

Associate in Applied Science, Industrial Systems Technology - Electrical & Instrumentation

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 industrial maintenance technician 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 & Fine Arts (6 Credits)

Fundamentals of Oral Communication or Public Speaking

Choose from:

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

Item #	Title	Credits
	Math, Science, or CIS	3

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

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 (48 Credits)

Technical Core

Item #	Title	Credits
INT 117	PRINCIPLES OF INDUSTRIAL MECHANICS	3
	Technical Cooperative Education	3
WKO 106	WORKPLACE SKILLS	3
	WKO Elective	3

Other Courses

Item #	Title	Credits
ILT 108	INTRODUCTION TO INSTRUMENTATION AND PROCESS CONTROL	3
ILT 118	CONSTRUCTION WIRING NEC	3
ILT 160	DC FUNDAMENTALS	3
ILT 161	AC FUNDAMENTALS	3
ILT 162	SOLID STATE FUNDAMENTALS	3
INT 158	INDUSTRIAL WIRING I	3
ILT 166	MOTORS AND TRANSFORMERS I	3
ILT 194	INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS	3
ILT 197	MOTOR CONTROLS I	3
ILT 231	NATIONAL ELECTRIC CODE	3
INT 118	FUNDAMENTALS OF INDUSTRIAL HYDRAULICS AND PNEUMATICS	3

Program Advisor-Approved Elective

Choose from:

Item #	Title	Credits
	INT Courses	3
	ILT Courses	3
EMS 100	CARDIOPULMONARY RESUSCITATION I	1
EMS 101	CARDIOPULMONARY RESUSCITATION II	1
EMS 103	FIRST AID/CPR	1
	Total Credits	69