



Biotechnology Program

Degrees and Certificates offered in the Biotechnology Program



MDC Biotechnology students working with the Bioreactor

Associate in Arts Degree (AA) (60 credits)

This program provides the *first two years of a four-year curriculum* for students planning to transfer to a bachelor's degree program in biotechnology, biology, chemistry, or bioinformatics.

Associate in Science Degree (AS) (60-61 credits)

This degree is designed for individuals seeking *immediate entry into the workforce*.

Advanced Technical Certificate (ATC) (33 credits)

This fast-track program is designed *to cross-train or retrain professionals* from other fields who want to gain the skills and experience necessary to be successful in the bioscience industry.

College Credit Certificate (CCC) (12-28 credits)

The College Credit Certificate is designed for individuals seeking fast-track *entry-level employment* or *supplemental training* for those on a career track. Credits earned in a CCC can be applied towards the AS and the ATC programs.

8 Tracks offered in the Biotechnology Program

Advanced Manufacturing (AS)

The Advanced Manufacturing track will prepare you for employment in biotech or related fields in a position such as technician. You might be part of a dynamic research and development team creating new products or a manufacturing team in charge of making the products created using the tools of biotechnology.

Automation (CCC)

The Automation track will prepare you for employment in biotech or related fields in a position such as Automation specialist or Applied Automation specialists. For example, you might be part of an energetic engineering team responsible for integrating robots into a medical device manufacturing process.



Visit the Biotechnology webpage to review detailed program sheets: www.mdc.edu/Biotechnology

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Bioinformatics (AA, AS, ATC)

The Bioinformatics track will prepare you to process, store, and analyze biological data. The data that Bioinformaticists generate can be used in many applications, such as the modeling of the spread of viruses, or in the development of new products or processes. If you are computer savvy, but still want to be part of the booming biotech field, the bioinformatics track may be ideal for you.

Biotechnology (AA, AS, ATC, CCC)

The Biotechnology track will prepare you for a wide variety of employment in biotech or related fields such as technician. You might be part of a dynamic research and development team creating new products or a manufacturing team in charge of making the products created using the tools of biotechnology.

Chemical Technology (AS, ATC)

The Chemical Technology track will prepare you for employment in pharmaceutical or testing related-industries. You will learn how to use, calibrate, and trouble-shoot high-end chemical instrumentation. For example, you may work in a quality control department verifying that a manufactured product meets certain specifications or an environmental testing agency verifying that water supplies are potable.

Crime Scene Technology (AS, CCC)

The Crime Scene track will prepare you for employment in law enforcement, or the medical and insurance industry, in a position such as technician or investigator. You will learn how to use law enforcement techniques, technology, and science to help solve crimes. For example, you might work side-by-side with police and the medical examiner to identify and collect evidence at crime scenes.

Forensic Science (AS)

The Forensic Science track will prepare you for employment such as a forensic identification specialist. You will learn how to analyze and interpret evidence using scientific methods. For example, you may examine clothing for invisible body fluids that you can then extract DNA from in order to determine if it matches a suspect.

Lean Manufacturing (CCC)

The Lean Manufacturing track will prepare you for employment in such positions as Quality Specialist and Lean Specialist in the biotech field. You will learn how to collect data and analyze it in order to implement processes that improve manufacturing. For example, you may work on a team charged with identifying the causes of waste in the drug manufacturing process in order to improve efficiency and reduce costs.



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MDC - North Campus
Biology, Health, Wellness & Funeral Sciences
11380 N.W. 27th Avenue
Science Complex – 3rd Floor
Miami, Florida 33167
Telephone: (305) 237-1101

MDC Wolfson Campus
Natural Science, Health & Wellness
300 NE 2nd Avenue
Room 1540
Miami, FL 33132
Telephone: (305) 237-3658