



PROGRAM TRANSFER GUIDE
Chemistry B.S. or B.A.



Associate in Science to Bachelor of Science in Chemistry
Associate in Science to Bachelor of Arts in Chemistry
with optional Concentrations in Forensics or Pre-Med

This guide between Black Hawk College (BHC) and St. Ambrose University (SAU) is intended to create a smooth and seamless curriculum transition for students who earn the Associate in Science (AS) degree at BHC to transfer and complete the Bachelor of Science (BS) degree or Bachelor of Arts (BA) degree in Chemistry SAU. A Concentration in Forensics or Pre-Med may be added to the BS or BA degree. This guide incorporates the [Articulation Agreement between BHC and SAU](#) dated December 13, 2013, the 2022-2023 BHC catalog and the 2021-2023 SAU catalog.

SAU recommends that students follow the Bachelor of Science curriculum if their goals include research and attending graduate school.

Degree Availability	<p>AS general education courses and most science and MATH courses offered on campus and online (science labs are on campus).</p> <p>BS and BA in Chemistry offer on campus. General education requirements may be offered on campus or online.</p>
GPA and Grade Requirements	<p>Graduation from BHC 2.00 GPA</p> <p>Admission to SAU 2.00 GPA.</p> <p>Graduation from SAU with either Chemistry degrees, and the optional Concentrations 2.00 GPA.</p> <p>SAU will grant transfer credit for college-level work in all areas that correspond to courses offered at SAU if a grade of a 'C' or better is earned.</p>
General Education	<p>The AS degree includes the IAI General Education Core Curriculum minus one Humanities/Fine Arts course and one Social Behavioral Science course. Contact an advisor or refer to the BHC catalog for a list of IAI general education courses. If pursuing a Concentration, this plan includes one general education course (3 credits) taken at SAU for reverse transfer to BHC to complete the AS degree.</p> <p>The AS degree satisfies SAU's lower division general education requirements except for the Health and Fitness, and Second Language categories.</p>
Credit Hours	<p><u>BHC credits on this guide: 65 SAU credits on this guide: 56 min. (additional SAU credits are required to earn an optional Concentration)</u></p> <ul style="list-style-type: none">✓ A minimum of 60 credits is required to complete the AS degree.✓ A minimum of 120 combined credits from BHC and SAU is required to complete the BA or BS in Chemistry degree.✓ A maximum of 64 community college credits may be applied toward the minimum 120 credits required for a bachelor degree at SAU.

Other Requirements and Recommendations

- ✓ BHC requires **one Non-Western Studies course** for graduation and it may simultaneously fulfill an IAI category in Humanities, Fine Arts, or Social and Behavioral Sciences, or be taken as an elective in the AS degree. Social and Behavioral Science courses must be from different disciplines.
- ✓ SAU requires **a second language** to graduate. Fulfill by completing either three years of the same second language in high school, or the same second language in college (or demonstrated proficiency) through the 102-level.
- ✓ Students are encouraged to view the [St. Ambrose Transfer Facts](#) for additional transfer information

The following BHC course order may be modified to accommodate part-time students; however, the ENG, BIOL, CHEM and PHYS courses are sequenced and must be taken in order due to pre-requisites. It's strongly recommended to complete any science sequence at the same institution. Selected BHC courses may also be offered in the summer or during the minimester. This plan assumes that students are academically eligible for all Semester 1 courses.

BHC Courses & Credit Hours			Transfers to SAU as
Semester 1			
ENG 101	Composition I. <i>A grade of 'C' or better is required</i>	3	English Elective
CHEM 101	General Chemistry I	4	CHEM 105 General Chemistry I
MATH 118	Precalculus	5	MATH 171 Elementary Functions
	IAI Life Science. Pre-Med Concentration take BIOL 105 General Biology I (5 cr.) Forensics Concentration take BIOL 250 Genetics (3 cr.)	3 min.	General Education. BIOL 199 General Biology I. BIOL 106 Human Genetics.
	IAI Humanities. HIST 222 Comparative Religions, or PHIL course recommended as the pre-req. for SAU upper division THEO or PHIL course	3	THEO 250 Introduction to Comparative Religions, or various Philosophy courses. Satisfies General Education
Semester total		18	
Semester 2			
ENG 102	Composition II. <i>A grade of 'C' or better is required</i>	3	ENGL 101 English Composition
CHEM 102	General Chemistry II	4	CHEM 106 General Chemistry II
MATH 124	Calculus I with Analytic Geo	4	MATH 191 Calculus & Analytic Geometry I
	IAI Social Behavioral Science. Pre-Med Concentration* take BIOL 106 General Biology II (5 cr.). Forensics Concentration* take CRJU 151 Criminal Justice System (3 cr.) <u>*Social Behavioral course is taken at SAU to complete the AS degree.</u>	3	General Education. BIOL 200 General Biology II. CRJU 101 Introduction to Criminal Justice.
Semester total		14	

