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## TECHNOLOGY EDUCATION

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An action-based program for all students to learn how to develop, produce, use, and assess the impacts of products and services that extend the human potential to improve and control the natural and human-made environment.

Each student who participates in the program will develop an understanding of technology as a system in the global context by developing ability to....

- Develop technological products and services.
- Use tools, machines, materials, and energy to produce products and services.
- Select appropriate technology to solve problems and meet opportunities.
- Appropriately use technology to extend human potential to improve and control our environment.
- Assess the impacts of technology on individuals, society, and the environment.
- Use appropriate personal and interpersonal skills to participate in a technological society

To reach these goals, the program is based on the technological actions that are universal for all technologies. The total curriculum addresses these two key aspects:

- The specific actions used in developing, producing, using, and assessing all technologies.
- The contexts where technology is developed and used.

**4784 \*INTRODUCTION TO MANUFACTURING I (10, 11, 12)** A broad course that explores the application of tools, materials, and energy in developing, producing, using and assessing manufactured products. Students will explore techniques used to apply technology in obtaining resources and in changing them into industrial materials and finished products.

**4796 \* INTRODUCTION TO MANUFACTURING II (10, 11, 12)** A specialized course that explores the technological processes used to obtain resources and change them into industrial materials and finished industrial and consumer products. **Requirement – Successful completion of Introduction to Manufacturing I.**

**4782 \* INTRODUCTION TO CONSTRUCTION I (10, 11, 12)** A broad course that explores the application of tools, materials, and energy in developing, producing, using and assessing constructed works. Students will explore techniques used to apply technology in producing residential buildings. Course may be supplemented with weekend hours spent at a Habitat for Humanity build (or other similar program).

**4792 \* INTRODUCTION TO CONSTRUCTION II (10, 11, 12)** A specialized course that explores the technological processes used to produce residential, commercial, and industrial buildings and a variety of civil structures. Course may be supplemented with weekend hours spent at a Habitat for Humanity build (or other similar program). **Requirement – Successful completion of Introduction to Construction I. Recommendation: at least a “C” average in Intro to Construction I.**

Conexus Indiana, in partnership with Hire Technology, is a career pathway for Advanced Manufacturing and Logistics (AML). The mission of Conexus Indiana is to prepare a qualified workforce for high-tech middle skill AML careers. Indiana manufacturers employ one in five Hoosiers while producing lifesaving medicines, the latest jet engines, electric cars and trucks and much more. Hire Technology is a comprehensive high school curriculum providing schools with a solution to prepare students for high-tech careers. The two-year curriculum features:

- Nationally recognized industry credentials
- Dual credit through Ivy Tech
- Immersive online learning environment
- Project Based Learning
- Partnership with local manufacturing company

**4796 INTRODUCTION TO ADVANCED MANUFACTURING AND LOGISTICS – 2 credits, 2 semesters (11, 12)** Introduction to Advanced Manufacturing and Logistics is a course that specializes in how people use modern manufacturing systems with an introduction to advanced manufacturing and logistics and their relationship to society, individuals, and the environment. Students apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Topics covered include: safety principles, quality principles, environmental concerns, manufacturing process basics, introduction to distribution, material handling, managing inventory, shipping & transportation, global/international logistics, workplace communication, and effective teamwork.

This is the first year of a two year program and students who complete both years are eligible for industry certification exams.