

Industrial Maintenance, A.A.S.

Industrial maintenance requires people employed in the field to be trained in a variety of areas, including welding, electricity, HVAC, gasoline or diesel engines, and generators. Often, the needs will change due to growth in a company or the expansion of services provided. This degree option will allow a student to choose from numerous courses to custom build a program that will fit the needs of an employer. It will also allow students employed in an industrial maintenance position to broaden their skill areas and achieve an associate of applied science degree.

(Major Code 2270; State CIP Code 47.0303)

- Electrical Technology (<http://www.jccc.edu/electrical-tech>)

Associate of Applied Science Degree

First Semester

DRAF 129 or MFAB 180 or HVAC 143	Interpreting Architectural Drawings Blueprint and Symbols Reading for Welders Reading Blueprints and Ladder Diagrams	2
ENGL 121	Composition I*	3
INDT 125	Industrial Safety/OSHA 30	3
HVAC 123	Electromechanical Systems	4
MATH 130	Technical Mathematics I*	3
Total Hours		15

Second Semester

Technical Electives (see below)		6
CPCA 128	PC Applications: MS Office	3
ELTE 122	National Electrical Code I	4
ENGL 123	Technical Writing I*	3
INDT 155	Workplace Skills	1
Total Hours		17

Third Semester

Related Electives (see below)		3
Technical Electives (see below)		4
ECON 132	Survey of Economics	3
MFAB 124	Introduction to Welding	3
SPD 120	Interpersonal Communication	3
Total Hours		16

Fourth Semester

Related Electives (see below)		3
Technical Electives (see below)		9
EMS 121	CPR I - Basic Life Support for Healthcare Provider	1
Humanities Elective [^]		3
Total Hours		16

[^] Humanities Elective (<http://catalog.jccc.edu/spring/degreecertificates/electives/humanities-aas>)

Technical Electives

AUTO 165	Automotive Engine Repair*	4
AUTO 210	Advanced Engine Repair*	3
CET 105	Construction Methods	3
ELEC 120	Introduction to Electronics	3

ELEC 133	Programmable Controllers	3
ELEC 165	Advanced Programmable Controllers*	3
ELTE 200	Commercial Wiring Methods*	4
ELTE 205	Industrial Electrical Wiring*	4
ELTE 271	Electrical Internship I*	3
HVAC 150	Refrigerant Management and Certification	1
HVAC 121	Basic Principles of HVAC*	4
HVAC 146	Plumbing Systems Applications	3
HVAC 221	Commercial Systems: Air Conditioning*	4
HVAC 223	Commercial Systems: Heating*	4
HVAC 271	HVAC Internship*	3
MFAB 128	Basic Machine Tool Technology	3
MFAB 140	Maintenance Repair Welding*	3
MFAB 240	Metallurgy	2
MFAB 271	Metal Fabrication Internship*	3

Related Electives

BUS 140	Principles of Supervision	3
BUS 141	Principles of Management	3
CET 129	Construction Management	3
CET 140	Civil Engineering Materials*	3
CPCA 105	Introduction to Personal Computers: Windows	1
CPCA 121	Introduction to Project Management*	1
CPCA 141	Internet I*	1

Total Program Hours: 64

Courses

INDT 125 Industrial Safety/OSHA 30* (3 Hours)

Prerequisites or corequisites: RDG 126 or College Reading Readiness

This course introduces the student to basic safety policies, procedures, and regulations. The student should be able to list various safety, health, and environmental topics, and recognize the need for an ongoing safety program. Upon successful completion of this course, including attendance and grade requirements, the students may be eligible for the OSHA General Industry Health and Safety Training card. 3 hr. lecture/wk.

INDT 155 Workplace Skills* (1 Hour)

Prerequisites or corequisites: RDG 126 or College Reading Readiness

Upon successful completion of this course, the student should be able to identify the job skills necessary to have a successful career in the field of his or her choosing. Topics include listening skills, oral communication, human relations, decision making/problem solving, how to work as a team, time and resource management, work ethics and career planning. 1 hr. lecture/wk.