

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS PROGRAMS - YEAR 2012 - 2013



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*The following Computer-Aided Drafting (CAD) Designer Specialization certificates and MSA will be **deactivated** as of September 1, 2011): (20, 21, 22, 23, 24, 25 and 26)*

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(Deactivated as of September 1, 2011)

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**HOUSTON COMMUNITY COLLEGE SYSTEM
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NAME:	SS#:	DATE:
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BIOTECHNOLOGY- ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering						
BITC 1311 Introduction to Biotechnology						
BITC 1402 Biotechnology Laboratory Methods and Techniques						
MATH 1314 College Algebra						
SCIT 1414 Applied General Chemistry I OR						
CHEM 1411 General Chemistry I						
SECOND SEMESTER						
BITC 2411 Biotechnology Laboratory Instrumentation						
BIOL 1406 General Biology I						
ENGL 1301 Composition I						
BITC 1370 Introduction to Biochemistry						
THIRD SEMESTER						
SCIT 2401 Applied Organic Chemistry I OR						
CHEM 2423 Organic Chemistry I						
XXXX #3## Social/Behavioral Science General Ed. Elective						
BITC 1470 Principles of BioFuels and Biosafety						
SECOND YEAR						
FIRST SEMESTER						
BITC 2431 Cell Culture Techniques						
BITC 2441 Molecular Biology Techniques						
BIOL 2420 Microbiology						
BIOL 2401 Anatomy and Physiology I OR						
SCIT 1407 Applied Human Anatomy and Physiology I						
SECOND SEMESTER						
BITC 2445 Medical Biotechnology						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
BITC 2386 Internship- Biological Technology/Technician						
BITC 1491 Special Topics in Biological Tech/Technician						
BITC 2472 Immunological Methods and Techniques						

**HOUSTON COMMUNITY COLLEGE SYSTEM
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NAME:	SS#:	DATE:
COLLEGE:	COUNSELOR/ADVISOR:	CATALOG YEAR: 12-13

CHEMICAL ENGINEERING TECHNOLOGY- ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering						
CTEC 1391 Special Topics in Chemical Technology/Technician						
PTAC 1308 Safety, Health, and Environment I						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
SECOND SEMESTER						
SCIT 1414 Applied General Chemistry I OR						
CHEM 1411 General Chemistry						
SCIT 1418 Applied Physics I OR						
PHYS 1401 College Physics I						
MATH 1325 Elements of Calculus with Applications						
PTAC 1332 Process Instrumentation I						
THIRD SEMESTER						
CTEC 1470 Principles of Pipeline Technology						
SCIT 2401 Applied Organic Chemistry I OR						
CHEM 2423 Organic Chemistry I						
PTAC 1410 Process Technology I- Equipment						
SECOND YEAR						
FIRST SEMESTER						
SCIT 1543 Applied Analytical Chemistry						
SOCI 1301 Introduction to Sociology						
CTEC 2470 Process Control and Design						
PTAC 2420 Process Technology II- Systems						
SECOND SEMESTER						
CTEC 2386 Internship- Chemical Technology/Tech. OR						
CTEC 1391 Special Topics in Chemical Technology/Technician						
PTAC 2446 Process Troubleshooting						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
CTEC 2445 Unit Operations						

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CHEMICAL LABORATORY TECHNOLOGY- ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201		Introduction to Engineering				
CTEC 1213		Introduction to Chemical Technology				
ENGL 1301		Composition I				
MATH 1314		College Algebra				
XXXX #3##		Department Approved Elective				
PSYC 2301		Introduction to Psychology				
SECOND SEMESTER						
SCIT 1414		Applied General Chemistry I OR				
CHEM 1411		General Chemistry I				
BIOL 1406		General Biology I OR				
PHYS 1401		College Physics				
MATH 1342		Statistics				
XXXX #3##		Humanities/Fine Arts General Ed. Elective				
THIRD SEMESTER						
SCIT 1543		Applied Analytical Chemistry				
SCIT 1415		Applied General Chemistry II OR				
CHEM 1412		General Chemistry II				
SECOND YEAR						
FIRST SEMESTER						
CTEC 1441		Applied Instrumental Analysis I				
SCIT 2401		Applied Organic Chemistry I OR				
CHEM 2423		Organic Chemistry I				
XXXX #4##		Department Approved Program- Related Elective*				
(Continued on page 2)						

*Electives: PTAC 2314, PTAC 2334; GEOL 1403, GEOL 1404; CTEC 2441, CTEC 1349, CTEC 1345, CTEC 2443, CTEC 2445, CTEC 1401, EPTC 1427, EPTC 2414 or other department approved elective.

