

## DEGREE PROGRAMS

### Associate of Applied Science Degree: CONSTRUCTION TECHNOLOGIES

The Associate of Applied Science Degree in Construction Technologies is designed to incorporate general education courses that provide increased skill development, a fundamental knowledge base and a broader understanding in the areas of humanities, social science, math, and natural science as a part of a well-rounded addition to the technical instruction. The program is designed to be completed in as little as 3 years with the additional OTJ training requirements. At least one general education course will be offered each semester.

Classroom instruction, lab exercises, practical hands on learning experience, and on the job training experience are incorporated and included in the learning process. Safety is emphasized throughout each phase.

Our Associate Degree has 5 different concentrations available to our apprentices – Glazier, Coating Application Specialist, Drywall Finisher, Glassworker and Painter. Each concentration represents a finishing trade and they share a core curriculum.

#### **Core Curriculum Required for All Areas of Concentration**

Course Number	Course Name	Instructional Hours	Credits
<b>HUMANITIES</b>			
ENG101	Effective Writing	45	3
COM111	Effective Communication	45	3
<b>SOCIAL SCIENCE</b>			
POL115	Politics and the Community	60	3
<b>MATH</b>			
MAT199	General Math	30	2
<b>NATURAL SCIENCE</b>			
ENV115	Environmental Science	45	3
IT101	Intro to Computers	45	3
<b>INTERNSHIP</b>			
CON120	Internship 1	2000	5
CON130	Internship 2	2000	5
CON140	Internship 3	2000	5
<b>TOTAL CORE</b>		<b>6270</b>	<b>32</b>

## *Area of Concentration: Coating Application Specialist*

Coating Application Specialists apply techniques to prepare substrates for coating and lining application. Techniques may include removal of rust, mill scale and previously applied hazardous coatings utilizing industry-specific tools and techniques. Industrial Specialists apply/install protective coatings and linings to steel and concrete on complex structures, such as bridges and towers; waterfront structures, such as locks and dam, metal and manufacturing facilities.

In today's environmentally-conscious culture, the Coating Application Specialist must also be careful to protect the environment surrounding the work site to ensure that hazardous debris such as lead-based paint and abrasive blasting media is properly contained and disposed of according to stringent federal, state and local regulations. This often requires the rigging of intricate containment systems and work platforms.

Students will learn to apply their theoretical knowledge and skills to the corrosion protection of steel and concrete on complex industrial structures through course work in Health and Safety Awareness for Application Specialists, surface preparation and coating materials properties, and application. Specialty application course work in plural component and thermal spray will further assist students in expanding their skills. Students will have their capabilities verified thru the IUPAT/FTI Industrial Coating and Lining Application Specialist Certification Program.

Course Number	Course Name	Instructional Hours	Credits
SFT110	Safety in the Trades	60	4
CON100	Intro to the trades	30	2
SFT210	Health and Safety Awareness for the Industrial Applicator	30	2
CAS100	Intro to Industrial Coatings	15	1
CAS141	Corrosive Theory and Control	40	3
CAS142	Surface Preparation I	30	2
CAS143	Surface Preparation II	45	3
CAS241	Spray Applications	15	1
CAS242	Airless Spray Applications	30	2
CAS243	Composition and Types	15	1
CAS245	Quality Control and Assurance I	45	3
CAS290	Special Topics in Industrial Coatings	20	2
CAS295	Quality Control and Assurance II	30	2
<b>TOTAL</b>		<b>405</b>	<b>28</b>