



## Corrections

### COURSES

#### WLD128 Introduction to Structural Drawings and AutoCAD

*(Title change – previously Blueprint Reading for Welders)*

**3 Credits (2 Lectures, 3 Labs)**

A focus on the understanding and interpretation of structural fabrication, steel erection, and structural contract drawings including analysis, identification, and application of proper interpretation and use of weld symbols. The course will also introduce Computer-Aided Drafting (CAD), computer technology for creation and documentation of 2D drawings utilizing the most recent version of AutoCAD distributed by AutoDesk, including operation and capabilities of computers in CAD, drafting fundamentals, dimensioning, annotating, management of CAD files, and printing. *Recommendations: Computer literacy.*

### CERTIFICATES AND DEGREES

#### ADVANCED INDUSTRIAL TECHNOLOGY CERTIFICATE

*(Title change – previously Advanced Industrial Maintenance Technician Certificate)*

**Total Credits: 32**

The Advanced Industrial Technology Certificate provides students the opportunity to gain knowledge, skills, and an understanding of the concepts and applications of industrial technology. Upon completion of the certificate, students will have the abilities and skills needed to support employment in the manufacturing technology industry. The certificate was developed in cooperation with automated manufacturing industries.

##### Core Requirements (32)

ELC122 Direct Current & Alternating Current Circuit Analysis (3)

ELC128 Introduction to Programmable Logic Controllers (3)

ELC220 Active Circuits (3)

ELC228 Advanced Programmable Logic Controllers (3)

HEO118 Forklifts, Rigging, and Hoisting Training (2)

MET125 Principles of Fabrication (3)

MET132 Fluid Power - Hydraulics/Pneumatics (3)

MET226 Electro-Mechanical Systems (3)

MET245 Variable Frequency Drive (3)

MET289 Advanced Technology Capstone (3)

WLD110 Survey of Welding Processes (3)

##### Other Requirements

- Students must earn:
  - a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale

- at least one-third of the certificate credits from CAC.

#### FUNDAMENTALS OF ARC WELDING CERTIFICATE

**Total Credits: 18-19**

*(Total credit change)*

The Fundamentals of Arc Welding Certificate prepares students for employment as an entry level welder and welder helper. Topics include the welding processes of shielded metal arc welding, gas metal arc welding, interpretation of structural drawings and an introduction to autoCAD. A typical graduate seeks employment in mining, steel fabrication, steel erection, and manufacturing industries. After completion of this certificate, students may continue on to a Structural Welding and Fabrication Certificate, a Pipe Welding Certificate, or an AAS in Welding Technology.

##### Core Requirements (18-19)

*(Core requirement changes)*

WLD121 Shielded Metal Arc Welding I (3)

WLD122 Shielded Metal Arc Welding II (3)

WLD128 Intro. to Structural Drawings & AutoCAD (3)

*(Changed course title)*

WLD222 Gas Metal Arc Welding (3)

WLD225 Shielded Metal Arc Welding III (3)

MAT106 Technical Math I (3)

OR

MAT118 Essential Mathematics (4) or higher

##### Other Requirements

- Students must earn:
  - A grade of C or better in all required courses
  - a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale
  - at least one-third of the certificate credits from CAC.



## HEALTH INFORMATION TECHNOLOGY AAS DEGREE

**Total Credits: 69**

*(Corrected program requirements)*

### Prerequisites

High School Diploma or GED;

MAT082 Basic Arithmetic



OR

equivalent math assessment test score

### General Education Requirements (23-24)

#### Written Communications (3)

Select one:

ENG101 English Composition III (3)  

ENG121 Applied Technical Writing (3)

#### Oral Communications (3)

Select one:

COM100 Fundamentals of Human Communication (3)

COM206 Public Speaking (3)

#### Art and Humanities (3)

Select courses numbered 100 or above from the following:

ART, HMC, LIT, MHL, PHI, and THE. Students may also choose any course from the Art or Humanities AGEC lists.

The required courses must represent two different departments for the Art and Humanities category. For example, students may not take a HIS course to fulfill their Art and Humanities requirement if they are using another HIS course to complete their Social and Behavioral Sciences requirement.

#### Social and Behavioral Sciences (3)

Select courses numbered 100 or above from the following:

ABS, ECN, GEO, HIS, POS, PSY, and SOC. Students may also choose any course from the Social and Behavioral Sciences AGEC list. The required courses must represent two different departments for the Social and Behavioral Sciences category. For example, students may not take a HIS course to fulfill their Art and Humanities requirement if they are using another HIS course to complete their Social and Behavioral Sciences requirement.

For example, students may not take a HIS course to fulfill their Art and Humanities requirement if they are using another HIS course to complete their Social and Behavioral Sciences requirement.