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DRAFTING AND DESIGN ENGINEERING TECHNOLOGY - AAS - GENERAL COMPUTER-AIDED DESIGN DRAFTING

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering OR						
LEAD 1200 Workforce Development with Critical Thinking						
DFTG 1305 Technical Drafting						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
PSYC 2301 Introduction to Psychology						
DFTG 1309 Basic Computer-Aided Drafting						
SECOND SEMESTER						
DFTG 2319 Intermediate Computer-Aided Drafting						
DFTG 1358 Electrical/ Electronics Drafting						
ENGL 2311 Technical and Industrial Correspondence and Report Writing						
DFTG 1333 Mechanical Drafting						
DFTG 2317 Descriptive Geometry						
THIRD SEMESTER						
MATH 1316 Plane Trigonometry						
SECOND YEAR						
FIRST SEMESTER						
DFTG 2332 Advanced CAD						
DFTG 2302 Machine Drafting						
DFTG 2323 Pipe Drafting						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
DFTG 1310 Specialized Basic Computer Aided Drafting (CAD)						
SECOND SEMESTER						
DFTG 2330 Civil Drafting						
ARCE 1352 Structural Drafting						
DFTG 1317 Architectural Drafting- Residential						
DFTG 2308 Instrumentation Drafting						
DFTG 2335 Advanced Tech.Mechanical Design and Drafting						

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DRAFTING AND DESIGN ENGINEERING TECHNOLOGY - AAS - BUILDING DESIGN DRAFTING SPECIALIZATION

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering OR						
LEAD 1200 Workforce Development with Critical Thinking						
ENGL 1301 Composition I						
DFTG 1305 Technical Drafting						
DFTG 1309 Basic Computer- Aided Drafting						
MATH 1314 College Algebra						
ARCE 1303 Architectural Material and Methods						
SECOND SEMESTER						
DFTG 1317 Architectural Drafting- Residential						
DFTG 2319 Intermediate Computer- Aided Drafting						
PSYC 2301 Introduction to Psychology						
MATH 1316 Plane Trigonometry						
ARCE 1352 Structural Drafting						
SECOND YEAR						
FIRST SEMESTER						
XXXX #3## Humanities/ Fine Arts Elective						
DFTG 2300 Intermediate Architectural Drafting-Residential						
SRVY 1301 Introduction to Surveying						
ENGL 2311 Tech. & Ind. Correspondence & Report Writing						
DFTG 1392 Special Topics in Architectural Drafting and Architectural CAD/CADD						
SECOND SEMESTER						
ARCE 1342 Codes, Specifications, Contract Documents						
ARCE 2352 Mechanical and Electrical Systems						
DFTG 1376 Revit Residential						
DFTG 2330 Civil Drafting						
DFTG 2328 Architectural Drafting- Commercial						

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NAME:	SS#:	DATE:
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DRAFTING AND DESIGN ENGINEERING TECHNOLOGY - AAS - ELECTRO-MECHANICAL DESIGN SPECIALIZATION

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering						
DFTG 1305 Technical Drafting						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
PSYC 2301 Introduction to Psychology						
DFTG 1309 Basic Computer-Aided Drafting						
SECOND SEMESTER						
DFTG 1358 Electrical/Electronics Drafting						
DFTG 2319 Intermediate Computer-Aided Drafting						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
DFTG 1333 Mechanical Drafting						
MATH 1316 Plane Trigonometry						
SECOND YEAR						
FIRST SEMESTER						
DFTG 2317 Descriptive Geometry						
DFTG 1329 Electromechanical Drafting						
DFTG 2340 Solid Modeling/Design						
DFTG 2302 Machine Drafting						
ENGL 2311 Technical and Industrial Correspondence and Report Writing						
SECOND SEMESTER						
DFTG 2305 Printed Circuit Board Design						
DFTG 1310 Specialized Basic Computer Aided Drafting (CAD)						
DFTG 2335 Advanced Technologies in Mechanical Design and Drafting						
DFTG 1394 Special Topics in Electrical/ Electronics Drafting and Electrical/ Electronics CAD/CADD						
DFTG 2381 Cooperative Education OR						
DFTG 2338 Final Project-Advanced Drafting						

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DRAFTING AND DESIGN ENGINEERING TECHNOLOGY - AAS - MECHANICAL DESIGN DRAFTING SPECIALIZATION

