MiraCosta Community College District programs are consistent with the college mission, vision, and core values.

**Baccalaureate Degree**

The baccalaureate degree at MiraCosta College is awarded to students who have successfully demonstrated they have developed intellectual skills, information technology facility, affective and creative capabilities, social attitudes, and an appreciation for cultural diversity. In addition to these accomplishments, students graduating with a baccalaureate degree shall possess sufficient depth in the major to contribute to preparation for career positions within the region and beyond. The depth will be provided with a minimum of twenty-four (24) semester lower-division-major units and a minimum of thirty-four (34) semester upper-division-major units. The college catalog will clearly differentiate upper-division and lower-division course work. Upper-division courses will be open only to those students enrolled in the baccalaureate degree program.

A. Upper-division courses require lower-division knowledge and apply that knowledge as demonstrated measures of critical thinking through writing, oral communication, or computation.

B. Upper-division courses will typically have prerequisites that have been established using content review of the entry skills necessary to be successful as outlined in the California Code of Regulations.

C. Upper-division courses may encompass research elements, workforce training, apprenticeships, internships, practicum, or capstone projects.

**General Education**

General education at MiraCosta College introduces the content and methodology of major areas of knowledge. Its purpose is to encourage students to select a broad spectrum of classes. The MiraCosta College general education program for the baccalaureate degree is comprised of thirty-seven (37) to forty-one (41) units of lower-division general education courses and nine (9) units of upper-division general education courses. Students completing this program are able to demonstrate the following:

A. A broad understanding of mathematics, science, social science, humanities, and the arts.
B. Effective communication in oral and written form.

C. A multicultural global perspective.

D. Critical-thinking skills that apply analytical and creative approaches to problem solving.

E. The ability to adapt to new environments and technologies.

F. Social awareness and responsibility as a participating member of society.

Lower-Division General Education

Students may satisfy the lower-division general education requirement for the baccalaureate degree at MiraCosta College by completing the California State University (CSU) breadth (CSU-GE) pattern or the University of California (UC) intersegmental general education transfer curriculum (IGETC) pattern. MiraCosta College courses approved for the CSU-GE and IGETC patterns meet the standards set forth in Board Policy 4025-B and meet the following universal criteria: rigor, scope, autonomy, breadth, critical thinking, communication, and rationality.

Consistent with Board policy 4025, the CSU-GE and IGETC lower-division general education requirements are designed to provide the knowledge, skills, experiences, and perspectives that will enable students to expand their capacities to take part in a wide range of human interests and activities; to confront personal, cultural, moral, and social problems that are an inevitable part of human life; and to cultivate both the requisite skills and enthusiasm for lifelong learning.

Lower-division general education courses for the baccalaureate degree will fulfill the following criteria related specifically to the designated CSU-GE or IGETC Area:

A. CSU-GE Area A and IGETC Area 1: Communication in the English Language and Critical Thinking

Courses emphasize development of students’ communication and reasoning skills. These areas require coursework in communication in the English language, to include both oral and written communication. Critical-thinking courses will develop the students’ abilities to analyze, criticize, and advocate ideas; to reason inductively and deductively; and to reach well-supported factual or judgmental conclusions.

B. CSU-GE Area B1-3, Scientific Inquiry and IGETC Area 5, Physical and Biological Sciences

Courses will develop the student’s knowledge of scientific theories, concepts, and data about both living and nonliving systems. Students will achieve an understanding and appreciation of scientific principles and the scientific method, as well as the potential limits of scientific endeavors and the value systems associated with human inquiry.
C. CSU-GE Area B4 and IGETC Area 2: Mathematical Concepts and Quantitative Reasoning

Courses will be designed so that students’ will not just practice computational skills, but will be able to explain and apply basic mathematical concepts and will be able to solve problems through quantitative reasoning.

D. CSU-GE Area C and IGETC Area 3: Arts and Humanities

Courses will cultivate and refine student’s affective, cognitive, and physical faculties through studying great works of the human imagination. Courses will encourage students to analyze and appreciate works of philosophical, historical, literary, aesthetic, and cultural importance from Western and non-Western perspectives. Activities may include participation in aesthetic, creative experiences. Courses that primarily focus on skill development will be excluded.

E. CSU-GE Area D and IGETC Area 4: Social and Behavioral Sciences

Courses provide students with the understanding that human social, political, and economic institutions and behavior are inextricably interwoven. Courses will ensure that students’ have the opportunity to develop understanding of the perspectives and methods of the social and behavioral sciences. Courses will help students gain an understanding and appreciation of the contributions and perspectives of men, women, and of ethnic and other minorities and a comparative perspective on both Western and non-Western societies.

F. CSU-GE Area E (CSU Only)

Courses in this area are designed to equip students for lifelong understanding and development of themselves as integrated physiological, social, and psychological beings. Courses will draw on findings from the biological, behavioral, and social sciences to study humans from psychological, sociological, and physiological perspectives.

Placement of courses on CSU-GE and IGETC is governed by the California State University (CSU) and University of California (UC) and will be in accordance with CSU and UC transfer submission and acceptance policies.

Successful completion of the CSU-GE or IGETC general education patterns will be in accordance with CSU-GE or IGETC certification guidelines that include the following:

1. Each course completed in CSU-GE Area A and B4 must be completed with a “C–” or a “P” or better.

2. Each course completed on IGETC must be completed with a “C” or a “P” or better.

3. Courses listed in two different areas may be used to satisfy a requirement in one area but not both areas.

4. All areas of the CSU-GE or IGETC pattern must be fully completed.
5. Students may request CSU-GE or IGETC certification, but certification is not necessary to fulfill the lower-division general education component of the baccalaureate degree.

Coursework from other U.S. regionally accredited institutions will be approved to meet CSU-GE (Plan B) or IGETC (Plan C) requirements according to the following CSU-GE and IGETC certification guidelines:

A. A CSU-GE or IGETC-approved course in the same area at another California community college.

B. A course comparable to an approved MiraCosta College course on CSU-GE (Plan B) or IGETC (Plan C) or a course on another California community college CSU-GE or IGETC pattern.

C. A lower-division course that meets the CSU-GE or IGETC area criteria.

D. An upper-division course that is determined comparable by faculty to a lower-division CSU-GE or IGETC-approved course.

E. Completion of the CSU-GE or IGETC general education pattern will satisfy the MiraCosta College associate degree competency requirements.

F. Prior completion of the CSU-GE or IGETC general education pattern for a bachelor’s degree at any CSU or UC.

G. A single course may be used to complete both a general education requirement and a lower-division major requirement.

**Upper-Division General Education**

Upper-division general education courses will enhance the foundational knowledge gained by students through the completion of the lower-division general education program. The further development of writing, leadership, and/or computational skills will supplement the major specific skill set that biotechnology employers seek in their employees.

A. Students will be provided with an upper-division general education curriculum designed to be:

1. An integrative learning experience that make connections among the disciplines.

2. Intentional, engaging, and meaningful.

3. Contextualized to the major and global workplace.

B. Courses will be offered in at least two disciplines outside of the biomanufacturing major.

C. At least one course will have an emphasis in written or oral communication or on further development of computation skills and analysis.
D. Courses will be open only to those students enrolled in the baccalaureate degree program.

E. Comparable upper-division courses from other U.S. regionally accredited institutions may be used to satisfy upper-division general education requirements.