

# MECHANICAL MAJOR Associate of Applied Science

This major provides the knowledge and skill sets used in various occupations found in a manufacturing environment. Students will learn mechanical drives, basic machining, basic electrical, fluid power hydraulics and pneumatics, blueprint reading, and more. This major provides for enough technical electives that will allow students to choose a career pathway that suits their interest and abilities.

# JOB OPPORTUNITIES FOR GRADUATES

There are a number of skilled positions/careers available to students taking this program. Positions held are tool & die, machinist, tool maker, die maker, mold maker, CNC machinist, maintenance technician, industrial mechanic, millwrights, and multicraft technician to name a few.

According to the DOL Bureau of Labor Statistics the job outlook thru 2022 is good. Nationally companies are looking to fill employment gaps ranging from 17% to 19% depending on the position. Locally we are looking at a skills shortage in a variety of skilled trade positions. With the current skilled workforce shrinking due to the large number of retirements and not enough new workers entering these fields to adequately replace those retirees; the demand has/is growing daily.

# SALARY

The median hourly wage for machinists is \$18.99. The lowest 10 percent earned less than \$11.70 per hour, and the top 10 percent earned more than \$28.75 per hour.

The median hourly wage for tool and die makers is \$22.60. The lowest 10 percent earned less than \$15.16 per hour, and the top 10 percent earned more than \$33.44 per hour.

The median annual wage for industrial machinery mechanics and maintenance workers and millwrights is \$45,840. The lowest 10 percent earned less than \$29,020, and the top 10 percent earned more than \$69,990.

Apprentices will make less than journeymen make, however they are on a progressive pay scale. Generally apprentices receive pay increases as they progress through their apprenticeship. As apprentices advance in their skills and are capable of working with limited supervision their rate of pay reflects that knowledge and skill advancement

# LOCATION

Findlay-area Campus Toledo-area Campus

### ABOUT THE DANA CENTER

Owens Community College continues to fulfill its mission as the region's workforce education leader by responding to labor market needs and expanding opportunities with the creation of the Dana Advanced Manufacturing Training Center, the renovated 59,000-square-foot, \$9.6 million facility focused on producing job-ready, skilled workers for in-demand careers



in skilled trades and advanced manufacturing. The Dana Center's design provides highly technical and integrated training in a modernized setting with amenities including natural lighting, glass walls and polished floors – a clean and safe environment conducive to learning.

# OWENS

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#### Office of Admissions

Toledo-area Campus - (567) 661-7777 Findlay-area Campus - (567) 429-3509 School of Science, Technology, Engineering and Mathematics (567) 661-7169

# **PROGRAM CURRICULUM**

# **MECHANICAL MAJOR**

Associate of Applied Science

# **REQUIRED COURSES**

\*The Age of Coursework for Skilled Trades (SKT) courses is 6 years - chair approval required for courses beyond that. Please refer to College Policy, Chapter 2 - Academic, 3358:11-2-22 Age of Coursework Policy.

# **1ST SEMESTER**

ENG 111	Composition I *	Credits: 3(Lec: 3)
or		
ENG 111P	Composition I Plus *	Credits: 4(Lec: 4)
MTH 143	Applied Industrial Mathematics	Credits: 3(Lec: 3)
STM 105	Technology in Society	Credits: 2(Lec: 2)
SKT 142	Mechanical Print Reading	Credits: 3(Lec: 2 Lab: 2)
SKT 170	Maintenance Electricity	Credits: 3(Lec: 3)
SUP 102	Managing Yourself	Credits: 1(Lec: 1)

# **2ND SEMESTER**

PHY 143	Applied Industrial Physics	Credits: 3(Lec: 3)
SKT 150	Piping Systems	Credits: 3(Lec: 2 Lab: 2)
SKT 151	Fluid Power: Hydraulics	Credits: 3(Lec: 2 Lab: 2)
SKT 157	Plant Equipment: Gear/Bearings	Credits: 3(Lec: 2 Lab: 2)
	Business (BUS) Elective	Credits: 3(Lec: 3)
	*Select any Business (BUS) course	

### **3RD SEMESTER**

PSY 111	Indust/Organization Psych	Credits: 3(Lec: 3)
SKT 153	Fluid Power: Pneumatics/Logic	Credits: 3(Lec: 2 Lab: 2)
WLD 191	Intro to the Welding Processes	Credits: 2(Lec: 1 Lab: 3)
CAM 160	Machining I	Credits: 2(Lec: 1 Lab: 3)
SKT 239	Mechanical Power Trans System	n Credits: 3(Lec: 2 Lab: 2)
IST 131	Computer Concepts and Apps	Credits: 3(Lec: 3)

# **4TH SEMESTER**

ENV 110	OSHA General Safety	Credits: 3(Lec: 3)
	Arts and Humanities Elective	Credits: 3(Lec: 3)
	Skilled Trades Technical Elective	Credits: 8
	*Select from: SKT 152, SKT 156, SKT 238, SKT 131,	
	CAM 161, WLD 192 or WLD 193	

\*Ohio Transfer Module Course

More information about the Ohio Transfer Module Course can be found at www.ohiohighered.org/transfer/transfermodule

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Your Success Starts Here.