

# Electrical Instrumentation Technician Certificate

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## Program Description

The Electrical Instrumentation Technician certificate is designed to prepare students for positions in the installation, repair and maintenance of commercial electrical and electronic equipment.

**Note:** Freeport McMoRan, Inc. and Asarco sponsor mining programs designed to prepare students for direct employment in the mining industry. There are special admission requirements for these programs. Contact (928) 776-2002 for details.

## Program Contacts

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## Program Outcomes

Upon successful completion of the Electrical Instrumentation Technician Certificate program, the learner will be able to:

1. Build, test, analyze and troubleshoot direct and alternating current circuits. (ELT 111, ELT 112)
2. Build, test, analyze and troubleshoot digital circuits. (ELT 183)
3. Build, test, analyze and troubleshoot solid state circuits. (ELT 126)
4. Build, test, analyze and troubleshoot microprocessor and programmable controller-based circuits. (ELT 161)
5. Build, test, analyze and troubleshoot process control instrumentation circuits. (ELT 171)
6. Design, fabricate and install safe electrical conduits and raceways. ( ELT 115)
7. Build, test, analyze and troubleshoot motors and motor control circuits. (ELT 272)

## Program Requirements

A minimum of 30 credit hours is required to complete the Electrical Instrumentation Technician Certificate.

	Course	Course Title	Credit Hours
	AGS101	Microcomputers in Agriculture	3
<b>OR</b>	CSA126	Microsoft Office	3
	ELT111	DC Electrical Systems	3
	ELT112	AC Electrical Systems	3
	ELT115	Conduits and Raceways	1
	ELT126	Solid State Devices	3
	ELT161	Microprocessors & Prog Control	3
	ELT171	Process Control Instrumentatn	3
	ELT183	Digital Circuits	3
	ELT272	Motors and Motor Controls	3
	MAT100	Technical Mathematics	3
	MET160	Basic Machine Hydr& Pneumatics	2