



**Location: Signal Peak Campus**

**Degree: Associate of Applied Science (AAS)**

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**DEPARTMENT WEBSITE:**  
centralaz.edu/divisions-programs/  
skilled-trades

**Program Description:** The Automated Industrial Technology AAS prepares students to troubleshoot, maintain and repair a variety of electro-mechanical systems for the automation industry. Students gain high-tech skills in Fanuc Robotics, programmable logic controls (PLC's), electronics, mechanics and electrical systems.

*Use this Program MAP as an advising guide to choose courses with your advisor and track progress towards milestones and completion of program.*

**Pre-Degree Requirements:** *If you have been placed in any developmental education class, you must see an advisor before registration.*

**Note:** Students must earn a grade of C or better in all required core AIT courses

**Bold** indicates recommended course

\* See back page

**SEMESTER BY SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS**

Plans can be modified to fit the needs of part-time students by adding more semesters

Semester 1		Credit Hours	Semester 2		Credit Hours
<input type="radio"/>	AIT100 NIMS Industrial Safety *	1	<input type="radio"/>	AIT225 Electrical Systems II *	3
<input type="radio"/>	AIT105 Maintenance Operations *	3	<input type="radio"/>	AIT205 Electrical Control Systems I *	3
<input type="radio"/>	AIT110 Mechanical Systems *	3	<input type="radio"/>	AIT210 Electrical Control Systems II *	3
<input type="radio"/>	AIT115 Hydraulic Systems *	3	<input type="radio"/>	AIT215 Process Control Systems *	4
<input type="radio"/>	AIT120 Pneumatic Systems *	3	<input type="radio"/>	AIT130 Maintenance Piping *	3
<input type="radio"/>	AIT125 Electrical Systems I *	3	<input type="radio"/>		
<input type="radio"/>			<input type="radio"/>		
<input type="radio"/>			<input type="radio"/>		
	<b>Semester Credits:</b>	<b>16</b>		<b>Semester Credits:</b>	<b>16</b>
Semester 3		Credit Hours	Semester 4		Credit Hours
<input type="radio"/>	MAT106 Technical Math	3	<input type="radio"/>	Any Biological/Physical Science course	4
<input type="radio"/>	<b>ENG121 Applied Technical Writing</b> or ENG101 College Composition I	3	<input type="radio"/>	Any Communication (COM) course	3
<input type="radio"/>	Any Arts & Humanities course	3	<input type="radio"/>	Any Social /Behavioral Science course	3
<input type="radio"/>	AIT220 Fanuc Operations and Programming *	3	<input type="radio"/>	<b>MET289 Advanced Technology Capstone</b> or <b>WLD221 Gas Tungsten Arc Welding</b> or any program elective (AIT230 Robot Vision or MET232 Solids Modeling or MET240 DeviceNet or MET250 Factory Talk or WLD221 Gas Tungsten Arc Welding)	3
<input type="radio"/>	<b>AIT230 Robot Vision</b> * or any program elective (MET232 Solids Modeling or MET240 DeviceNet or MET250 Factory Talk or WLD221 Gas Tungsten Arc Welding)	3	<input type="radio"/>		
<input type="radio"/>			<input type="radio"/>		
	<b>Semester Credits:</b>	<b>15</b>		<b>Semester Credits:</b>	<b>13</b>
<b>Total Program Hours:</b>					<b>60</b>

Semester: _____		Credit Hours	Semester: _____		Credit Hours
○			○		
○			○		
○			○		
○			○		
○			○		
○			○		
○			○		
○			○		
			○		
Semester Credits:			Semester Credits:		
					Total Program Hours:

## TRANSFER INFORMATION

Students interested in pursuing Northern Arizona University’s Bachelor’s Degree in Interdisciplinary Studies (90/30 program) should take transferable (AGEC) courses. The 90/30 program combines the study of business principles and leadership skills used in industrial organizations to ensure you’ll be prepared to take a leadership role.

For more information, visit <https://nau.edu/interdisciplinary-studies-industrial-leadership-90-30/>.

As part of Central Arizona College’s TRUE Learning Community, Career & Transfer Center supports students in achieving their goals through career development and transfer to a four-year institution. It provides the following services: transfer workshops, university representative visits, admission application assistance, local university campus tours, career resources, and much more.

For more information, visit CAC Career & Transfer Center at [centralaz.edu/transfer](http://centralaz.edu/transfer).

## CAREER INFORMATION

\* Courses listed with an asterisk are courses that students can test for a certification from the National Institute for Metalworking Skills (NIMS). This industry certification is important for career readiness and advancement. See [www.Nims-skills.org](http://www.Nims-skills.org)

The growing emphasis on cost control through increased efficiency, along with their role in assisting with automation, is expected to sustain demand somewhat for industrial engineering technicians’ services. However, this occupation’s employment is projected to show little or no change from 2018 to 2028 in large part because of the projected decreases in employment in the manufacturing industries in which these technicians work, such as computer and electronic product manufacturing, chemical manufacturing, and primary metal manufacturing.

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Industrial Engineering Technicians, at <https://www.bls.gov/ooh/architecture-and-engineering/industrial-engineering-technicians.htm>