

# Associate in Applied Science, Industrial Systems Technology – Welding Technology

## Degree Type

A.A.S.

## Student Learning Outcomes

Graduates of the Industrial Systems Technology Program (Electrical and Instrumentation Option) will be able to:

- Function as a competent entry-level welder by demonstrating knowledge and skills retained from coursework (ADM 150-154)
- Perform all tasks in a safe manner. (ADM 150-154)
- Exhibit a positive work ethic. (ADM 150-154)

## Area I - Written Composition (3 credits)

### Vocational Technical English or English Composition I

Choose from:

Item #	Title	Credits
ENG 100	VOCATIONAL TECHNICAL ENGLISH	3
ENG 101	ENGLISH COMPOSITION	3

## Area II - Humanities and Fine Arts (6 Credits)

### Fundamentals of Oral Communication or Public Speaking

Choose one:

Item #	Title	Credits
SPH 106	FUNDAMENTALS OF ORAL COMMUNICATION	3
SPH 107	FUNDAMENTALS OF PUBLIC SPEAKING	3

### Humanities & Fine Arts

Choose from:

Item #	Title	Credits
ART 100	ART APPRECIATION	3
ART 203	ART HISTORY I	3
ART 204	ART HISTORY II	3
MUS 101	MUSIC APPRECIATION	3
PHL 206	ETHICS AND SOCIETY	3
REL 100	HISTORY OF WORLD RELIGIONS	3
REL 151	SURVEY OF THE OLD TESTAMENT	3
REL 152	SURVEY OF THE NEW TESTAMENT	3
SPA 201	INTERMEDIATE SPANISH I	3
SPA 202	INTERMEDIATE SPANISH II	3
THR 120	THEATER APPRECIATION	3
THR 126	INTRODUCTION TO THEATER	3

## Area III - Natural Sciences & Mathematics (9 Credits)

### Microcomputer Applications

Item #	Title	Credits
CIS 146	COMPUTER APPLICATIONS	3

### Mathematics

Choose from:

Item #	Title	Credits
BUS 271	BUSINESS STATISTICS I	3
MTH 100	INTERMEDIATE COLLEGE ALGEBRA	3
MTH 103	INTRODUCTION TO TECHNICAL MATHEMATICS	3
MTH 110	FINITE MATHEMATICS	3
MTH 112	PRECALCULUS ALGEBRA	3
MTH 113	PRECALCULUS TRIGONOMETRY	3
MTH 116	MATHEMATICAL APPLICATIONS	3
MTH 120	CALCULUS AND ITS APPLICATIONS	3
MTH 125	CALCULUS I	4
MTH 126	CALCULUS II	4
MTH 227	CALCULUS III	4
MTH 231	MATH FOR THE ELEMENTARY TEACHER I	3
MTH 232	MATH FOR THE ELEMENTARY TEACHER II	3
MTH 237	LINEAR ALGEBRA	3
MTH 238	APPLIED DIFFERENTIAL EQUATIONS I	3
MTH 265	ELEMENTARY STATISTICS	3

### Math, Science, or CIS

**\*\*Student is responsible for meeting with an advisor to select courses.**

## Area IV - History, Social, & Behavioral Sciences (3 Credits)

### History, Social, & Behavioral Sciences

Choose from:

Item #	Title	Credits
ECO 231	PRINCIPLES OF MACROECONOMICS	3
ECO 232	PRINCIPLES OF MICROECONOMICS	3
GEO 100	WORLD REGIONAL GEOGRAPHY	3
HIS 101	WESTERN CIVILIZATION I	3
HIS 102	WESTERN CIVILIZATION II	3
HIS 201	UNITED STATES HISTORY I	3
HIS 202	UNITED STATES HISTORY II	3
POL 211	AMERICAN NATIONAL GOVERNMENT	3
PSY 200	GENERAL PSYCHOLOGY	3
PSY 210	HUMAN GROWTH AND DEVELOPMENT	3
SOC 200	INTRODUCTION TO SOCIOLOGY	3
SOC 210	SOCIAL PROBLEMS	3

## Area V - Pre-Professional, Major, & Elective Courses (45 credits)

### Technical Core

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
INT 117	PRINCIPLES OF INDUSTRIAL MECHANICS	3
	Technical Cooperative Education	3
WKO 106	WORKPLACE SKILLS	3
WKO 110	NCCER CORE	3
INT 119	PRINCIPLES OF MECHANICAL MEASUREMENT AND TECHNICAL DRAWING	3
	WDT Electives	30
	Total Credits	66