



FAQ

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What Is The Timeline?

The biomanufacturing bachelor's degree program admits new students each fall.

The Associate Degree in Biomanufacturing serves as the lower-division preparation for the upper-division course work. It is similar to our associate degree in biotechnology research and development, but requires the bioprocessing-specific course work: BTEC211, BTEC221 and BTEC222.

Specific admission requirements are included below.

What Is The Difference Between Biomanufacturing And Biotechnology?

Biotechnology, in its broadest definition, takes our understanding of life and uses that to solve problems across a wide variety of areas, including medicine, agriculture and industrial applications. These solutions come in the form of products and services. When bringing a new product or service to market, it will progress through three main stages: research, development, and production.

Existing biotechnology baccalaureate degree programs in California focus on product understanding during the research and early development stages. MiraCosta College's biomanufacturing degree program will address the later stages of development and production when the focus is on process understanding.

The biomanufacturing bachelor's degree major and requirements are available here: [BS Degree Biomanufacturing](#) as well as [BS Degree Course Descriptions](#). The program will consist of a minimum of 120 semester units that includes lower-division and upper-division required courses in the major and general education, and elective courses.

Here is a quick lesson in biomanufacturing by one of the world's leading biotechnology companies:

<https://www.gene.com/topics/manufacturing>.

Completion of the [CSU-GE \(Plan B\)](#) or [IGETC \(Plan C\)](#) general education patterns will be a required component of the degree.

What Are The Eligibility Requirements?

The below requirements must be fulfilled to be eligible to apply and then enroll for the program. Applications will be accepted starting August 1, 2022. F-1 visa students should contact the International Office for admission information.

I. Requirements For Eligibility To Enroll In The Bachelor's Program

- Overall GPA of 2.0 for all course work
- Completion of all of the following program prerequisites, with no grade less than a C (or P) prior to the start date of the program (start of upper division coursework):
 - BTEC 108/BTEC 108H or General biology (BIO 105 or equivalent)
 - CHEM 150/150H
 - CHEM 151/151H
 - BTEC 107
 - BTEC 110/BTEC 110H
 - BTEC 120
 - BTEC 210
 - BTEC 211
 - BTEC 221
 - BTEC 222
 - ENGL 100/ENG 100H
 - Statistics (BTEC 180/BTEC 180H or equivalent)

Applicants who will enroll in any of these courses in the spring 2023 semester in order to fulfill program requirements may indicate this on their application at the time of submission.

Courses taken from other institutions must be evaluated for prerequisite equivalency. [Here is a grid of comparable coursework from other institutions](#). Please make an appointment with a MiraCosta counselor for course review. See when the above courses will be offered.

II. Cohort Selection

All applications will undergo a comprehensive review that ensures that applicants meet the above eligibility requirements. [You may review the comprehensive selection process rubric](#). Additional weight will be given to students who have:

- Completed BTEC 221 and BTEC 222 (or equivalent) with a grade of C minus or P, or better, prior to the start of the program (start of upper division coursework).
- Completed an associate degree in research and development, biomanufacturing, or equivalent.
- Earned GPAs of 2.5 or higher.
- Completed additional 200-level biotechnology courses.
- Completed or partially fulfilled [CSU-GE](#) or [IGETC](#).
- Have life experiences or special circumstances of interest, such as having biotechnology industry work experience; being a veteran, former foster youth, low income student and/or first-generation college student; need to work during prerequisites; disadvantages: social or educational environment; or having a verified disability.

Please join our mailing list below to receive updates.

What Campuses Offer Classes And When Are They Offered?

Biotechnology-specific classes will be offered through a combination of on-ground course work on the Oceanside Campus and online instruction. Many of the general education classes can also be taken at the Oceanside Campus, San Elijo Campus, online, or at other community colleges. Upper-division course work for the biomanufacturing program is offered during the day, Monday through Thursday mornings, on the Oceanside Campus.

Who Teaches The Biomanufacturing Classes?

Faculty in the Biotechnology Department will teach the majority of classes with strong participation from local industry scientists and engineers. All instructors must meet strict minimum qualifications, which will typically include a master's degree and several years of experience in the industry.

How Do I Apply?

Students will apply to the college using the [standard online application](#). In addition to the application to MiraCosta College, there is a separate application process specific to the bachelor's degree. You may access the bachelor's program application in your student account on SURF. After logging into SURF, you can find the application form in the Student Forms tile of the Student Center under the Admission and Records section.