#### Physical and Biological Sciences (8)

BIO201 Human Anatomy - Physiology I (4)

BIO202 Human Anatomy - Physiology II (4)

#### Mathematics (3-4)

Select one:

BUS101 Business Mathematics (3)

MAT118 Essential Mathematics (4) or higher

### Core and Elective Requirements (43)

CBA113A MS Excel Basic (1)

CBA114A MS Access Basic (1)

HCC116 Medical Terminology Accelerated (3)

HIM115 Health Information Technology I (2)

HIM117 Health Information Technology II (3)

HIM121 Legal Aspects of Health Information (3)

HIM138 ICD Coding (3)

HIM158 CPT Coding (3)

HIM160 Healthcare Data Management (2)

HIM200 Healthcare Reimbursement (2)

HIM205 Healthcare Statistics and Research (2)

HIM208 Advanced Coding (3)

HIM210 Supervision and Quality (2)

HIM215 Health Information Systems (3)

HIM275Q Health Information Technology Practicum (4)

HPM162 Basic Pharmacology for Health Occupations (3)

HPM173 Pathophysiology (3)

### Other Requirements

#### Reading Competency

RDG094 College Reading

OR

equivalent reading assessment test score

#### Computer Competency (3)

CIS120 Survey of Computer Information Systems (3)

### Students must earn:

- A grade of C or better in all required courses
- a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale
- a minimum of 20 credits from CAC
- a minimum of 69 credits



## INDUSTRIAL TECHNOLOGY CERTIFICATE

*(Title change – previously Industrial Maintenance Certificate)*

### Total Credits: 18

The Industrial Technology Certificate provides students the opportunity to gain knowledge, skills, and an understanding of the concepts and applications of industrial maintenance. Upon completion of the certificate, students will have the abilities and skills needed to support employment in the manufacturing industry. The certificate was developed in cooperation with automated manufacturing industries.

### Recommended Proficiencies

Ability to be a tactile learner, willingness to work in a repetitive environment.

### Core Requirements (32)

ELC122 Direct Current and Alternating Current Circuit Analysis (3)

ELC128 Introduction to Programmable Logic Controllers (3)

ELC220 Active Circuits (3)

MET132 Fluid Power - Hydraulics/Pneumatics (3)

MET226 Electro-Mechanical Systems (3)

### Select One:

MET125 Principles of Fabrication (3)

WLD110 Survey of Welding Processes (3)

### Other Requirements

- Students must earn:
  - a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale
  - at least one-third of the certificate credits from CAC.

## RADIOLOGIC TECHNOLOGY AAS DEGREE

### Total Credits: 79

*(Modification of Core and Elective requirements)*

### Core and Elective Requirements (55)

RAD100 Fundamentals of Radiologic Science and Healthcare (1)

RAD110 Radiographic Positioning I Lecture (2)

RAD110LB Radiographic Positioning I Lab (2)

RAD120 Principles of Radiographic Exposure I (3)

RAD150 Radiation Physics I (3)

RAD170 Principles of Radiographic Exposure II (3)

RAD180 Practicum II (240-280 hours) (3)

RAD200 Practicum III (600-650 hours) (7)

RAD250 Basic Pharmacology and Drug Administration (1)

RAD260 Radiographic Pathology (2)

RAD270 Advanced Imaging (2)

RAD280 Registry Review (3)

RAD290 Practicum V (360-390 hours) (4)

AND

RAD130 Patient Care in Radiologic Science (2)

OR

[RAD130A Patient Care in Radiologic Science (1)

AND

RAD130B Patient Care in Radiologic Science (1)]

AND

RAD140 Practicum I (240-280 hours) (3)

OR

[RAD140A Practicum I (240-280 hours) (1.5)

AND

RAD140B Practicum I (240-280 hours) (1.5)]

AND

RAD160 Radiographic Positioning II Lecture (2)

OR

[RAD160 A Radiographic Positioning II Lecture (1)

AND

RAD160B Radiographic Positioning II Lecture (1)]

AND

RAD160LB Radiographic Positioning II Lab (2)

OR

[RAD160LBA Radiographic Positioning II Lab (1)

AND

RAD160LBB Radiographic Positioning II Lab (1)]

AND

RAD210 Radiation Physics II (3)

OR

[RAD210A Radiation Physics II (1.5)

AND

RAD210B Radiation Physics II (1.5)]

AND

RAD230 Radiobiology and Radiation Protection (3)

OR

[RAD230A Radiobiology and Radiation Protection (1.5)

AND

RAD230B Radiobiology and Radiation Protection (1.5)]



