

MATERIAL SCIENCE - COE

MATERIAL SCIENCE

CORROSION TECHNOLOGY

Corrosion Technology - AAS	2
Corrosion Technology - Certificate: Level I	3

WELDING TECHNOLOGY

Basic Welding Helper - Certificate: Level I	4
Advanced Welding - Certificate: Level I	5

Workforce Degrees and Certificates 2018 - 2019

Corrosion Technology

CORROSION TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE

Associate of Applied Science

FIRST YEAR

First Semester - Fall

			SCH
EDUC	1300	Learning Framework	3
METL	1313	Introduction to Corrosion	3
ENGL	1301	Composition I	3
ENTC	2331	Manufacturing Materials	3
MATH	1314	College Algebra	3
Semester Total			15

Second Semester - Spring

XXXX	#3## ¹	Natural Science Elective	3
METL	1301	Introduction to Metallurgy	3
METL	2441	Cathodic Protection	4
DFTG	1305	Technical Drafting	3
Semester Total			13

SECOND YEAR

First Semester - Fall

XXXX	#3## ¹	Humanities/Fine Arts Elective	3
INMT	1311	Computer Integrated Manufacturing	3
HYDR	1345	Hydraulics & Pneumatics	3
NDTE	1305	Introduction to Ultrasonics	3
ENTC	1347	Safety & Ergonomics OR	
OSHT	1301	Introduction to Safety & Health	3
Semester Total			15

Second Semester - Spring

INMT	1343	Computer Aided Design/Computer Aided Manufacturing (CAD-CAM)	3
METL	2405	Atmospheric Corrosion Control (Capstone)	4
INMT	1317	Industrial Automation	3
CETT	1409	DC-AC Circuits	4
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			17

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates 2018 - 2019

CORROSION TECHNOLOGY

Certificate - Level 1

First Semester - Fall

			SCH
METL	1313	Introduction to Corrosion	3
TECM	1301	Industrial Mathematics	3
ELPT	1311	Basic Electrical Theory	3
ETWR	1302	Introduction to Technical Writing	3
Semester Total			12

Second Semester - Spring

METL	1301	Introduction to Metallurgy	3
METL	2405	Atmospheric Corrosion Control (Capstone)	4
METL	2441	Cathodic Protection	4
Semester Total			11

Total Minimum Credits for the Level 1 Certificate **23**

Workforce Degrees and Certificates 2018 - 2019

Welding Technology

WELDING TECHNOLOGY- BASIC WELDING HELPER

Certificate - Level 1

First Semester - Fall			SCH
TECM	1301	Industrial Mathematics	3
WLDG	1407	Introduction to Welding Using Multiple Processes	4
WLDG	1413	Introduction to Blueprint Reading for Welders	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW) (Capstone)	4
WLDG	1191	Special Topics in Welder/Welding Technologist	1
Semester Total			16
Total Minimum Credits for the Level 1 Certificate			16

Workforce Degrees and Certificates 2018 - 2019

WELDING TECHNOLOGY - ADVANCED WELDING

Certificate - Level 1

First Semester - Fall

			SCH
TECM	1301	Industrial Mathematics	3
WLDG	1407	Introduction to Welding Using Multiple Processes	4
WLDG	1413	Introduction to Blueprint Reading for Welders	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
WLDG	1191	Special Topics in Welder/Welding Technologist	1
Semester Total			16

Second Semester - Spring

WLDG	1434	Introduction to Gas Tungsten Arc Welding (GTAW)	4
WLDG	1435	Introduction to Pipe Welding	4
WLDG	1457	Intermediate Shielded Metal Arc Welding (SMAW)	4
Semester Total			12

Third Semester - Summer

WLDG	2447	Advanced Gas Metal Arc Welding (GMAW)	4
WLDG	2451	Advanced Gas Tungsten Arc Welding (GTAW)	4
WLDG	2453	Advanced Pipe Welding (Capstone)	4
Semester Total			12

Total Minimum Credits for the Level 1 Certificate **40**