



Biotechnology

Who will:

- **Protect us from emerging diseases?**
- **Use forensics to solve crimes?**
- **Develop alternative fuel sources?**
- **And much, much more?**

Biotechnicians!

The Montgomery College biotechnology program is an excellent choice for students interested in changing the future through bioscience. The college is located near the heart of the growing biotechnology industry in Texas; biotech firms in Montgomery County alone employ over a thousand scientists and technicians. The Montgomery College Biotechnology Institute (MCBI) partners with local companies and schools to insure that students are prepared with the current skills necessary for entry into the biotechnology industry. The MCBI also teams up with local universities to facilitate transfer to four-year programs. Montgomery College has the oldest biotechnology program in the state and the only one rated Exemplary by the Higher Education Coordinating Board.

What do biotechnicians do?

The skills you learn in our biotechnology program will prepare you to work in an entry-level position in many sectors of the bioscience industry. You can pursue employment in research laboratories and the bioscience industry, in companies ranging from small start-ups to large, well-established firms. The study of biotechnology can lead you to a career in human health, forensics, food and drug production, environmental science, or energy production.

How is the job market?

The biotechnology industry in The Woodlands, Houston and throughout Southeast Texas is booming. There are currently many more jobs available than applicants. Graduates from the Montgomery College Biotech program are very successful in entering this market. In the last nine years 100 per cent of our students have found jobs or chosen to continue their education full-time.

What can I expect to earn as a biotechnology professional?

Currently, the median salary for biotechnicians with an associate's degree is \$28,600; recent starting salaries range from \$23,000 to \$33,000 per year.

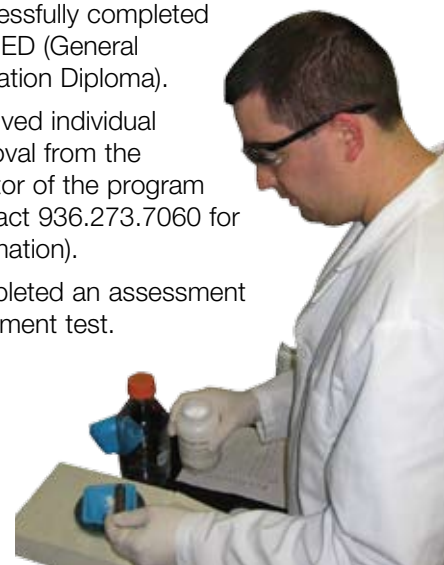
What if I already have a degree?

If you already have an AS or BS degree in the natural sciences, consider the Advanced Technical Certificate (ATC) in biotechnology. Students who have taken the prerequisite courses in Chemistry (2 semesters) and Biology (3 semesters, including Microbiology) can complete the Biotechnology ATC in one year, including an internship. This certificate program requires only six courses, so qualified students rapidly enter the biotechnology workforce.

How can I get started?

Take advantage of Montgomery College's continuous admission and enroll today! Admission to Montgomery College is available for those who meet any one of the following criteria:

- Graduated from an accredited high school.
- Transferred from another college or institution.
- Successfully completed the GED (General Education Diploma).
- Received individual approval from the director of the program (contact 936.273.7060 for information).
- Completed an assessment placement test.



www.montgomery-college.com/

Biotechnology



What does the two-year biotechnology program include?

Skills in cell culture, laboratory methods, molecular biology, and laboratory instrumentation are taught in the courses that make up the specialized portion of this degree plan. There is also a sequence of basic sciences, including biology and chemistry. During the final semester, students are assigned to an internship which, in most cases, paves the way to a full-time job upon graduation.

Can I transfer into a four-year biotechnology degree program?

Yes, you can! Graduates of Montgomery College's biotechnology program can transfer to any number of institutions, including the University of Houston-Downtown, and pursue a BS in biotechnology or related fields. All of the classes for degrees from UH/D can be taken at The University Center, located on the Montgomery College campus.



Why should I study biotechnology at Montgomery College?

Attending Montgomery College means something different for every student, as our students have a wide range of goals and aspirations. Yet, ultimately, it comes down to one thing: they want to be better prepared for post-college life. To that end, Montgomery College has developed an environment ripe for student success. Not only do we offer a wide range of associate degrees and transfer options, but we back them up with a commitment to help you succeed. We provide free on-site tutors and success seminars, class sizes that average just 24 students per class, and a convenient one-stop system for advising, financial aid, registration, etc.

Graduates with degrees or certificates from Montgomery College can find jobs immediately after graduation or continue their studies at the university level.

Most graduates from the biotechnology program do both! They usually enter the workforce immediately, but continue to upgrade their skills and knowledge while pursuing a bachelor's degree.

We hope you find what you're looking for at Montgomery College. Whether it's a few classes before transferring to a four-year institution, an associate's degree or certificate to help you land the job of your dreams, or continuing education to upgrade your existing skills, we are here to help you succeed!

For more information:

Montgomery College

Biotechnology Institute

936.271.7060

E-mail:

mcbiotech@nhmccd.edu

Web site:

www.montgomery-college.com/biotech/index.htm

Biotechnology Associate Degree Program

| Prefix Number | Course Name | Credit |
|-----------------------------------|---|--------|
| FIRST YEAR | | |
| First Semester | | |
| BIOL 1406 | Biology I | 4 |
| BITC 1211 | Intro. To Biotechnology | 2 |
| CHEM 1405 or 1412 | Introductory Chemistry General Chemistry I | 4 |
| ENGL 1301 | Comp. And Rhetoric I | 3 |
| MATH 1314 | College Algebra | 3 |
| | Semester Total | 16 |
| Second Semester | | |
| BIOL 1407 | Biology II | 4 |
| BITC 1402 | Lab Methods and Techniques | 4 |
| CHEM 1419 or 1412 | Intro Organic/Biochemistry General Chemistry II | 4 |
| ITSC 1401 or COSC 1401 | Introduction to Computers Introduction to Computers | 4 |
| ENGL 1302 | Comp. And Rhetoric II | 3 |
| | Semester Total | 19 |
| SECOND YEAR | | |
| First Semester | | |
| BIOL 2421 or 2420 | General Microbiology Medical Microbiology | 4 |
| BIOL 2416 | General Genetics | 4 |
| BITC 2411 | Lab Instrumentation | 4 |
| PHIL 2306 | Introduction to Ethics | 3 |
| BITC 1191*** | Special Studies & Bioethical Issues of Biotechnology | 1 |
| KINE | Activity Course | 1 |
| | Semester Total | 17 |
| Second Semester | | |
| BITC 2441 | Molecular Biology Techniques | 4 |
| BITC 2431 | Cell Culture Techniques | 4 |
| SPCH 1311 or 1315 | Intro. To Speech Communication Public Speaking | 3 |
| or 1321 | Business Speech | 3 |
| SOCI 1301** or 2319** | Principles of Sociology Minority Studies | 3 |
| BITC 1191*** | Special Studies & Bioethical Issues of Biotechnology | 1 |
| | Semester Total | 15 |
| Third Semester | | |
| BITC 2486* | Internship | 4 |
| | Semester Total | 4 |
| Total Credit Hours for AAS Degree | | 71 |

* Capstone Course

** Meets multi-cultural requirement

*** Course must be carried for two semesters.

Affirmative Action/EEO College

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