AND  
RAD240 Practicum IV (360-390 hours) (4)  
OR  
[RAD240A Practicum IV (360-390 hours) (2)  
AND  
RAD240B Practicum IV (360-390 hours) (2)]

**STRUCTURAL WELDING AND FABRICATION CERTIFICATE**

*(Title change – previously Structural Welding Certificate)*

**Total Credits: 15**

*(Total credit change)*

The Structural Welding and Fabrication Certificate prepares students for employment as an entry level welder/fabricator with an array of career opportunities within the industry. Topics include Quality control. Thermal cutting processes. Flux-cored Arc welding with gas. Flux-cored Arc Welding without gas using engine driven welding machines with portable semi-automatic wire feeders. Students will learn structural fabrication and introduction to steel erection through various projects. A typical graduate seeks employment in mining, steel fabrication, and steel erection industries. After completion of this certificate, students may continue on towards an AAS in Welding.

**Core Requirements (15)**

*(Core requirement changes)*

- WLD120 Thermal Cutting Processes (3)
- WLD124 Flux Cored Arc Welding I (3)
- WLD224 Flux Cored Arc Welding II (3)
- WLD227 Welding Design and Fabrication (3)
- WLD228 Welding Inspection Technology (3)

**Other Requirements**

- Students must earn:
  - A grade of C or better in all required courses
  - a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale
  - at least one-third of the certificate credits from CAC.

**WELDING TECHNOLOGY AAS DEGREE**

**Total Credits: 62-63**

*(Total credit change)*

**Core and Elective Requirements (24)**

*(Modification of Core and Elective requirements)*

- WLD128 Intro. to Structural Drawings & AutoCAD (3)
- MET125 Principles of Fabrication (3)
- WLD121 Shielded Metal Arc Welding I (3)
- WLD122 Shielded Metal Arc Welding II (3)
- WLD222 Gas Metal Arc Welding (3)
- WLD225 Shielded Metal Arc Welding III (3)

*Select two courses (6) from the following list:*  
BUS100 Introduction to Business (3)  
BUS122 Small Business Management (3)  
AGB100 Introduction to Agricultural Business (3)  
AGB225 Agriculture Business Analysis (3)

**Select one Specialization:**

**Specialization #1 Structural Welding**

- WLD120 Thermal Cutting Processes (3)
- WLD124 Flux Cored Arc Welding I (3)
- WLD224 Flux Cored Arc Welding II (3)
- WLD227 Welding Design and Fabrication (3)
- WLD228 Welding Inspection Technology (3)

**Specialization #2 Pipe Welding**

*(Modification of Specialization #2 requirements)*

- WLD125 Pipe Welding 1 (3)
- WLD135 Pipe Welding 2 (3)
- WLD221 Gas Tungsten Arc Welding (3)
- WLD245 Pipe Welding 3 (3)
- WLD255 Pipe Welding 4 (3)

**Other Requirements (4)**

PAC course (1)

**Reading Competency:**

RDG100 College Reading OR  
equivalent reading assessment test score

**Computer Competency (3):**

*Select one:*

- AGB124 Microcomputers in Agriculture (3)
- CIS110 Fundamentals of Computer Literacy (3)
- CIS120 Survey of Computer Information Systems (3)
- EGR102 Introduction to Engineering (3)
- EIT151 Digital Audio Workstation (3)
- DMA122 Introduction to Web Design (3)

Students must earn:

- a grade of C or better in all required courses;
- a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale;
- a minimum of 20 credits from CAC;
- a minimum of 62 credits.



## Additions

### NEW COURSES

#### **IRW130 Structural Steel Erection I**

*3 Credits (2 Lectures, 3 Labs)*

The basic foundations of iron working including proper safety procedures, how to set up and use safety tie off points, how to navigate and walk steel in an elevated position, basic rigging of structural members, how to make structural connections including plumbing of columns and aligning members, the proper use of a transit, and how to finalize structural connection fit-up including high strength bolting and complete joint penetration welding. Fundamentals of Arc Welding Certificate. *Prerequisite: Prior learning equivalent credit, or documented industry experience.*

#### **RAD130A Patient Care in Radiologic Science**

*Combined with RAD130B can substitute for RAD130.*

*1 Credit (1 Lecture)*

Basic concepts of patient care, physical and psychological needs of the patient/family. Infection control measures, routine/emergency patient care procedures; patient safety, assessment, radiologic technologist/patient communications and patient care devices are presented. *Prerequisite: Radiologic Technology Cohort student.*

#### **RAD130B Patient Care in Radiologic Science**

*Combined with RAD130A can substitute for RAD130.*

*1 Credit (1 Lecture)*

Basic concepts of patient care, physical and psychological needs of the patient/family. Infection control measures, routine/emergency patient care procedures; patient safety, assessment, radiologic technologist/patient communications and patient care devices are presented. *Prerequisite: Radiologic Technology Cohort student.*

