

# INSTRUMENTATION AND ELECTRICAL TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE

The Instrumentation/Electrical Technology program seeks to provide training for entry-level I&E technicians in various fields including refineries, commercial building maintenance, and other related industries.

Effective September 1, 2017, HB 1508 amends the Texas Occupations Code Section 53 that requires education providers to notify potential or enrolled students that a criminal history may make them ineligible for an occupational license upon program completion. Program specific information will be provided in course syllabi.

## Stackable Credentials

- Associate of Applied Science - Instrumentation & Electrical Technology (p. 1)
- Level 2 Certificate -Instrumentation & Electrical Technology (<http://coursecatalog.com.edu/catalog/areas-of-study/industry/instrumentation-and-electrical-cert2/#fulltimescheduletext>)
- Level 1 Certificate -Instrumentation & Electrical Technology (<http://coursecatalog.com.edu/catalog/areas-of-study/industry/instrumentation-and-electrical-cert1/#fulltimescheduletext>)

## Full-Time Student Schedule

Course	Title	Semester Credit Hours
<b>Semester #1</b>		
PTAC 1302	Introduction to Process Technology	3
ELPT 1321	Introduction to Electrical Safety & Tools	3
Select from one of the following: 3		
TECM 1343	Technical Algebra and Trigonometry	
MATH 1314	College Algebra <sup>2</sup>	
CETT 1302	Electricity Principles	3
ENGL 1301	Composition I <sup>2</sup>	3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Semester #2</b>		
INTC 1448	Analytical Instrumentation	4
PHYS 1410	Elementary Physics <sup>2</sup>	4
PTAC 1310	Process Technology I - Equipment	3
INTC 1301	Principles of Industrial Measurements I	3
ITSC 1305	Introduction to PC Operating Systems	3
<b>Semester Credit Hours</b>		<b>17</b>
<b>Semester #3</b>		
INTC 1457	AC/DC Motor Controls	4
INTC 1315	Final Control Elements	3
INTC 2330	Instrumentation Systems Troubleshooting <sup>1</sup>	3
INTC 2410	Principles of Industrial Measurements II	4
<b>Semester Credit Hours</b>		<b>14</b>

<b>Semester #4</b>		
SPCH 1315 or SPCH 1318	Public Speaking <sup>2</sup> or Interpersonal Communication	3
PHED 1164	Introduction to Physical Fitness and Wellness <sup>2</sup>	1
INTC 2436	Distributed Control and Programmable Logic	4
PHIL 2306 or HUMA 1301	Introduction to Ethics <sup>2</sup> or Introduction to the Humanities I	3
PSYC 2301 or SOCI 1301	General Psychology <sup>2</sup> or Introduction to Sociology	3
<b>Semester Credit Hours</b>		<b>14</b>
<b>Total Semester Credit Hours</b>		<b>60</b>

<sup>1</sup> Capstone course

<sup>2</sup> Course(s) listed in the Texas Common Course Numbering System (<https://tcns.org/institution/id:14/yid:19/>)

## Part-Time Student Schedule

Course	Title	Semester Credit Hours
<b>Semester #1</b>		
PTAC 1302	Introduction to Process Technology	3
ELPT 1321	Introduction to Electrical Safety & Tools	3
<b>Semester Credit Hours</b>		<b>6</b>
<b>Semester #2</b>		
Select from one of the following:		3
TECM 1343	Technical Algebra and Trigonometry	
MATH 1314	College Algebra <sup>1</sup>	
CETT 1302	Electricity Principles	3
<b>Semester Credit Hours</b>		<b>6</b>
<b>Semester #3</b>		
ENGL 1301	Composition I <sup>2</sup>	3
INTC 1448	Analytical Instrumentation	4
<b>Semester Credit Hours</b>		<b>7</b>
<b>Semester #4</b>		
PHYS 1410	Elementary Physics <sup>2</sup>	4
PTAC 1310	Process Technology I - Equipment	3
<b>Semester Credit Hours</b>		<b>7</b>
<b>Semester #5</b>		
INTC 1301	Principles of Industrial Measurements I	3
ITSC 1305	Introduction to PC Operating Systems	3
<b>Semester Credit Hours</b>		<b>6</b>
<b>Semester #6</b>		
INTC 1457	AC/DC Motor Controls	4
INTC 1315	Final Control Elements	3
<b>Semester Credit Hours</b>		<b>7</b>
<b>Semester #7</b>		
INTC 2330	Instrumentation Systems Troubleshooting <sup>1</sup>	3
INTC 2410	Principles of Industrial Measurements II	4
<b>Semester Credit Hours</b>		<b>7</b>

**Semester #8**

SPCH 1315 or SPCH 1318	Public Speaking <sup>2</sup> or Interpersonal Communication	3
PHED 1164	Introduction to Physical Fitness and Wellness <sup>2</sup>	1
INTC 2436	Distributed Control and Programmable Logic	4
<b>Semester Credit Hours</b>		<b>8</b>

**Semester #9**

PHIL 2306 or HUMA 1301	Introduction to Ethics <sup>2</sup> or Introduction to the Humanities I	3
PSYC 2301 or SOCI 1301	General Psychology <sup>2</sup> or Introduction to Sociology	3
<b>Semester Credit Hours</b>		<b>6</b>
<b>Total Semester Credit Hours</b>		<b>60</b>

<sup>1</sup> Capstone course<sup>2</sup> Course(s) listed in the Texas Common Course Numbering System  
(<https://tcns.org/institution/id:14/yid:19/>)