## **Industrial Maintenance Certificate**

Industrial maintenance mechanics are employed in the die-casting, plastics, food processing, printing, precision metal and woodworking industries. The vocational certificate course work includes a broad curriculum of industrial electricity, welding, HVAC and blueprint reading. Emphasis will be hands-on training in the repairing and testing of equipment. This also allows students employed in an industrial maintenance position to broaden their skill areas and achieve a vocational certificate.

Note: MFAB 120 - MFAB Tools and Equipment or MFAB 127-Welding Processes are prerequisites/corequisites to MFAB 121. Students who may have the skills needed for MFAB 120 or MFAB 127 may contact the career program facilitator for a waiver or may contact the Testing Center for prior learning credit.

## Suggested/Sample Course Sequence

The sequence taken by the student may vary depending on prerequisites, course availability, and personal/ professional responsibilities.

(Major Code 5210; State CIP Code 47.0303)

- · Gainful Employment Industrial Maintenance (http://www.jccc.edu/electrical-tech/ge-vc-indusmain.html)
- Electrical Technology (http://www.jccc.edu/electrical-tech)

## **First Semester**

DRAF 129	Interpreting Architectural Drawings	2
or MFAB 180	Blueprint and Symbols Reading for Welders	_
or HVAC 143	Reading Blueprints and Ladder Diagrams	
ELTE 123	Electromechanical Systems	4
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INDT 125	Industrial Safety/OSHA 30	3
MFAB 124	Introduction to Welding	3
Total Hours		12
Second Semester		
Technical Electives (see list below)		12
Total Hours		12
Technical Electives		
ELEC 120	Introduction to Electronics	3
ELEC 133	Programmable Controllers	3
ELEC 165	Advanced Programmable Controllers*	3
ELTE 122	National Electrical Code I	4
ELTE 200	Commercial Wiring Methods*	4
ELTE 205	Industrial Electrical Wiring*	4
HVAC 121	Basic Principles of HVAC*	4
CET 105	Construction Methods	3
MFAB 140	Maintenance Repair Welding*	3
MFAB 128	Basic Machine Tool Technology	3
MFAB 240	Metallurgy	2
INDT 155	Workplace Skills	1

**Total Program Hours: 24**