#### **RAD140A Practicum I**

*Combined with RAD140B can substitute for RAD140.*

*1.5 Credits (1.5 Practica – 135+ Hours)*

Initial clinical radiography experience that applies radiographic theory to the performance of procedures. Through structured, sequential competency-based assignments under supervision, students acquire proficiency in clinical practice and the performance of radiographic exams. *Prerequisite: Radiologic Technology Cohort student.*

#### **RAD140B Practicum I**

*Combined with RAD140A can substitute for RAD140.*

*1.5 Credits (1.5 Practica – 135+ Hours)*

Initial clinical radiography experience that applies radiographic theory to the performance of procedures. Through structured, sequential competency-based assignments under supervision, students acquire proficiency in clinical practice and the performance of radiographic exams. *Prerequisite: Radiologic Technology Cohort student.*

#### **RAD160 A Radiographic Positioning II**

*Combined with RAD160B can substitute for RAD160.*

*1 Credit (1 Lecture)*

Human structure/function, sectional anatomy and the fundamentals of radiographic positioning of the bony thorax, contrast studies of urinary and digestive systems, cranium, arthrography, myelography, venography, pediatric imaging, basic mobile radiography and imaging during trauma and surgery.

#### **RAD160B Radiographic Positioning II**

*Combined with RAD160A can substitute for RAD160.*

*1 Credit (1 Lecture)*

Human structure/function, sectional anatomy and the fundamentals of radiographic positioning of the bony thorax, contrast studies of urinary and digestive systems, cranium, arthrography, myelography, venography, pediatric imaging, basic mobile radiography and imaging during trauma and surgery.

#### **RAD160LBA Radiographic Positioning II Lab**

*Combined with RAD160LBB can substitute for RAD160LB.*

*1 Credit (3 Labs)*

Human structure/function, sectional anatomy and the fundamentals of radiographic positioning of the bony thorax, contrast studies of urinary and digestive systems, cranium, arthrography, myelography, venography, pediatric imaging, basic mobile radiography and imaging during trauma and surgery.

#### **RAD160LBB Radiographic Positioning II Lab**

*Combined with RAD160LBA can substitute for RAD160LB.*

*1 Credit (3 Labs)*

Human structure/function, sectional anatomy and the fundamentals of radiographic positioning of the bony thorax, contrast studies of urinary and digestive systems, cranium, arthrography, myelography, venography, pediatric imaging, basic mobile radiography and imaging during trauma and surgery.

#### **RAD210A Radiation Physics II**

*Combined with RAD210B can substitute for RAD210.*

*1.5 Credits (1.5 Lectures)*

Continuation of RAD150, Radiation Physics I, covering the basics of imaging systems and quality control. *Prerequisite: RAD140 and Radiologic Technology Cohort student.*

#### **RAD210B Radiation Physics II**

*Combined with RAD210A can substitute for RAD210.*

*1.5 Credits (1.5 Lectures)*

Continuation of RAD150, Radiation Physics I, covering the basics of imaging systems and quality control. *Prerequisite: RAD140 and Radiologic Technology Cohort student.*



**RAD230A Radiobiology and Radiation Protection**

*Combined with RAD230B can substitute for RAD230.*

*1.5 Credits (1.5 Lectures)*

Building and expanding on the basic and radiation protection concepts presented in RAD100, Fundamentals of Radiologic Science and Health Care. Content includes the principles of the interaction of ionizing radiation, biological systems and concepts of radiation protection. Prerequisites: RAD100 and Radiologic Technology Cohort student.

**RAD230B Radiobiology and Radiation Protection**

*Combined with RAD230A can substitute for RAD230.*

*1.5 Credits (1.5 Lectures)*

Building and expanding on the basic and radiation protection concepts presented in RAD100, Fundamentals of Radiologic Science and Health Care. Content includes the principles of the interaction of ionizing radiation, biological systems and concepts of radiation protection. Prerequisites: RAD100 and Radiologic Technology Cohort student.

**RAD240A Practicum IV**

*Combined with RAD240B can substitute for RAD240.*

*2 Credits (2 Practica – 180+ Hours)*

Through structured, sequential competency-based assignments under supervision, students will acquire proficiency in clinical practice and the performance of radiographic exams.

**RAD240B Practicum IV**

*Combined with RAD240A can substitute for RAD240.*

*2 Credits (2 Practica – 180+ Hours)*

Through structured, sequential competency-based assignments under supervision, students will acquire proficiency in clinical practice and the performance of radiographic exams.