 or CIS Programming Course-Structured Languages.