BIOTECHNOLOGY
A DEGREE IN HIGH DEMAND // Ivy Tech Community College-Bloomington

TAKE IVY TECH CLASSES IN HIGH SCHOOL and earn college credit!
**WHAT IS BIOTECHNOLOGY?**

Biotechnology is the use or manipulation of living organisms or their parts to make a useful product. In the Bloomington region, this includes biomanufacturing as well as the production of medical devices.

**ARE THERE JOBS IN BIOTECHNOLOGY?**

YES! The biotechnology industry is extremely strong in the Bloomington region and growing. According to a 2012 Batelle study, Bloomington ranked #5 in the nation in drug and pharmaceutical employment and #1 for medical device employment for small metropolitan areas.

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Degree</th>
<th>Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Culture Technician or Biomanufacturing Technician</td>
<td>Associate degree</td>
<td>$30,000 - $40,000</td>
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<tr>
<td>Microbiology Quality Control Technician</td>
<td>Bachelor’s degree</td>
<td>$40,000 - $50,000</td>
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<tr>
<td>Quality Assurance/Regulatory Affairs Documentation Coordinator</td>
<td>Associate degree</td>
<td>$30,000 – $48,000</td>
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<tr>
<td>Process Development Associate</td>
<td>Bachelor’s degree</td>
<td>$35,000 - $60,000</td>
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</tbody>
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More information on job descriptions and salary information can be found at www.bio-link.org.

**WHY CHOOSE A CAREER IN BIOTECHNOLOGY?**

Because you can help save lives, cure diseases, help feed the hungry, or develop alternative fuels and be a pioneer in green technology! People who work in biotechnology make discoveries at the forefront of science in the areas of drug discovery, crop improvement, environmental protection, manufacturing of bioscience products including drugs and medical devices. The industry is growing and offers excellent pay and benefits.

**Biotechnology graduates find local employment.**

“Since 2005, Cook Pharmica has provided a significant number of internships and or full-time career opportunities to graduates of the Ivy Tech-Bloomington biotechnology program. We value the skill level and job readiness of the employees we have hired from Ivy Tech. I highly recommend this program for individuals looking to get into the biopharmaceutical industry.”

– Tedd Green, President, Cook Pharmica LLC
Biotechnology education

IVY TECH COMMUNITY COLLEGE-BLOOMINGTON

DEGREE OPTIONS

Associate of Science (AS) degree in Biotechnology
The two-year AS program incorporates foundational science courses in biology, chemistry, and physics along with general education requirements which provides a strong foundation for the advanced study of biotechnology at Indiana University, Bloomington.

Associate of Applied Science (AAS) degree in Biotechnology
This two-year program concentrates on technical and professional development courses that are directly applicable to the field of biotechnology. You can choose various topics such as analysis of biological molecules, recombinant DNA technology, cell culture skills using bioreactors and fermenters, small and large scale biomolecule purification methods, food and drug law, product life cycle, clinical trials, post market issues, technical writing and risk management. Key program objectives include practicing within full compliance of the biotechnology regulatory environment, and practicing good documentation, laboratory and manufacturing safety skills.

Get a head start on your biotechnology degree in high school!

Ivy Tech Dual Credit program
Get a jump start on college by enrolling in Ivy Tech dual credit courses while still in high school! Dual credit classes count for both high school and college credit. To find out what courses are offered at your school, see your school’s guidance counselor.

For more information about Ivy Tech’s Dual Credit program:
ivytech.edu/dual-credit | (812) 330-6013 | vclay@ivytech.edu

Scholarship opportunities
Scholarship funds are available for students pursuing the biotechnology degree at Ivy Tech-Bloomington. Paid internship opportunities are available for students pursuing the AAS degree program.

Enroll today!
Apply online at ivytech.edu/apply-now or visit us on campus!

Ivy Tech Community College-Bloomington
200 Daniels Way, Bloomington, IN 47403
Walk in anytime: Monday–Thursday (8am – 6pm) Friday (9am-5pm)
(812) 330-6013

FOR QUESTIONS ABOUT BIOTECHNOLOGY, CONTACT:

Sengyong Lee, Ph.D.
Biotechnology Program Chair/Professor
slee@ivytech.edu | (812) 330-6036

Sarah Cote
Associate Professor, Biotechnology
scote@ivytech.edu | (812) 330-6310

For more information: ivytech.edu/biotechnology
Meet Ivy Tech biotechnology graduates!

**Kristine Lewis**
**Quality Control Chemistry – Stability Lab Assistant, Cook Pharmica LLC**
Kristine graduated from Bloomfield High School with an Academic Honors diploma. After having her son, she enrolled at Ivy Tech Community College-Bloomington. She graduated in 2009 with an Associate of Science degree in biotechnology. She then transferred her degree to Indiana University Bloomington. She graduated in 2011 from Indiana University with a Bachelor of Science degree in biotechnology with a chemistry minor. She is now pursuing her master's degree in biotechnology and regulatory affairs online through Johns Hopkins University. She currently works at Cook Pharmica LLC as a quality control analytical chemistry stability lab assistant. Previously she worked at Ivy Tech Community College as a lab technician, prepping lab supplies for chemistry classes, microbiology classes and biology classes, purchasing laboratory supplies, managing a budget, and maintaining laboratory inventories.

**Ben Walker**
**Ph.D. student, Indiana University**
Ben grew up in Amberg, Germany, where he completed high school before coming to the United States. Ben enrolled at Ivy Tech Community College-Bloomington and earned his Associate of Science degree in biotechnology in 2009. He continued his education at Purdue University and earned a Bachelor of Science degree in biochemistry in 2013. At Purdue, Ben worked as an undergraduate research associate and lab technician. After completing his education at Purdue, he began the interdisciplinary biochemistry Ph.D. program at Indiana University. As a graduate student and research assistant, he also instructs undergraduate courses, and is currently working on a research project in the Cochran Lab. In his research, he investigates molecular motors in the cell called kinesins that exert force on chromosomes during cell division. Through his research, he hopes to shed light on how these molecular motors function.

**Erin Crain**
**Associate Scientist, AB Biotechnologies**
While she was a student at Ivy Tech, Erin had a biotechnology internship at a small research and development company, and was offered a full-time position after she completed her Associate of Applied Science degree in biotechnology. As an associate scientist at AB BioTechnologies, Erin has many responsibilities and opportunities to learn and grow as a scientist. In a typical day, she might be found drafting reports, testing samples with specialized equipment (e.g. HPLCs, a freeze-dry microscope, and particle sizers), formulating R&D batches, or providing technical support. Erin finds solving problems for AB BioTechnologies clients to be a rewarding challenge every day.