

The Technical Certificate (T.C.) in Biotechnology Laboratory Specialist (Health Sciences) provides advanced academic and technical skill proficiency for the biotechnology research, testing, and manufacturing areas.

Completion demonstrates a technical understanding of DNA, RNA, enzymes, and immunochemical isolation and purification methods as well as an understanding of separation and spectroscopy methodology. This skill set can be used with supplemental industry-specific training for entering the workforce or as a starting point for more advanced academic and technical knowledge.

<input checked="" type="checkbox"/> Task
<input type="checkbox"/> Explore career resources at <a href="https://fscj.edu/student-services/career-development">fscj.edu/student-services/career-development</a> .
<input type="checkbox"/> Meet with your advisor each term.
<input type="checkbox"/> Satisfy the technical certificate graduation requirements.

## Articulation

This certificate articulates directly into the Biotechnology Laboratory Technology (2199) (A.S.) degree. Contact an advisor to determine the career education path that is best for you.

## 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.

## Advising

[biotechnologylaboratorytechnology@fscj.edu](mailto:biotechnologylaboratorytechnology@fscj.edu).

## Sample Roadmap

This roadmap provides general guidance about required courses. For specific guidance about your individual academic degree plan, please see an advisor. Also refer to the College Catalog and class schedules 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.

### Term 1

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	MAC 1105: College Algebra or higher	3-5	All
<input type="checkbox"/>	STA 2023: Elementary Statistics	3	All

### Term 2

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	CHM 1025C: Introduction to General Chemistry	4	All
<input type="checkbox"/>	BSC 1421C: Introduction to Biotechnology Methods	4	All
<input type="checkbox"/>	BSC 2010C: Principles of Biology I	4	All

### Term 3

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

<input checked="" type="checkbox"/>	Course: Course Title	Credit Hours	Terms Offered
<input type="checkbox"/>	BSC 2420C: Biotechnology Methods I	4	See note above
<input type="checkbox"/>	BSC 2427C: Biotechnology Methods II	4	See note above
<input type="checkbox"/>	MCB 2010C: Microbiology	4	All

## Total Program Credit Hours

The **Biotechnology Laboratory Specialist (Health Sciences)** T.C. program requires a **minimum of 30 credit hours**. Total program hours may vary based on the student's individual degree plan. Please see an advisor for individual guidance. This program **is eligible** for financial aid.

## 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