


**Santa Fe High School, Institute of Biotechnology**

**Career Cluster:** Manufacturing

**CTE Program:** Industrial Biotechnology

**Career Cluster Pathway:** Maintenance, Installation and Repair

**Industry Certification:** Biotechnician Assistant

		16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS	
		ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)
<b>HIGH SCHOOL</b>	<ul style="list-style-type: none"> <li>• Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a>.</li> <li>• Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li> <li>• One course within the 24 credit program must be an online course. Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program</li> </ul>							
	9 <sup>th</sup>	Please see Graduation Checklist*	Please see Graduation Checklist	Please see Graduation Checklist	Please see Graduation Checklist		<b>Biotechnology 1</b>	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	Please see Graduation Checklist	Please see Graduation Checklist	Please see Graduation Checklist	Please see Graduation Checklist	Physical Education (1 credit) (Not required for ACCEL Program)	<b>Biotechnology 2</b>	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	11 <sup>th</sup>	Please see Graduation Checklist	Please see Graduation Checklist	Please see Graduation Checklist	Please see Graduation Checklist	Practical Arts or Fine Arts course (1 credit)	<b>Biotechnology 3</b>	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	Please see Graduation Checklist	Please see Graduation Checklist	Please see Graduation Checklist	Please see Graduation Checklist		<b>Industrial Education Directed Study</b>	Other elective course appropriate for student's career and education plan.
<b>POST SECONDARY</b>	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.							
	<b>TECHNICAL CENTER PROGRAM(S)</b>		<b>COLLEGE PROGRAM(S)</b>			<b>UNIVERSITY PROGRAM(S)</b>		
		<b>Santa Fe College</b> Biotechnology Laboratory Technology AS			<b>University of Florida</b> Biology Biochemistry Biochemistry and Molecular Biology Microbiology and Cell Science Chemistry			
<b>CAREER</b>	<b>Sample Career Specialties</b>							
		Technician, Biotechnology Research Biological Technician, Cell Culture Technician, Biotechnology Manufacturing Technician			Medical Technologist, Molecular Biologist, Bacteriologist, Research Assistant			

\*Florida Department of Education Graduation Requirements: <http://www.fldoe.org/academics/graduation-requirements/index.shtml>

Career and Technical Student Association	Internship/Work Experience Recommendations
SkillsUSA	Local research facilities, quality control testing laboratories, genetics laboratories, and medical laboratories.

ARTICULATION AND CTE DUAL ENROLLMENT OPPORTUNITIES			
High School to College Credit or Degree			
CREDIT	High School Courses	Santa Fe College Courses	Credits
	3027010 Biotechnology 1	BSC 1421 Introduction to Biotechnology	3
	3027020 Biotechnology 2	BSC 1421L Introduction to Biotechnology Lab	1
	2003340 Chemistry I or 2003350 Chemistry I Honors or 2003371 AICE Chemistry I or 2003800 Pre IB Chemistry I	CHM 1030 Elements of Chemistry I CHM 1030L Elements of Chemistry I Lab	3 1
	Industry Certificate	Santa Fe College Course	Credits
	Biotechnician Assistant (CERHB001)	BSC 1421 Introduction to Biotechnology BSC 1421L Introduction to Biotechnology Lab	3 1
<b>PSAV/PSV to AAS or AS to BS or BAS</b> <b>Statewide articulations:</b> Regionally-accredited AS to BAS			

To receive articulated credit for the **SF** courses listed above, high school students must either:

- Be recommended for the SF Career Pathways assessment by their teacher
  - Receive at least a “B” grade in their articulated courses
  - Pass the Health Sciences pre-qualifying exam (CHM 1030 only)
  - Pass the SF Career Pathways assessment
- OR** (for BSC 1421 and BSC 1421L only)
- Pass the Biotechnician Assistant industry certification examination.
  - Have the certification verified by the Santa Fe Consortium Career Pathways Coordinator and SF Emerging Technologies Programs representative.

More information is available at: <http://www.sfcollege.edu/careerpathways/>