

# BIOTECHNOLOGY (BIOT)

IvyTech.edu/biotechnology

## OVERVIEW



The Biotechnology program at Ivy Tech is taught by instructors with real-world experience. Students will use state-of-the-art laboratories that are equipped with instrumentation, supplies and equipment for an effective hands-on laboratory experience. Students find employment opportunities within the following companies: Purdue University, Evonik, DOW Agrowsciences, Cook Biotech, and Tate and Lyle.

Classes focus on teaching a variety of procedures necessary to execute laboratory projects assigned in the student's chosen field. Students will spend a significant amount of class time working hands-on doing laboratory activities either by themselves or in small groups with the ability to have one-on-one time with the instructor.

## TWO-YEAR PROGRAM OPTIONS

### ASSOCIATE OF APPLIED SCIENCE

(60 credit hours = 4 semesters)

Associate of Applied Science degree programs are two-year programs that prepare students for careers, career changes and career advancement. Students who need to take longer to complete the degree because of job or family obligations can take the program over a longer period of time. AAS programs may also prepare students for transfer to four-year institutions. These programs offer education in recognized technical areas and specialties with emphasis on analysis, synthesis and evaluation. The program content, which is approximately 30% general education and 70% professional/technical, provides depth and breadth in conceptual and professional/technical skills. The general education courses equip students with the problem solving, communications, scientific and mathematical skills to compete successfully in the job market. Professional technical courses equip students with the skills to obtain employment and to advance in the workforce.

### ASSOCIATE OF SCIENCE

(60 credit hours = 4 semesters)

The Associate of Science degree prepares you for transfer to a university to pursue a baccalaureate degree. To find out information about your transfer options to public and private universities, contact your academic advisor or the transfer office of your local Ivy Tech. You are also encouraged to contact the institution and consult the current catalog and web page of the institution to which you wish to transfer. All 60 credits are transfer to IUPUI and students are directly admitted to the Junior class of Biotechnology.

## FEATURED CAREER OPTION BIOLOGICAL TECHNICIANS

**\$20.99** /hour median salary in  
Indiana\*

\*Data is specific to Indiana and taken from EMSI February 2016

## FOR MORE INFORMATION:

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765-269-5463

IF YOU'VE GOT QUESTIONS, WE'VE GOT ANSWERS.

FOR MORE INFORMATION:

School Advanced Manufacturing, Engineering & Applied Science

765.269.5000



# Ivy Tech Community College-Lafayette

## Biotechnology

2018-2019

THE FOLLOWING SUGGESTED REGIONAL SEQUENCE INCLUDES ALL COURSE REQUIREMENTS FOR THIS DEGREE. YOU MUST CONSULT WITH AN ACADEMIC ADVISOR TO DETERMINE WHICH ELECTIVES BEST MEET YOUR CAREER GOALS.

### ASSOCIATE OF SCIENCE IN BIOTECHNOLOGY

Course #	Title	Credit Hours
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#### Semester 1

A COMM 101	Fundamentals of Public Speaking	3
A ENGL 111	English Composition	3
IVYT 111	Student Success in University Transfer	1
A MATH 136	College Algebra	3

#### Select 1 of the following courses:

BIOL 105	Biology I- Molecular & Cellular Processes	5
BIOL 121	General Biology I	4

#### Semester 2

A CHEM 105	General Chemistry I	5
A MATH 137	Trigonometry with Analytic Geometry	3
XXXX XXX	Transfer Cluster Elective	4
A XXXX XXX	Transfer General Education Core Elective	3

#### Semester 3

CHEM 106	General Chemistry II	5
XXXX XXX	Transfer Cluster Elective	4
XXXX XXX	Transfer Cluster Elective	3-4
A XXXX XXX	Humanistic & Artistic Ways of Knowing Elec.	3

#### Semester 4

BIOT 220	Molecular Biology Lectures	3
^ BIOT 279	Capstone in Biotechnology	1
A PHYS 101	Physics I	4
A XXXX XXX	Social & Behavioral Ways of Knowing Elec.	3
XXXX XXX	Transfer Cluster Elective	4

**Total: 60**

#### Transfer Cluster Electives:

BIOT 101	Introduction to Biotechnology
BIOT 103	Safety & Regulatory Compliance for Biotechnology
BIOT 201	Cell Culture and Cellular Processes
BIOT 211	Analytic Methods in Biotechnology I
BIOT 233	Protein Analysis and Purification
BIOT 280	Co-op/Internship

BIOL 105 required for transferring to IUPUI's Biotechnology program.

#### Symbol Key:

^ -Capstone Class

A Required for Transfer General Education Core (TGEC) Certification

### ASSOCIATE OF APPLIED SCIENCE IN BIOTECHNOLOGY

Course #	Title	Credit Hours
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#### Semester 1

ENGL 111	English Composition: Strategies for Inquiry	3
IVYT 113	Student Success in Technology	1
MATH 136	College Algebra	3
XXXX XXX	Biotechnology Statewide Elective	4

#### Select 1 of the following courses:

BIOL 105	Biology I- Molecular & Cellular Processes	5
BIOL 121	General Biology I	4

#### Semester 2

BIOT 101	Introduction to Biotechnology	4
BIOT 103	Safety & Regulatory Compliance for Biotechnology	3
CHEM 105	General Chemistry I	5
XXXX XXX	Humanities/Social & Behavioral Sciences Elective	3

#### Semester 3

BIOT 201	Cell Culture & Cellular Processes	4
BIOT 211	Analytic Methods in Biotechnology I	3
BIOT 212	Analytic Methods in Biotechnology II	3

#### Select 1 of the following courses:

COMM 101	Fundamentals of Public Speaking	3
COMM 102	Introduction to Interpersonal Communication	3

#### Semester 4

^ BIOT 279	Capstone in Biotechnology	1
CHEM 106	General Chemistry II	5
XXXX XXX	Biotechnology Statewide Elective	3-4
XXXX XXX	Biotechnology Statewide Elective	4

#### Select 1 of the following courses:

BIOT 280	Co-op/Internship	3
BIOT 281	* INDEPENDENT RESEARCH & DEVELOPMENT	3

**Total: 60**

Ready to get started?

**APPLY NOW FOR FREE**

at [IvyTech.edu/applynow](http://IvyTech.edu/applynow)

For more information contact Ivy Tech Community College Lafayette at 765-269-5229

