

Merit Shop Training, Inc.

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Craft Training

Course Outlines

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**ACCREDITED SPONSOR**

**Revision Date: November 9, 2018**

**Director of Education**

**Associated Builders and Contractors, Inc.**

**Texas Gulf Coast Chapter**

**& Merit Shop Training, Inc.**

**Introduction**

**Merit Shop Training, Inc. (MSTI) is the educational affiliate of Associated Builders and Contractors, Inc., Texas Gulf Coast Chapter. This booklet lists the ABC/MSTI Craft Training Program certificate requirements and course outlines as offered through Brazosport College.**

**MSTI offers the following training opportunities for the craft worker:**

**Formal Craft Training**

**The Craft Training Program is a competency based training program designed to prepare individuals for occupations in skilled crafts. A trainee commits to training and follows a structured course outline. They may move through the program at an accelerated pace based on their capabilities, rather than being tied to a strict time requirement. This training is a combination of classroom and laboratory, with a structured course outline, and the job training (OJT), under the guidance of a journeyman. Upon successful completion of all required courses, along with sponsorship by an ABC member, individuals will be issued an MSTI "Certificate of Completion”.**

**Module Training**

**Module Training is designed for craftsmen desiring to take specific NCCER Modules as prescribed by the NCCER Skills Assessments. There are several ways this may be accomplished. For additional information, please contact any ABC member's training director or the MSTI Director of Education.**

**Please direct any questions about the MSTI Craft Training Program to your employer Training Director or the MSTI Director of Education:**

**Director of Education**

**Associated Builders and Contractors**

**& Merit Shop Training, Inc.**

**Texas Gulf Coast Chapter**

**1002 ABC Avenue \* P.O. Box 2650**

**Freeport, TX 77542**

**Phone: 979-233-1616**

**Email: becky@abctxgulfcoast.org**

**COURSE REQUIREMENTS FOR NCCER CLASSES**

**TheNCCER Curriculumis nationally recognized and standardized. As an NCCER Accredited Training Sponsor (ATS), MSTI offers the following courses utilizing this curriculum. Part of the curriculum is the “Core” (Introduction to Construction Technology). Each of our NCCER course requirements includes the following:**

**CNBT 1301 – Intro. to Construction Technology1**

**Module Title**

**00101-09 Basic Safety**

**00102-09 Introduction to Construction Math**

**00103-09 Introduction to Hand Tools**

**00104-09 Introduction to Power Tools**

**00105-09 Introduction to Construction Drawings**

**00106-09 Introduction to Basic Rigging (Elective Module, not required for Core completion)**

**00107-09 Basic Communication Skills**

**00108-09 Basic Employability Skills**

**00109-09 Introduction to Material Handling**

**Upon successful completion of the required MSTI courses, along with sponsorship by an ABC member, individuals will receive a “Certificate of Completion” in their respective craft. Individuals interested in a NCCER “Certificate of Completion” may pursue the remaining NCCER Modules by taking the additional courses listed under each craft.**

**MODULES NOT LISTED UNDER “ADDITIONAL COURSES” AVAILABLE ON REQUEST**

**NON-NCCER LEARNING SERIES CRAFTS**

**Non-NCCER Learning Series Crafts do not utilize the NCCER curriculum. Course contents are approved by the MSTI Board.**

**Upon successful completion of the required courses in a craft, along with sponsorship by an ABC member, individuals will receive a “Certificate of Completion” from MSTI.**

**NON-CRAFT RELATED CERTIFICATES**

**MSTI recognizes *Construction Management* and *Safety, Health and Environmental Management* courses at Brazosport College. For each course, we offer an MSTI “Certificate of Completion” upon successful completion of these courses.**

**BRAZOSPORT COLLEGE COOPERTIVE EDUCATION**

**Cooperative Education is required as a part of most MSTI Craft Training Certificate Programs.**

**Please refer to specific crafts below for the required number of Cooperative Education classes.**

**The specific levels and order of levels taken are determined at the discretion of the program coordinator.**

* **Automotive Technology I, II**
* **Construction Management I, II**
* **Drafting Technology None**
* **HART None**
* **Industrial Electricity I, II, III**
* **Industrial Pipefitting – General PF I, II, III**
* **Instrumentation & Electrical None**
* **Machine Technology - Machinist I, II, III**
* **Machine Technology - Millwright I, II, III**
* **Safety, Health & Environmental None**
* **Welding I, II**

## Automotive Technology

MSTI Craft Training Program

Course Requirements

* [AUMT 1405 - Introduction to Automotive Technology](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 4
* [AUMT 1407 - Automotive Electrical Systems](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 4
* [AUMT 1410 - Automotive Brake Systems](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 4
* [AUMT 1416 - Automotive Suspension and Steering Systems](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 4
* [AUMT 1345 - Automotive Heating and Air Conditioning](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 3
* [AUMT 1380 - Cooperative Education I- Automotive Technician](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 3
* [AUMT 1381 - Cooperative Education II- Automotive Technician](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 3
* [AUMT 2317 - Automotive Engine Performance Analysis I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 3
* [AUMT 2434 - Automotive Engine Performance Analysis II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1193) **Credit Hours:** 4

