

The Associate in Science (A.S.)
Degree in Biomedical
Laboratory Technology
prepares students both for
employment and for advanced
degrees in the life sciences.

The program prepares individuals for entry-level employment as a biotechnology research technician, biotechnology manufacturing technician, biotechnology testing technician and cell culture technician by providing them with the following skills: formulating chemical solutions; performing assays and recombinant DNA techniques; culturing organisms; purifying and characterizing DNA, RNA, and proteins; isolating and preparing samples for analyses; and collecting and assessing data.

☑	Task
	View career information at http://www.fscj.edu/careercoach
	Meet with your advisor each term.
	Fulfill the Civic Literacy requirement.
	Satisfy the associate in science degree graduation requirements.

Career Options

Biotechnologists are employed as laboratory technicians by clinical research and pharmaceutical drug development laboratories, or analytical laboratories. Students will also have great opportunities in forensic investigation, environmental improvement and protection, and agricultural product enhancement to feed an expanding global population.

Advising

(904) 713-4545 or hcic@fscj.edu.

Biotechnology Laboratory Technology (2199)

ASSOCIATE IN SCIENCE | College Catalog Year: 2022-2023

Recommended Roadmap

This roadmap provides general guidance about recommended courses. For specific guidance about your individual academic degree plan, please see an advisor. Also refer to the College Catalog for additional information. Full-time students will refer to the term-by-term recommendations, and part-time students will take courses in the order listed. A minimum grade of C or higher must be achieved in all professional courses, as well as courses used to satisfy the general education and civic literacy requirements. A list of Professional Elective Coursework options is available at the end of this document.

Term 1

6	₫	Course: Course Title	Credit Hours	Terms Offered	Available Modalities
		ENC 1101: English Composition I or ENC 1101C: English Composition I Enhanced	3 or 4	Varies	Varies
		MAC 1105: College Algebra or higher-level MAC prefix course or MAP 2302: Differential Equations or MGF 1106: Topics in College Mathematics or MGF 1107: Explorations in Mathematics	3-5	Varies	Varies
		AMH 2020: United States History From 1877 to the Present or POS 2041: American Federal Government	3	All	On-Campus, Online

Term 2

Course: Course Title	Credit Hours	Terms Offered	Available Modalities
CHM 1025C: Introduction to General Chemistry	4	All	On-Campus, Online
BSC 1421C: Introduction to Biotechnology Methods	4	All	On-Campus
BSC 2010C: Principles of Biology I	4	All	On-Campus, Online

Term 3

Note: BSC 2040C and BSC 2427C will be offered in the following terms: Fall 2022, Summer 2023, Spring 2024, Fall 2024, Summer 2025, Spring 2026, Fall 2026 and Summer 2027.

☑	Course: Course Title	Credit Hours	Terms Offered	Available Modalities
	BSC 2420C: Biotechnology Methods I	4	See note	On-Campus
	BSC 2427C: Biotechnology Methods II	4	See note	On-Campus
	MCB 2010C: Microbiology	4	All	On-Campus, Online
	STA 2023: Elementary Statistics	3	All	On-Campus, Online



Important for You to Know

This academic roadmap does not include developmental education courses in reading, writing, and/or mathematics that you may be required to take. Students who place into developmental education courses are required to complete designated developmental education courses with a grade of C or higher regardless of program of study. In addition, it does not include MAT 1033: Intermediate Algebra, which, for many students, is a prerequisite course for MAC 1105.

Related Roadmaps

Embedded Technical Certificate(s)

Technical certificates are available within this degree program. Students may pursue the A.S. degree and earn technical certificates while completing the requirements for the degree or pursue one or more certificates to develop or upgrade their skills in a particular field. Contact an advisor to determine the career education path that is best for you. Embedded technical certificates include:

- Biotechnology Specialist (Manufacturing)
- Biotechnology Laboratory Specialist (Health Science)

Program Learning Outcomes

Upon completing this program, students will be able to demonstrate proficiency in the following program learning outcomes:

- Students will effectively communicate in the biotechnology laboratory environment.
- Students will demonstrate safety skills.
- Students will identify basic laboratory skills.
- Students will demonstrate computer skills needed in bioinformatics

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Term 4

Note: BSC 2419C and BSC 2435 will be offered in the following terms: Spring 2023, Fall 2023, Summer 2024, Spring 2025 and Fall 2025.

	Course: Course Title	Credit Hours	Terms Offered	Available Modalities
	BSC 2419C: Protein Biotechnology and Cell Culture	4	See note	On-Campus
	BSC 2435: Introduction to Bioinformatics	3	See note	On-Campus, Online
	CHM 2045C: General Chemistry and Qualitative Analysis I	4	All	On-Campus, Online

Term 5

Note: BSC 1943 requires permission of the instructor and acceptance by a preceptor at an approved off-site worksite. BSC 1942 is held on-campus.

Course: Course Title	Credit Hours	Terms Offered	Available Modalities
BSC 1943: Biotechnology Internship or BSC 1942: Biotechnology Externship	3	All	See note
CHM 2046C: General Chemistry and Qualitative Analysis II	4	All	On-Campus, Online
PHI 2010: Philosophy in the Humanities or HUM 2020: Topics in the Humanities	3	Varies	Varies
Professional Elective	4	Varies	Varies

Total Program Credit Hours

The Biotechnology Laboratory Technology A.S. degree program requires a **minimum of 61 credit hours**. Total program hours may vary based on the student's individual degree plan. Please see an advisor for individual guidance.

Professional Elective Coursework Options

Minimum Credit Hours: 4

Note: Students planning on pursuing a bachelor's degree are encouraged to take BSC 2085C or other related courses with permission of the instructor.

☑	Course: Course Title	Credit Hours	Terms Offered	Available Modalities
	BSC 2085C: Human Anatomy and Physiology I	4	Varies	Varies
	BSC 2020C: Human Biology	4	Varies	Varies
	CHM 2205C: Introductory Organic/Biochemistry	4	Varies	Varies
	CHM 1032C: Principles of General Chemistry	4	Varies	Varies