

## 2007-08 Catalog: Programs of Study

### Biotechnology Laboratory Technology (2199)

#### Associate in Science

The Biotechnology Laboratory Technology program is an associate in science degree program which consists of classroom, laboratory and worksite instruction. The program prepares individuals for entry-level employment as Biotechnology Research Technician, Biotechnology Manufacturing Technician, and Cell Culture Technician by providing them with the following skills: make chemical reagents, perform biochemical analyses, use recombinant DNA techniques, culture bacteria or animal or plant cells, purify and/or characterize DNA and proteins, and collect and assess data. Students will also develop essential work skills such as professional behavior and appearance, dependability, ethics, follow directions, and team work.

#### Internships

This program includes on-site training with a Northeast Florida manufacturer or medical research center.

#### Career Opportunities, Rapid Placement

Biotechnology is a \$500 billion per year industry. North Florida is home to dozens of companies involved in biolab technology or biomanufacturing. Your degree program readies you for entry-level positions as biotechnology research technicians, biotechnology manufacturing technicians or cell culture technicians.

Biotechnologists are employed as laboratory technicians by clinical research and pharmaceutical drug development laboratories such as Mayo Clinic, Medtronic, Pfizer and Vistakon. You also have great opportunities in forensic investigation, environmental improvement and protection, and agricultural product enhancement to feed an expanding global population.

#### Cost

Estimated cost of tuition is \$4,050 (tuition rated for Florida residents, as of 7/07). Contact the program manager for additional costs (textbooks, materials, fees).

#### Need More Information? Contact:

**Kevin Pegg**, Advanced Technology Center, 904.598.5621

#### Curriculum

Course Number and Title	Credits
<b>General Education</b>	
<b>ENC 1101</b> English Composition I	3
*Humanities	3
<b>MAC 1105</b> College Algebra	3
*Social and Behavioral Sciences	3
<b>BSC 2010C</b> Principles of Biology I	4
<b>Credit Hours</b>	<b>16</b>
<b>Required Professional Courses</b>	
<b>STA 2023</b> Elementary Statistics	3
<b>CHM 2045C</b> General Chemistry and Qualitative Analysis I	4
<b>CHM 2046C</b> General Chemistry and Qualitative Analysis II	4
<b>BSC 1421</b> Introduction to Biotechnology	1
<b>BSC 1404C</b> Introduction to Biotechnology Methods	3
<b>MCB 2010C</b> Microbiology	4
<b>BSC 2020C</b> Human Biology	4
<b>BSC 2420C</b> Biotechnology Methods I	4
<b>BSC 2427C</b> Biotechnology Methods II	4
<b>BSC 2419C</b> Protein Biotechnology and Cell Culture	4
<b>BSC 2435</b> Introduction to Bioinformatics	3
<b>BSC 1943</b> Internship	3

<b>Credit Hours</b>		<b>41</b>
<b>Professional Electives (minimum 4 credit hours)</b>		
<b>CHM 1025C</b>	Introduction to General Chemistry	4
<b>CHM 1032C</b>	Principles of General Chemistry	4
<b>CHM 2205C</b>	Introductory Organic/Biochemistry	4
<b>CHM 2930</b>	Selected Topics in Chemistry	3
<b>BSC 2931</b>	Selected Topics in Biological Sciences	1
<b>Credit Hours</b>		<b>4</b>
<b>Total Credit Hours</b>		<b>61</b>

\*Refer to A.S. degree **General Education Requirements**.

#### Record of Conviction of a Crime

Companies or agencies used for some clinical, internship or cooperative education classes may require students to undergo drug screening and/or criminal background checks prior to placement at their sites. Students whose drug screening or criminal background checks are unsatisfactory may be denied access to the company or agency. Withdrawal from the program may be necessary if students cannot be placed for clinical, internship or cooperative education classes.

#### Note

This associate in science degree program is intended primarily for students who desire to complete an associate in science degree and become employed. Students who decide to pursue university transfer study must meet certain course and test requirements. For details refer to **the university transfer guide**.

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