Associate of Applied Science Available – See BC Counselors

## Construction Management

MSTI Craft Training Program

Course Requirements

* [CNBT 1301 - Introduction to the Construction Industry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 1311 - Construction Methods and Materials I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 2310 - Commercial/Industrial Blueprint Reading](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 1380 - Cooperative Education I- Construction Technology](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 1381 - Cooperative Education II - Construction Technology](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 2342 - Construction Management I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [ITSC 1301 - Introduction to Computers](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 1346 - Construction Estimating I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 1359 - Project Scheduling](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [CNBT 2344 - Construction Management II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3
* [OSHT 2309 \*\* - Safety Program Management](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197) **Credit Hours:** 3 **OR** [OSHT 1405](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1197#tt8769) \*\*

**\*\**Both courses needed for NCCER Construction Site Safety Technician (CSST) Certification***

Associate of Applied Science Available – See BC Counselors

## Drafting Technology

MSTI Craft Training Program

Course Requirements

* [DFTG 1325 - Blueprint Reading and Sketching](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3

**OR** any one of the following:

[CNBT 1300](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194#tt5338), [CNBT 2310](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194#tt9263), [MCHN 1302](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194#tt7028), [PFPB 1305](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194#tt8432), [PFPB 2310](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194#tt9663) Credit Hours: 3

* [DFTG 1305 - Technical Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 1309 - Basic Computer-Aided Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 2319 - Intermediate Computer-Aided Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 1317 - Architectural Drafting - Residential](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3 **OR** a Drafting Elective, selected from the list below
* [DFTG 2302 - Machine Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3 **OR** a Drafting Elective, selected from the list below
* [DFTG 2323 - Pipe Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 2332 - Advanced Computer-Aided Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 1358 - Electrical/Electronics Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3 **OR** a Drafting Elective, selected from the list below
* [ARCE 1352 - Structural Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3 **OR** a Drafting Elective, selected from the list below

## *Drafting Electives*

* [ARCE 2344 - Statics and Strength of Materials](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [ENTC 1310 - Fluid Mechanics with Applications](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 2331 - Adv CAD Architectural-Building Information Modeling](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 2338 - Final Project - Advanced Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 2340 - Solid Modeling Design](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 1380 - Cooperative Education I- Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 1381 - Cooperative Education II - Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [DFTG 2380 - Cooperative Education III - Drafting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [CNBT 1301 - Introduction to the Construction Industry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [CNBT 1359 - Project Scheduling](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [CNBT 2342 - Construction Management I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [PFPB 2349 - Field Measuring, Sketching and Layout](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3
* [SRVY 2348 - Plane Surveying](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1194) **Credit Hours:** 3

Associate of Applied Science Available – See BC Counselors

## HART

MSTI Craft Training Program

Course Requirements

* [HART 1401 - Basic Electricity for HVAC](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4
* [HART 1403 - Air Conditioning Control Principle](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4
* [HART 1407 - Refrigeration Principles](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4
* [HART 1410 - Shop Practices and Tools](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4
* [HART 1441 - Residential Air Conditioning](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4
* [HART 1445 - Gas and Electric Heating](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4
* [HART 2445 - Residential Air Conditioning Systems Design](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4
* [HART 2449 - Heat Pumps](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1195) **Credit Hours:** 4

## Associate of Applied Science Available – See BC Counselors

## Industrial Electricity

MSTI Craft Training Program

Course Requirements

* [CNBT 1301 - Introduction to the Construction Industry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELPT 1319 - Fundamentals of Electricity I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELPT 1329 - Residential Wiring - Fundamentals of Electricity II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELPT 1345 - Commercial Wiring](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELPT 1357 - Industrial Wiring](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELTN 1380 - Cooperative Education I- Electrician](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3

* [ELPT 1341 - Motor Control](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELTN 1381 - Cooperative Education II - Electrician](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELPT 2301 - Journeyman Electrician Exam Review](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELPT 2305 - Motors and Transformers](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELPT 2339 - Electrical Power Distribution](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours:** 3
* [ELTN 2380 - Cooperative Education III - Electrician](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1196) **Credit Hours**

## Associate of Applied Science Available – See BC Counselors

## Industrial Pipefitting: General PF Specialty

MSTI Craft Training Program

Course Requirements

* [CNBT 1301 - Introduction to the Construction Industry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 1305 - Basic Blueprint Reading for Pipefitters](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 1308 - Basic Pipefitting Skills](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 2310 - Intermediate Blueprint Reading for Pipefitters](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 2307 - Pipe Fabrication and Installation I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 1380 - Cooperative Education I- Pipefitter](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 2308 - Piping Standards and Materials](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3 **OR** [PFPB 1380 Cooperative Education I- Pipefitter](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286#tt7041)
* [PFPB 2341 - Pipe Fabrication and Installation II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 1381 - Cooperative Education II - Pipefitter](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 2349 - Field Measuring, Sketching and Layout](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [PFPB 2380 - Cooperative Education III - Pipefitter](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3

