

BIOTECHNOLOGY CERTIFICATE PROGRAM AT ORANGE COAST COLLEGE

Prerequisites:

- 1) **Mathematics 030- Intermediate Algebra** or qualifying mathematics placement score for Math 120 or higher.
- 2) **Chemistry 130- Preparatory General chemistry** OR placement into Chemistry 180 based on chemistry assessment
- 3) Eligibility to enroll in **English 100**.

Semester 1 (Fall)

Biology 181- Cell and Molecular Biology	4 Units
English 100- Freshman Composition	3 Units
Chemistry 180- General Chemistry	<u>5 Units</u>
	12 Units

Semester 2 (Spring)

Mathematics 160- Introduction to Statistics	3 Units
Biology 210- General Microbiology	5 Units
Chem 185- General Chemistry	<u>5 Units</u>
	13 Units

Semester 3 (Fall)

Biology 199: Special Topics in Biotechnology	1 Unit
Biology 230: Structure and Function of Cells	3 Units
Biology 250-Laboratory Methods in Biotechnology 1	5 Units
Philosophy 120: Ethics (Biomedical option)	<u>3 Units</u>
	12 Units

Semester 4 (Spring)

Biology 251- Laboratory Methods in Biotechnology 2	5 Units
Biology 281/281H- Molecular Biology 1: Biochemistry	2 Units
Biology 281L- Protein Chemistry Laboratory	1 Unit
Biology 282/282H- Molecular Biology 2: Molecular Bio	2 Units
English 105- Technical Report Writing	<u>3 Units</u>
	13 Units

Summer

Internship 393AB-Internship Academy Level	3 Units
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TOTAL UNITS 53