Semester 3			
CHEM 203	Organic Chemistry I	5	CHEM 207 & CHEM 209
MATH 225	Calculus II with Analytic Geo	4	MATH 192 Calculus & Analytic Geometry II
PHYS 201	Mechanics and Thermal Physics. <i>For BA degree may take PHYS 201, or PHYS 101 College Physics I</i>	5	PHYS 251 General Physics I: Mechanics. <i>alternate option for BA degree is PHYS 203 College Physics I</i>
	IAI Fine Arts	3	General Education
Semester total		17	

Semester 4			
SPEC 101	Principles of Speech	3	COMM 129 Principles of Public Speaking
CHEM 204	Organic Chemistry II	5	CHEM 208 & CHEM 210
PHYS 202	Electricity and Magnetism <i>For BA degree may take PHYS 202, or PHYS 102 College Physics II</i>	5	PHYS 253 General Physics II: Thermodynamics, Electricity & Magnetism. <i>alternate option for BA degree is PHYS 204 College Physics II</i>
	IAI Social Behavioral Science	3	General Education
Semester total		16	

After transfer to SAU complete the following courses (credit hours)

The semester in which CHEM courses are offered changes in odd and even calendar years.

Semester 5	Semester 6	Semester 7	Semester 8
CHEM 301 Quantitative Analysis (3)	CHEM 110 Laboratory Safety (1)	CHEM 313 Physical Chemistry I (4)	CHEM 350-WI Intro. to Chem. Lit. & Writing (3)
Gen. Ed. -- reverse transfer to AS degree (3). <i>must meet BHC's Social & Behav. Science category*</i>	CHEM 150 Career Exploration in Chem. (1)	BS degree: CHEM 428 Chemical Research Project I (1) or CHEM 440 Chem. Internship (1-2)	BS degree: CHEM 314 Physical Chemistry II (4)
BS degree: CHEM 319 & 320 Biochem. & Lab (4)	CHEM 303 Instrumental Analysis (4)	Theology general education (3)**	BS degree: CHEM 429 Chemical Research Project II (1) <i>if CHEM 428 was selected</i>
Philosophy general education (3)**	BS degree: CHEM 321 Adv. Inorganic Chem. (4)	KIN 149 Wellness Concepts (1)	Electives as needed to reach 120 total credits for BA or BS degree.
Second Language 101 Level (3) <i>unless satisfied in high school</i>	Second Language 102 Level (3) <i>unless satisfied in high school</i>	Electives as needed to reach 120 total credits for BA or BS degree.	
Pre-Med Concentration, also take:			
BIOL 230 Human Anatomy & Physiology I (4)	BIOL 232 Human Anatomy & Physiology II (4)	BIOL 303 Genetics (4) CHEM 319 & 320 Biochemistry & Lab (4)	BIOL 301 Cell and Molecular Biology (4)
Forensics Concentration, also take:			
CRJU 311 Constitution & Criminal Justice (3)	BIOL 120 Forensic Biology (4)	BIOL 205 Essentials of Anatomy & Physiology (4)	CRJU 342 Crim. Evidence & Investigation (3)
			CRJU 420 Applied Forensics Theory (3)
Semester total (16) + Electives / Concentration	Semester total (13) + Electives / Concentration	Semester total (9-10) + Electives / Concentration	Semester total (7-8) + Electives / Concentration

Black Hawk College: www.bhc.edu
 Quad-Cities Campus 309-796-5000 (Moline, IL)
 East Campus 309-854-1700 (Galva, IL)

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 with St. Ambrose University
www.sau.edu
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* select a discipline that differs from course taken at BHC; courses in **bold** meet BHC's Non-Western Studies; choose ECON 201, 202; HIST 201, 202, **211**; PSCI 101, **130**; PSYC 105; or SOC 101, 120, **210**. **one course must be upper division.

For questions about this guide and to apply, please contact:

Black Hawk College

[Advising](#)

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ADVQC@bhc.edu

[Admissions Office](#)

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Visit the [Natural Sciences & Engineering Department](#)

St. Ambrose University

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This guide is intended as a projected plan coordinated by both institutions and is not presented as a contract. While effort is made to present current information, both institutions reserve the right to make changes to admission, graduation, degree, course and supplementary information without notice. Students are responsible for confirming all guide contents.