Bachelor's degree programs in Mathematics prepare students with diverse career goals by developing rigorous, logical thinking; an appreciation and familiarity with complex structures and algorithms; and the ability to learn technical material and abstract concepts. Community college students seeking a bachelor's degree in Mathematics are strongly encouraged to complete an Associate in Science (A.S.) degree prior to transfer. To transfer as a junior into a bachelor's math program students must complete a minimum of 60 semester credits (64 for the Associate degree). Since admission is competitive, completing the recommended courses does not by itself guarantee admission. A grade of "C" or better may be required for chemistry, mathematics, and engineering science courses to transfer.

Effective Fall of 2016, the associate in science (A.S.) degree is designed to complete the lower-division (freshman and sophomore) portion of a bachelor of science degree in STEM related majors. As a result, A.S. degree does not include the entire General Education Core Curriculum. Therefore, students will need to complete MORE general education courses after transfer by completing the GECC curriculum while enrolled at the participating Illinois transfer institution OR fulfilling the general education requirements of their selected non-participating transfer institution.

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. Students contemplating careers as high school mathematics teachers should meet with an academic advisor.

Mathematics - IAI Recommended Baccalaureate Curriculum

### Program Contacts at Sauk Valley Community College

- Academic Advising, 815-835-6354
- Carrie Conderman, Professor of Mathematics, 815-835-6356
- Ronald Hobson, Professor of Mathematics, 815-835-6214
- Kevin Megill, Associate Professor of Computer Information Systems, 815-835-6251
- Steven Shaff, Professor of Mathematics, 815-835-6238
- Scott VanZuiden, Professor of Mathematics, 815-835-6349

# **Total Hours Required - 64-68 Hours**

## **Suggested Program**

First Semester - 15-17 Hours

- Life Science 3-5 Semester hour(s)
- Social/Behavioral Science 3 Semester hour(s)
- Personal Development 1 Semester hour(s)
- 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 - 16 Hours**

- Personal Development 1 Semester hour(s)
- ENG 103 Composition II (3 Semester Hours)
- CIS 207 C++ Programming (3 Semester Hours)

### OR

MAT 150 - Computer Prog Math & Engineer (3 Semester Hours)

• \*

MAT 204 - Calc & Analytic Geometry II (4 Semester Hours)

• PHY 211 - Engineering Physics I (5 Semester Hours)

### **Third Semester - 16-18 Hours**

- Social/Behavioral Science 3 Semester hour(s)
- Fine Arts 3 Semester hour(s)
- Additional Science 3-5 Semester hour(s)
- \*\*Electives and/or Humanities/Fine Arts 4 Semester hour(s)
- \*\*\*

MAT 211 - Differential Equations (3 Semester Hours)

### OR

\*\*ELECTIVES 3 SEMESTER HOUR(S)

### Fourth Semester - 17 Hours

- Fine Arts 3 Semester hour(s)
- Personal Development 1 Semester hour(s)
- \*\*Electives 3 Semester hour(s)
- COM 131 Intro to Oral Communication (3 Semester Hours)
- \*

MAT 205 - Calc & Analytic Geometry III (4 Semester Hours)

• \*\*\*

MAT 231 - Linear Algebra (3 Semester Hours)

OR

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**ELECTIVES 3 SEMESTER HOUR(S)
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### Footnotes

- \*It is highly advised that students complete the entire Calculus sequence at a single institution. Course content may vary widely among institutions depending on the credits assigned to each course, and completing the sequence at a single institution is the best way to assure that neither credit nor content is lost in transfer.
- \*\*Suggested electives include CIS 208, MAT 230, and/or PHY 211, and one Humanities or Fine Arts general education class.
- \*\*\* Students should choose MAT 211 or MAT 231 (not both). MAT 231 is preferred.