## Associate of Applied Science Available – See BC Counselors

## Instrumentation Technology

## Instrumentation and Electrical (I&E)

MSTI Craft Training Program

Course Requirements

* [INTC 1401 - Principles of Industrial Measurements](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 4
* [INTC 1315 - Final Control Elements](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 3
* [INTC 1457 - AC/DC Motor Control](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 4
* [ELPT 2319 - Programmable Logic Controllers I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 3
* [INTC 1441 - Principles of Automatic Control](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 4
* [INTC 2410 - Principles of Industrial Measurements II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 4
* [INTC 1343 - Application of Industrial Automatic Control](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 3
* [INTC 2333 - Instrumentation and Installation](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 3
* [INTC 2330 - Troubleshooting](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1203) **Credit Hours:** 3

Associate of Applied Science Available – See BC Counselors

## Machine Technology: Machinist Specialty

MSTI Craft Training Program

Course Requirements

* MCHN 1391 – Intro to Machine Technology Credit Hours: 3
* [MCHN 1338 - Basic Machine Shop I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 1341 - Basic Machine Shop II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 1343 - Machine Shop Mathematics](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 1302 - Print Reading for Machining Trades](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 1380 - Cooperative Education I- Machine Technologist](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 1381 - Cooperative Education II - Machine Technologist](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 1352 - Intermediate Machining I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 1354 - Intermediate Machining II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 2341 - Advanced Machining I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 2345 - Advanced Machining II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3
* [MCHN 2380 - Cooperative Education III - Machine Tool Technologist](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1198) **Credit Hours:** 3

## Associate of Applied Science Available – See BC Counselors

## Machine Technology: Millwright Specialty

MSTI Craft Training Program

Course Requirements

* CNBT 1301 – Intro. To Construction Technology OR MCHN 1391 Credit Hours: 3
* [MCHN 1325 - Millwright I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 1329 - Millwright II](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 2305 - Millwright III](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 2307 - Millwright IV](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 1380 - Cooperative Education I- Machine Technologist](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 1381 - Cooperative Education II - Machine Technologist](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 2312 - Millwright V](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 2314 - Millwright VI](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 2316 - Millwright VII](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 2318 - Millwright VIII](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3
* [MCHN 2380 - Cooperative Education III - Machine Tool Technologist](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1199) **Credit Hours:** 3

## Associate of Applied Science Available – See BC Counselors

## Safety, Health, Environmental Management

MSTI Craft Training Program

Course Requirements

* [OSHT 1405 - OSHA Regulations - Construction Industry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 4**\*\***
* [EPCT 1311 - Introduction to Environmental Science](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3
* [EPCT 1305 - Environmental Regulations Overview](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3
* [EPCT 1441 - Principles of Industrial Hygiene](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 4
* [CHEM 1305 - Introductory Chemistry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3
* [CHEM 1105 - Introductory Chemistry Laboratory](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 1
* [EPCT 2431 - Industrial Hygiene Applications](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 4
* [OSHT 2309 - Safety Program Management](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3**\*\***
* [OSHT 2401 - OSHA Regulations - General Industry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 4
* Select one from the SHEM Sophomore Elective list below.  **Credit Hours:** 3

### SHEM Sophomore Electives

* [EPCT 2300 - DOT Regulations](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3
* [EPCT 2333 - Environmental Toxicology](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3
* [OSHT 2305 - Ergonomics and Human Factors in Safety](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3
* [OSHT 2337 - Advanced Risk Management](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1205) **Credit Hours:** 3

**\*\**Both courses needed for NCCER Construction Site Safety Technician (CSST) Certification***

## Associate of Applied Science Available – See BC Counselors

## Welding Technology

MSTI Craft Training Program

Course Requirements

* [CNBT 1301 - Introduction to the Construction Industry](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1286) **Credit Hours:** 3
* [WLDG 1428 - Introduction to Shielded Metal Arc Welding (SMAW)](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 4
* [WLDG 2406 - Intermediate Pipe Welding](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 4
* [WLDG 2443 - Advanced Shielded Metal Arc Welding (SMAW)](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 4
* [WLDG 2447 - Advanced Gas Metal Arc Welding (GMAW)](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 4 **OR** [WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW)](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200#tt5723)
* [WLDG 1280 - Cooperative Education I- Welding Technology](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 2
* [WLDG 1327 - Welding Codes](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 3
* [WLDG 2451 - Advanced Gas Tungsten Arc Welding (GTAW)](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 4 **OR** [WLDG 2447 Advanced Gas Metal Arc Welding (GMAW)](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200#tt2141)
* [NDTE 1310 - Liquid Penetrant/Magnetic Particle Testing](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 3
* [WLDG 1281 - Cooperative Education II - Welding Technology](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 2
* [PFPB 2307 - Pipe Fabrication and Installation I](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200) **Credit Hours:** 3 **OR** [PFPB 2308 Piping Standards and Materials](http://catalog.brazosport.edu/preview_program.php?catoid=15&poid=1200#tt3846)
* Program Elective: Any course from DFTG, HART, ELPT, CNBT, MCHN, AUMT, or WLDG.   **Credit Hours: 3**

## Associate of Applied Science Available – See BC Counselors