MECHANICAL MAINTENANCE  
Technical Diploma

About the Mechanical Maintenance Program

Introduces students and builds basic skills to install, maintain, and operate hydraulic, pneumatic, mechanical, and electronic automated equipment used in manufacturing industries. Students will be introduced to diagnostics and repair of equipment components. Upon completion of the certificate, students will be eligible for entry level positions in manufacturing as production workers or maintenance technicians.

PROGRAM OUTLINE

| TERM 1 |
|----------------|-----------------------------|
| Course #       | Course Title                                      | Credits |
| 1010311500     | MS Word Beginning  
This course will cover creating a flyer, research paper, and business letter using Microsoft Word. | 1.00     |
| 1010312600     | MS Excel Beginning  
This course will cover creating a worksheet and chart; application of formulas, functions, and formatting; and working with large worksheets, charting, and what-if analysis using Microsoft Excel. | 1.00     |
| 1044910000     | Industrial Safety Fundamentals  
Introduces general safety for a manufacturing environment while raising the awareness of the worker to the hazards around them, and how to best protect themselves while working safely. Students will earn an OSHA 30 card and confined space certificate upon completion. | 2.00     |
| 1046210300     | Hydraulic Components and Schematics  
Students will learn how to operate the Basic Hydraulic Trainer and draw the schematic symbols in a circuit. | 1.00     |
| 1046210500     | Fixed Displacement Pumps  
Students will learn about Pascal's law and the relationship between pressure, force and area. | 1.00     |
| 1046210700     | Hydraulic Pressure Valves  
Students will identify different hydraulic valves and use them in an application. | 1.00     |
| 1046210900     | Analyze Basic Pneumatic Trainer  
Students will learn how to operate the Basic Pneumatic Trainer. | 1.00     |
| 1046211200     | Analyze Pressure Regulator and Actuator  
Students will understand how air compression will affect an actuator. | 1.00     |
| 1046211500     | Basic Electrical Circuits  
Students will learn how to measure voltage, current and resistance in an electrical circuit. | 1.00     |
| 1046211700     | Inductance and Capacitance  
Students will learn how to define and calculate inductance and capacitance in an electrical circuit. | 1.00     |
Analyze Transformers
Students will learn how to size a transformer and how to identify the step up and step down transformers.

Written Communication
Develops writing skills which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through the analysis of a variety of written documents.

Total Credits: 15.00
Talk with a Success Coach about the program outline. Together, you will determine if credits you've already earned satisfy any requirements, discuss possible alternative courses, and choose the best classes if you're thinking of transferring.

AT A GLANCE

How You'll Learn

ON CAMPUS ONLINE CLASSES MULTIPLE START DATES FLEXIBLE PACE

2022 Start Dates

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<th>January 5</th>
<th>May 2</th>
<th>September 6</th>
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<td>February 7</td>
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<td>October 3</td>
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2023 Start Dates

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<tr>
<th>January 9</th>
<th>May 8</th>
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<tbody>
<tr>
<td>February 6</td>
<td>June 5</td>
</tr>
<tr>
<td>March 6</td>
<td>July 3</td>
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Approximate Cost

$2,524*

*Based on 10-level courses—materials, books, and fees may be additional
What You'll Learn

- Practice industry recognized safety practices and guidelines, including the use of personal protective equipment in an industrial operating environment.
- Prepare and maintain documentation of work orders, repair work completed, and safety procedures implemented.
- Install, maintain, troubleshoot and repair industrial machinery and manufacturing equipment, using appropriate tools, materials, and methods.

Your Potential Careers

- Machinery Maintenance Worker
- Machinery Repair

Median Annual Salary

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<tr>
<th></th>
<th>Local</th>
<th>State</th>
<th>National</th>
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<tbody>
<tr>
<td>Median Annual</td>
<td>$40,275</td>
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EMSI 2022.1

Get Started

Your application can be submitted online, it takes just a few minutes to complete.

APPLY NOW