

## **College Mission**

Ivy Tech Community College prepares Indiana residents to learn, live, and work in a diverse and globally-competitive environment by delivering professional, technical, transfer, and lifelong education. Through its affordable, open-access education and training programs, the College enhances the development of Indiana's citizens and communities and strengthens its economy.

## **College Vision**

Changing Lives  
Making Indiana Great

## **School of Technology Mission**

The mission of the School of Technology is to provide a broad and practical education for those seeking employment, advancement and training in technical occupations by offering courses, professional certificates, Technical Certificate degrees, Associate of Science and Associate of Applied Science degrees. The School of Technology will prepare students with the ability to think critically, and develop skills in technical field through high-quality education and collaborative project based learning. Students will also reflect the mission of lifelong learning, through continuing their education formally at other colleges or universities or making use of our many courses which embed industrial certifications. Graduates will serve their industry and community through applying their knowledge to respond to future advances and changes in technology, with an appreciation of the diverse and global society in which they live.

## **School of Technology - General Outcomes**

1. Technology skills – Ability to utilize and leverage technology in ways that add value to an organization.
2. Math and Science abilities – Apply mathematics and scientific principles as appropriate to one's discipline.
3. Strategic and Critical Thinking – Ability to link data, knowledge and insight together to provide solution to unsolved problems. Ability to find needed information and evaluate the quality of information and sources.
4. Communication and Teamwork – Ability to exchange information effectively using appropriate and varied delivery methods, and work effectively with others.
5. Dedication to Lifelong learning - Continue professional development through ongoing education, certifications, professional society membership, and/or licensing.
6. Practice of Professionalism, Respect for Diversity, and Ethical Conduct – Promote the understanding of, and respect for, issues of gender, race and cultures other than one's own. Behave professionally and ethically in the workplace

## Biotechnology Program Mission

The primary mission of the Ivy Tech Community College Biotechnology Program is to instill the principle of work while developing professional skills advancement within the laboratory environment. The Biotechnology Program places a strong emphasis on the development of work habits that are consistent with the safety and regulatory environment that graduates will encounter in the biotechnology workplace. It is also essential to develop the ability of the student to be able to learn new techniques and processes independently so as to foster life-long learning.

## Biotechnology Program Competencies

- a) Biotechnology laboratory and production competencies - Demonstrate capability to work safely and efficiently in a biotechnology laboratory and manufacturing facility. Independently conduct routine solution preparation and routine analytical tasks such as determination of weight, volume, pH, conductivity and optical density. Be able to follow SOP's and Batch Records to do more complex analytical and production tasks and maintain cultures of and manipulate cells that are commonly used in biotechnology laboratories and production facilities.
- b) Apply STEM to tech problems - Be able to relate theoretical concepts from theoretical concepts introduced in the classroom to activities within the biotechnology laboratory and manufacturing facility.
- c) Experiment, Measure, and Analyze - Interpret and analyze information from various sources, then integrate the information to into solving biotechnology problems.
- d) Teamwork – Function effectively as a member of a technical team and, when necessary, demonstrate leadership skills for that team.
- e) Identify and Solve Problems – Identify, analyze, and solve narrowly defined technical problems.
- f) Communication – Apply written, oral and graphical communication skill in both technical and non-technical environments; identify and use appropriate tech literature.
- g) Lifelong learning – Understand the need for, and engagement in, self-directed continuing professional development
- h) Professional/Ethical/Diversity – Demonstrate understanding of and commitment to address professional and ethical responsibilities, including a respect for diversity.
- i) Quality, Continuous Improvement – Demonstrate a commitment to quality, timeliness, and continuous improvement.