

IBHE SHORT PROGRESS REPORT
Bachelor of Science in Engineering Technology

- 1. Reporting Institution:** Eastern Illinois University
- 2. Reporting Program:** Bachelor of Science in Engineering Technology
- 3. Date:** February 7, 2022
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5. Summary of Program Goals and Objectives and Progress at Meeting Goals:

The Engineering Technology program began as a program offering in the fall semester of 2018. The graduates from this program go into high-demand technical careers such as production engineer, manufacturing engineer, product design engineer, safety coordinator, and machine designer. With high rates of retirements from individuals in engineering and technical fields, the demand for these graduates looks to continue to grow for many years to come.

The mission of the Bachelor of Science in Engineering Technology program is to prepare technical or technical management-oriented professionals for employment in production, design and manufacturing environment. Upon completion of the degree program, students will be able to:

1. Demonstrate effective communication skills for engineering technology fields using written, oral, and technological formats.
 - I. Write critically and effectively in the discipline of engineering technology by developing an argument and evaluating evidence, issues, ideas, and problems from multiple perspectives.
 - II. Present information using engineering tools, engage in discussion of engineering concepts, explain the ideas of others, and express their own ideas with clarity.

Progress: Students are assessed during oral presentations, written assignments and presentations, which is a partial requirement for both coursework within the program. The senior capstone class requires a presentation of the project to industry representatives.

2. Analyze problems and apply engineering technology solutions utilizing quantitative reasoning and critical thinking skills.
 - I. Produce, analyze, interpret, and evaluate estimating and costing systems used in engineering environments.
 - II. Apply critical thinking skills to interpret engineering trends.
 - III. Apply critical thinking skills to design and manage in engineering production environments.
 - IV. Create and justify cost effective engineering projects using a variety of tools.

Progress: Required courses are specifically designed to provide students with the tools to analyze problems and develop solutions while applying quantitative reasoning and critical thinking skills in Engineering Technology. Students complete assignments and projects in courses directly requiring application of these skills.

3. Develop an awareness of ethical values and social responsibility in a multicultural environment.
 - I. Interact sensitively and ethically with people from diverse backgrounds and demonstrate understanding of the sociocultural contexts that influence individual differences in engineering and professional environments.
 - II. Implement values and systems in production environments that will lead to positive outcomes in engineering environments and a society responsive to multicultural and global concerns.

Progress: Core courses in Engineering Technology emphasize ethical considerations within a variety of contexts as well as educate students of their role in an environment filled with persons of diverse backgrounds and talents. Students submit assignments where they must analyze the implications of trends on society and must practice in teamwork key concepts of cultural inclusivity and responsible interaction.

4. Demonstrate functional and operational skills relevant to the engineering technology field.
 - I. Apply engineering knowledge and technical skills in the content areas of engineering technology.

Progress: Students learn and apply the tools and operations of various engineering tools and design concepts as applied to real-world situations in business and industry. Students are required to complete comprehensive projects to demonstrate their knowledge of strategies, principles, and tools for Engineering Technology.

Enrollment History

The Engineering Technology program has tracked the following number of students in the program since its inception:

| | FA18 | SP19 | FA19 | SP20 | FA20 | SP21 | FA21 | SP22 |
|-----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| EGT | 23 | 20 | 32 | 30 | 33 | 27 | 32 | 29 |

VPAA Decision:

The Engineering Technology B.S. has demonstrated steady enrollment growth, from 23 to 29 students in its first five years as a program. Expecting high demand in the job market, especially in the wake of a retirement wave, the program follows and assesses its mission to prepare future engineering technology professionals who have strong skills in communication, problem solving, and ethical decision-making. The program is in **good standing**.