

# MECHANICAL ENGINEERING TECHNOLOGY (METT)

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## OVERVIEW



The Mechanical Engineering Technology (METT) Program at Ivy Tech educates skilled technicians who will work with engineers and other professionals to implement mechanical designs and support engineering processes. As a field of applied engineering, METT has a hands-on focus with competencies that include collecting, analyzing, and interpreting data, as well as troubleshooting mechanical systems. Students learn the fundamentals of mechanical design, automation, fluid power, and electronics, with every core course having a lab component. Graduates of the Associate of Science (AS) degree can seamlessly transfer as a Junior to a four-year institution through the Transfer Single Articulation Pathway (TSAP) program (provided they meet the admissions requirements of the transfer institution) or immediately enter the workforce as a technician.

## TWO-YEAR PROGRAM OPTIONS

### ASSOCIATE OF SCIENCE

(60 credit hours = 4 semesters)

The Associate of Science degree in Mechanical Engineering Technology prepares you for transfer to a university to pursue a baccalaureate degree. Graduates will also earn the Transfer General Education Certificate.

### COURSEWORK

Students in METC will work with a variety of equipment and tools to solve technical problems. Examples include creating molds and castings, performing heat-treating and measuring its results, testing material properties such as hardness and strength, utilizing CAD software, viewing polariscopes to observe stress within specimens, and troubleshooting electronic equipment with circuit fundamentals.

### OUR GRADUATES

Our program prepares students to transfer to a four year engineering technology program at universities such as Purdue & IUPUI. At these universities students will be able to enhance their technology, science, and math skills to work with engineers and other technicians. Areas of work entry include design, manufacturing, transportation, and electronics.

### MANUFACTURING LAB

Ivy Tech's large industrial workspace provides a setting for hands on training in automation, robotics, and electrical and mechanical systems. The skill set gained from this equipment prepares students for Indiana's future employment needs in engineering and manufacturing.

## STUDENT TESTIMONIAL

"I am not going to lie, I was not expecting my teamwork skills to improve as much as they did this semester. I teamed up with a couple of fellow students that all I have in common with is this drive to get into engineering, and as I am sure you know, it's not always easy. Part of what makes us interested in this degree is to be innovative and create new and exciting things. This is great, but it can make working in a team of people who think similarly, very difficult. There is always the question of why don't you do it like this? Or think maybe it should be done this way, and they may all be valid points but at times it is hard to hear that you may not be working as effectively as you thought. I learned that even though people all do things differently and everyone has their own ideas of new and innovative, it is often best to talk it out and come to an agreement so that things can continue to move forward. "

-Joel Salinas, METT

## FOR MORE INFORMATION

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

FOR MORE INFORMATION:

School of Advanced Manufacturing, Engineering and Applied Science  
765.269.5229



IVY TECH  
COMMUNITY COLLEGE

# Ivy Tech Community College-Lafayette

## Mechanical Engineering Technology

2021-2022

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

Course #	Title	Credit Hours
<b>Semester 1</b>		
* ENGL 111	English Composition	3
* MATH 137	Trigonometry with Analytic Geometry	3
METC 105	Introduction to Engineering Technology	3
* CHEM 111	Chemistry I	4
IVYT 111	Student Success in University Transfer	1
<b>Semester 2</b>		
* COMM 101	Fundamentals of Public Speaking	3
* MATH 136	College Algebra	3
EECT 111	Introduction to Circuit Analysis	4
METC 107	Mechanical Design & Documentation	3
* PHYS 101	Physics I	4
<b>Semester 3</b>		
* MATH 221	Calculus for Technology I	3
* PHIL 102	Introduction to Ethics	3
METC 111	Statics	3
METC 143	Materials & Processes	3
METC 220	CAD for Mechanical Design	3
<b>Semester 4</b>		
* MATH 222	Calculus for Technology II	3
* XXXX XXX	Social & Behavioral Ways of Knowing Elective	3
METC 230	Fluid Power	3
METC 237	System Automation & Control	4
^ METC 279	Portfolio & Professional Preparation	1

**Total: 60**

#### Symbol Key

^ Capstone Course

\* Required for General Transfer Education Core (TGEC) Certificate

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