When Can I Apply For The Program?

Applications are available August 1, 2022, and will be accepted until a cohort of 30 students have successfully applied. Applicants will be notified by letter of their application outcome no later than March 15, 2023.

Is There An Application Fee?

Currently there are no plans to add an application fee. However, this may change at the state level.

How Many Students Will Be Accepted?

The full-time cohort of bachelor's students will be approximately 30 students. Students will attend Monday through Thursday mornings on the Oceanside Campus. A new cohort will start each fall semester.

Do I Have To Be A MiraCosta College Graduate To Apply?

Not at this time. We encourage students from biotechnology programs at other community colleges to apply.

Do I Have To Have An Associate Degree To Apply?

No, an associate degree is not necessary to apply, but there are specific coursework and units that are necessary to be eligible for the program. You can review the eligibility criteria above. Applicants who have completed an associate degree in related biotechnology majors will receive priority consideration in the review process.

Can I Still Apply If I Already Have A Bachelor's Degree?

Yes. However, please be aware that there may be financial aid restrictions.

Not Sure If You Are Ready To Apply?

[Track your progress with this checklist.](#)

How Can I Find Out More Information About The Program?

View an informational session on the new BDP by department chair G Baughman at the top of this page.

When Can I Meet With A Counselor?

If you are a current MiraCosta College student, you can set up an appointment to speak with an academic counselor. Please visit the counseling website for additional information. When requesting your appointment, please specify that you are interested in the biomanufacturing bachelor's degree program. You can also fill out our information request form below to receive emails about upcoming events.

Once admitted to the program, all students will be required to meet with a counselor to develop an educational plan. You can view a Representative 4-year plan here to guide your enrollment options.

What Are The Enrollment Fees?

All course work, both upper and lower division, currently costs \$46 per unit and upper-division course work will cost an additional \$84 per unit, with an estimated total cost of about \$10,000 for the four-year program. Additional fees include health services, parking and student center. There will also be costs associated with books and materials.

Does The California College Promise Grant (CCPG) Cover The Bachelor's Degree Differential Fee Of \$84?

No, The California College Promise Grant (CCPG) will only cover the standard \$46 per unit for qualifying students. Cal-Grant funds may be available to cover the the \$84 per unit depending upon individual student eligibility.

Can I Get A Cal Grant?

Yes, Cal Grants will be available to students in the Bachelor's program students that meet eligibility requirements. Cal Grant funds will cover the \$84/unit upper-division course work fee.

Can My Parent Take Out A Parent PLUS Loan On My Behalf?

No. MiraCosta College does not participate in the Parent PLUS loan program.

Will My Subsidized Loan Usage Limit Increase When I Move From The AA Degree Into The BS Degree Program?

Yes, moving into a program that takes longer to complete re-sets the usage period.

Will My Maximum Time Frame For Eligibility Be Adjusted For The BS Degree Program?

Yes, the maximum time frame will be adjusted to 150% of the units required to complete the bachelor's program.

Will This Program Help Me Secure An Internship In The Field?

Internships have been an important part of the current biotechnology education program and that will continue with the bachelor's degree. This program will provide you with the skills, abilities, and knowledge to secure and perform well in an internship. MiraCosta College has a Career Center to help students with internship placement. Take a look at information provided at Career Night on 10/18/17.

What Type Of Job Can I Get Upon Graduation?

The degree program will prepare students for work within the biotechnology industry in the unique environment of biological production where science thrives in partnership with quality and compliance.

Typical job titles include:

- (bio)manufacturing technician/associate
- bioprocess technician/associate
- quality assurance technician/associate/specialist
- quality control technician/associate/analyst
- quality specialist/coordinator/inspector
- biological technician
- (bio)production technician/associate
- (bio)manufacturing operator
- laboratory technician
- upstream technician/associate
- downstream technician/associate

What Is The Average Salary Of The Job I Can Get Upon Graduation?

A 2019 labor market analysis for San Diego County had average entry-level wages at \$26.30 per hour (\$55k annual) and a median salary of \$33.17 per hour (\$69k annual).for manufacturing technicians.

Campus Locations



COMMUNITY LEARNING CENTER



OCEANSIDE



SAN ELIJO



TECHNOLOGY CAREER INSTITUTE



760.757.2121

888.201.8480

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