## Associate in Science Degree with a Concentration in Mathematics (416)

The concentration in Mathematics prepares students to transfer to four-year universities to pursue a bachelor's degree in Mathematics, Actuarial Science, Statistics, or Secondary Education teaching Mathematics.
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, the A.S. degree does not include the entire General Education Core Curriculum (GECC). 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.
Mathematics - IAI Recommended Baccalaureate Curriculum

## Transfer Considerations

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.

1. Bachelor's degree programs in Secondary Mathematics Education will require education classes. Bachelor's degree programs in Mathematics will require other classes.
2. 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 ensure that neither credits nor content is lost in transfer.

## Competitive Admissions

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 guarantee admission. A grade of "C" or better may be required when transferring chemistry, mathematics, and engineering science courses.
Since admission is competitive, completing the recommended courses does not by itself guarantee admission.

## Special Considerations

1. If you are also pursuing Secondary Education, other requirements through that program will be required for the Bachelor's degree at your transfer institution.
2. If planning on teaching at the college level (Community College or University) a Master's Degree in Mathematics (M.S or M.A) and/or a Ed.D/Ph.D may be required.

## 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
- Scott VanZuiden, Professor of Mathematics, 815-835-6349
- Connor Williams, Assistant Professor of Mathematics, 815-835-6397


## Minimum Total Credit Hours - 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)
- ENG101-Composition I ( 3 Semester Hours)
- FYE101 - First Year Experience ( 1 Semester Hours)
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MAT203 - Calculus \& Analytic Geometry I ( 4 Semester Hours)

## Second Semester - 16 Hours

- Personal Development 1 Semester hour(s)
- ENG103 - Composition II ( 3 Semester Hours)
- CIS207-C++ Programming ( 3 Semester Hours)

OR
MAT150 - Computer Prog Math \& Engineer ( 3 Semester Hours)

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MAT204 - Calc \& Analytic Geometry II ( 4 Semester Hours)

- PHY211 - 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)
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MAT211 - Differential Equations ( 3 Semester Hours)
OR
**ELECTIVES 3 SEMESTER HOUR(S)

## Fourth Semester - 17 Hours

- Humanities 3 Semester hour(s)
- Personal Development 1 Semester hour(s)
- **Electives 3 Semester hour(s)
- COM131 - Intro to Oral Communication ( 3 Semester Hours)
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MAT205 - Calc \& Analytic Geometry III ( 4 Semester Hours)

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MAT231 - Linear Algebra ( 3 Semester Hours)
OR
**ELECTIVES 3 SEMESTER HOUR(S)

## Footnotes

- *tt 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.

