INDUSTRIAL ELECTRICITY/ELECTRONICS TECHNOLOGY (Degree)

Program Purpose

The purpose of the Associate of Applied Technology in Industrial Electricity/Electronics Technology program is to provide accessible, premium quality educational opportunities that will provide individuals with the knowledge, technical skills, values, and attitudes necessary to obtain entry-level employment in the electrical, electronics, computer, and/or industrial maintenance fields.

The associate degree is intended to produce graduates who are prepared for employment as entry-level industrial electricians, electronics technicians, or computer industry technicians. Program graduates are to be competent in the academic areas of communications, mathematics, computer literacy, and human relations and in the technical areas of electronics circuit repair, industrial electrical wiring, programmable logic controllers, instrumentation, troubleshooting, preventive maintenance, and computer system operation set up and repair. Reid State Community College will accomplish program objectives by providing students with a comprehensive general education and technical training in the core area of industrial electricity/electronics/maintenance. The occupational skill preparation will meet recognized skill standards. The College will ensure program quality through internal certification of graduate competencies.

Occupational Data

Graduates of the Industrial Electronics/Electricity program work in the electronic/electrical industry where they use their skills which are grouped under the classification of industrial electronic/electrical maintenance/technician personnel. According to Economic Modeling, the national median wage for industrial electronic/electricity maintenance/technician personnel was $35.02/hr. in 2022.

Program Outcome Objectives

- Program graduates will be proficient in communication, computation, and interpersonal skills.
- Program graduates will be technically proficient.
- Program graduates will be able to obtain industry certification.
- Program graduates will be successfully employed in the field.
- Employers of program graduates will be satisfied with their education and training.

Admission Requirements

Applicants to this program must complete the application procedures and be 16 years of age. Additionally, applicants must present official documentation of a high school diploma, in accordance with ACCS Board of Trustees Policy, or GED. If the ACCUPLACER score is between 200-242 the student will be required to enroll in MTH 098. With a score of 243-252 the student must take MTH 100+MTH 099.

Industrial Electricity/Electronics Technology, Associate of Applied Technology

MINIMUM CREDITS REQUIRED: 71-72 Semester Credit Hours
Length : 6 Semesters of full-time attendance

GENERAL EDUCATION CORE: 16-17 Semester Credit Hours		Theory	Lab	Internship	Contact	Credit
ORT 100	Orientation OR	1	0		1	1
ORI 101	Orientation to College					
AREA I: WRITTEN COMPOSITION 3 hours						
ENG 101	English Composition I	3	0		3	3
AREA II: HUMANITIES AND FINE ARTS 3 hours						
ART 100	Art Appreciation OR	3	0		3	3
MUS 101	Music Appreciation OR					
REL 151	Survey of the Old Testament OR					
REL 152	Survey of the New Testament OR					
PHL 206	Ethics and Society					
AREA III: NATURAL SCIENCE AND MATHEMATICS 6-7 hours						
*Students are required to complete one three-hour mathematics course and may either complete an additional mathematics course or one natural science course as listed below. *NOTE: MTH courses higher than MTH 100 may be substituted for the three-hour math requirement as well. MTH 110 or 112 is suggested for students anticipating transfer. A four-hour science course is also suggested.*						
MTH 100	Intermediate College Algebra OR	3	0		3	3
MTH 116	Mathematical Applications*					
MTH*	Any MTH course OR	3	0		3	3
BIO 113	History of Biology OR	3	0		3	3
BIO 101	Introduction to Biology I OR	3	1		5	4
BIO 103	Principles of Biology OR	3	1		5	4
PHS 111	Physical Science I	3	1		5	4
AREA IV: HISTORY, SOCIAL, AND BEHAVIORAL SCIENCES 3 hours						
Students are required to complete one three-hour history, social, or behavioral science listed below.						
PSY 200	General Psychology OR	3	0		3	3
PSY 210	Human Growth and Development OR					
SOC 200	Introduction to Sociology					

TECHNICAL CONCENTRATION: 55 Semester Credit Hours							
ILT	104	Industrial Instrumentation	2	1		4	3
ILT	105	Industrial Instrumentation Lab	0	2		4	2
ILT	117	Principles of Construction Wiring	1	2		5	3
ILT	160	DC Fundamentals	1	2		5	3
ILT	161	AC Fundamentals	1	2		5	3
ILT	169	Hydraulics/Pneumatics	2	1		4	3
ILT	194	Intro to Programmable Logic Controllers	2	1		4	3
ILT	195	Troubleshooting Techniques I	2	1		4	3
ILT	216	Industrial Robotics	3	0		3	3
ILT	217	Industrial Robotics Lab	0	2		4	2
INT	113	Industrial Motor Control I	1	2		5	3
INT	213	Industrial Motor Control II	1	2		5	3
WKO	110	NCCER Core	2	1		5	3
INT	112	Industrial Maintenance Safety Procedures	3	0		3	3
WKO	142	MSSC Quality Practice/Measurement Course	1	2		5	3

ELT	241	National Electric Code	3	0		3	3
WKO	144	MSSC Maintenance Awareness Course	1	2		5	3
INT	161	Blueprint Reading for Industrial Technology	3	0		3	3
ILT	196	Advanced Programmable Logic Controllers	2	1		4	3