 UPDATED: 07/08/16 CLICK ON YOUR PLAN. GO TO THAT PAGE.

COE – Material Science Programs - Catalog Year 2016 - 2017

Find the Right Educational Degree Plan

There are two distinctly different ways to pursue your education at HCC. Each pattern has its own particular purpose, and its own advantages and disadvantages. Read the descriptions carefully to make an informed choice. You must choose one of the two following patterns: The ***Academic Transfer*** pattern of education ***OR*** The ***Workforce Career*** pattern of education. For more information, visit our College and Career Planner Guide.

Material Science

Corrosion Technology

Corrosion Technology - AAS 2-3
Atmospheric Corrosion - Certificate: Level I 4
Cathodic Protection - Certificate: Level I 5

Welding

Basic Welding Helper - Certificate: Level I 6
Advanced Welding - Certificate: Level I 7

Updated: 12/01/2015

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SID#:	TEL#:	EMAIL:	DATE:
COLLEGE:	COU/ADV:	TEL#:	EMAIL:	CAT YR: 8/15/16-8/14/17

CORROSION TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE

HCCS Course Requirement	cr hr	Transfer Institution	Substitute Course	Substitute (SU) Transfer (TR)	Term	Credits	Grade	Approval Signature	Date
					Comment/Disapproval				
TSI testing required prior to first enrollment.									
FIRST YEAR									
First Semester									
LEAD 1370 Workforce Leadership and Critical Thinking									
Skills for Student Success	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									
XXXX #3## 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									
XXXX #3## Humanities/Fine Arts Elective	3								
INMT 1311 Computer Integrated Manufacturing	3								
HYDR 1345 Hydraulics and Pneumatics	3								
NDTE 1405 Introduction to Ultrasonics	4								
ENTC 1347 Safety and Ergonomics ***OR***									
OSHT 1301 Introduction to Safety and Health	3								
Semester Total	**16**								

(Continued on page 2)

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SID#:	TEL#:	EMAIL:	DATE:
COLLEGE:	COU/ADV:	TEL#:	EMAIL:	CAT YR: 8/15/16-8/14/17

CORROSION TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE

HCCS Course Requirement	cr hr	Transfer Institution	Substitute Course	Substitute (SU) Transfer (TR)	Term	Credits	Grade	Approval Signature	Date
					Comment/Disapproval				
(Continued from page 1)									
Second Semester									
INMT 1343 Computer Aided Design/Computer Aided									
Manufacturing (CAD-CAM)	3								
INMT 1317 Industrial Automation	3								
CETT 1409 DC-AC Circuits	4								
XXXX #3## Social/ Behavioral Science Elective	3								
METL 2305 Atmospheric Corrosion Control **	3								
Semester Total	**16**								
Program Total	**60**								
**Capstone Course									

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Updated: 06/17/2014

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SID#:	TEL#:	EMAIL:	DATE:
COLLEGE:	COU/ADV:	TEL#:	EMAIL:	CAT YR: 8/15/16-8/14/17

CORROSION TECHNOLOGY - ATMOSPHERIC CORROSION - CERTIFICATE: LEVEL I

HCCS Course Requirement	cr hr	Transfer Institution	Substitute Course	Substitute (SU) Transfer (TR)	Term	Credits	Grade	Approval Signature	Date
					Comment/Disapproval				
FIRST YEAR									
First Semester									
LEAD 1370 Workforce Leadership and Critical Thinking									
Skills for Student Success	3								
METL 1313 Introduction to Corrosion	3								
OSHT 1301 Introduction to Safety and Health									
DFTG #3## ***OR*** Drafting Elective									
WLDG 1407 ***OR*** Introduction to Welding Using									
Multiple Processes	3								
ITSC 1309 Integrated Software Applications I	3								
DFTG 1305 Technical Drafting	3								
Semester Total	**15**								
Second Semester									
METL 2305 Atmospheric Corrosion Control	3								
METL 1301 Introduction to Metallurgy	3								
NDTE 1405 Introduction to Ultrasonics	4								
Semester Total	**10**								
Program Total	**25**								

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SID#:	TEL#:	EMAIL:	DATE:
COLLEGE:	COU/ADV:	TEL#:	EMAIL:	CAT YR: 8/15/16-8/14/17

CORROSION TECHNOLOGY - CATHODIC PROTECTION - CERTIFICATE: LEVEL I

HCCS Course Requirement	cr hr	Transfer Institution	Substitute Course	Substitute (SU) Transfer (TR)	Term	Credits	Grade	Approval Signature	Date
					Comment/Disapproval				
FIRST YEAR									
First Semester									
LEAD 1370 Workforce Leadership and Critical Thinking									
Skills for Student Success	3								
METL 1313 Introduction to Corrosion	3								
DFTG 1305 Technical Drafting	3								
CETT 1409 DC - AC Circuits ***OR***									
ELPT 1311 Basic Electrical Theory	3/4								
ITSC 1309 Integrated Software Applications I	3								
Semester Total 15 -	16								
Second Semester									
METL 2441 Cathodic Protection	4								
METL 1301 Introduction to Metallurgy	3								
NDTE 1405 Introduction to Ultrasonics	4								
Semester Total	11								
Program Total 26 –	27								

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SID#:	TEL#:	EMAIL:	DATE:
COLLEGE:	COU/ADV:	TEL#:	EMAIL:	CAT YR: 8/15/16-8/14/17

WELDING TECHNOLOGY - BASIC WELDING HELPER - CERTIFICATE: LEVEL I

HCCS Course Requirement	cr hr	Transfer Institution	Substitute Course	Substitute (SU) Transfer (TR)	Term	Credits	Grade	Approval Signature	Date
					Comment/Disapproval				
First Semester									
LEAD 1370 Workforce Leadership and Critical Thinking Skills for Student Success	3								
TECM 1301 Industrial Mathematics	3								
WLDG 1421 Introduction to Welding Fundamentals	4								
WLDG 1313 Introduction to Blueprint Reading for Welders	3								
WLDG 1407 Introduction to Welding Using Multiple Process**	4								
Program Total	**17**								

** **Capstone Class**

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SID#:	TEL#:	EMAIL:	DATE:
COLLEGE:	COU/ADV:	TEL#:	EMAIL:	CAT YR: 8/15/16-8/14/17

WELDING TECHNOLOGY - ADVANCED WELDING - INTERMEDIATE CERTIFICATE: LEVEL I

HCCS Course Requirement	cr hr	Transfer Institution	Substitute Course	Substitute (SU) Transfer (TR)	Term	Credits	Grade	Approval Signature	Date
					Comment/Disapproval				
First Semester									
LEAD 1370 Workforce Leadership and Critical Thinking Skills for Student Success	3								
TECM 1301 Industrial Mathematics	3								
WLDG 1421 Introduction to Welding Fundamentals	4								
WLDG 1313 Introduction to Blueprint Reading for Welders	3								
WLDG 1407 Introduction to Welding Using Multiple Process	4								
Semester Total	**17**								
Second Semester									
WLDG 1430 Introduction to Gas Metal Arc MIG Welding (GMAW)	4								
WLDG 1434 Introduction to Gas Tungsten Arc TIG Welding (GTAW)	4								
WLDG 1435 Introduction to Pipe Welding	4								
Semester Total	**12**								
Third Semester									
WLDG 2447 Advanced Gas Metal Arc MIG Welding (GMAW)	4								
WLDG 2451 Advanced Tungsten Arc Welding (GTAW)	4								
WLDG 2453 Advanced Pipe Welding **	4								
Semester Total	**12**								
Program Total	**41**								
** **Capstone Class**									

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