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering OR						
LEAD 1200 Workforce Development with Critical Thinking						
DFTG 1305 Technical Drafting						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
PSYC 2301 Introduction to Psychology						
DFTG 1309 Basic Computer-Aided Drafting						
SECOND SEMESTER						
DFTG 1333 Mechanical Drafting						
DFTG 2319 Intermediate Computer-Aided Drafting						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
DFTG 1329 Electro-Mechanical Drafting						
MATH 1316 Plane Trigonometry						
SECOND YEAR						
FIRST SEMESTER						
DFTG 1310 Specialized Basic Computer Aided Drafting						
DFTG 2317 Descriptive Geometry						
DFTG 1358 Electrical/Electronics Drafting						
DFTG 2302 Machine Drafting						
DFTG 2308 Instrumentation Drafting						
SECOND SEMESTER						
DFTG 2370 Intermediate Comp.-Aided Drafting-Microstation						
DFTG 2306 Machine Design						
DFTG 2335 Advanced Tech.Mechanical Design and Drafting						
DFTG 2305 Printed Circuit Board Design						
DFTG 2358 Advanced Machine Design						
ENGL 2311 Technical and Industrial Correspondence and Report Writing						
THIRD SEMESTER						
DFTG 2358 Advanced Machine Design						

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DRAFTING AND DESIGN ENGINEERING TECHNOLOGY - AAS - PIPING DESIGN DRAFTING SPECIALIZATION

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering OR						
LEAD 1200 Workforce Development with Critical Thinking						
DFTG 1305 Technical Drafting						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
PSYC 2301 Introduction to Psychology						
DFTG 1309 Basic Computer-Aided Drafting						
SECOND SEMESTER						
DFTG 2319 Intermediate Computer-Aided Drafting						
DFTG 2323 Pipe Drafting						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
DFTG 1333 Mechanical Drafting						
DFTG 2317 Descriptive Geometry						
THIRD SEMESTER						
MATH 1316 Plane Trigonometry						
SECOND YEAR						
FIRST SEMESTER						
DFTG 1310 Specialized Basic Computer Aided Drafting (CAD)						
DFTG 2308 Instrumentation Drafting						
ENGL 2311 Technical and Industrial Correspondence and Report Writing						
DFTG 2330 Civil Drafting						
DFTG 2302 Machine Drafting						
SECOND SEMESTER						
DFTG 2306 Machine Design						
ARCE 1352 Structural Drafting						
DFTG 2340 Solid Modeling Design						
DFTG 2345 Advanced Pipe Drafting						
DFTG 2375 Piping Design Management Systems						

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ELECTRONICS ENGINEERING TECHNOLOGY - AAS - BIOMEDICAL ELECTRONICS SPECIALIZATION

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
EDUC 1300 <i>or</i> Learning Framework						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
CETT 1321 Electronic Fabrication						
CPMT 1449 Computer Networking Technology						
SECOND SEMESTER						
CETT 1403 DC Circuits						
CETT 1425 Digital Fundamentals						
MATH 1316 Plane Trigonometry						
XXXX #3## Social/Behavioral Science General Ed. Elective						
ENGL 2311 Technical and Industrial Correspondence and Report Writing						
THIRD SEMESTER						
PHYS 1401 College Physics I						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
SECOND YEAR						
FIRST SEMESTER						
CETT 1405 AC Circuits						
CETT 1429 Solid State Devices						
BIOM 1309 Applied Biomedical Equipment Technology						
CETT 1331 Programming for Discrete Electronic Devices						
SECOND SEMESTER						
BIOM 2331 Biomedical Clinical Instrumentation						
MDCA 1313 Medical Terminology						
BIOM 2489 Internship - Biomedical Technology/Technician						
CETT 1457 Linear Integrated Circuits						

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ELECTRONICS ENGINEERING TECHNOLOGY - AAS - ELECTRICAL POWER TECHNOLOGY SPECIALIZATION

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
EDUC 1300 <i>or</i> Learning Framework						
MATH 1314 College Algebra						
ENGL 1301 Composition I						
CETT 1321 Electronic Fabrication						
CPMT 1449 Computer Networking Technology						
SECOND SEMESTER						
CETT 1403 DC Circuits						
CETT 1425 Digital Fundamentals						
MATH 1316 Plane Trigonometry						
XXXX #3## Social/Behavioral Science General Ed. Elective						
ENGL 2311 Technical and Industrial Correspondence and Report Writing						
THIRD SEMESTER						
PHYS 1401 College Physics I						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
SECOND YEAR						
FIRST SEMESTER						
CETT 1405 AC Circuits						
CETT 1429 Solid State Devices						
CETT 1331 Programming for Discrete Electronic Devices						
RBTC 1301 Programmable Logic Controllers						
SECOND SEMESTER						
XXXX #4## Program - Related Elective						
ELPT 1451 Electrical Machines						
CETT 1457 Linear Integrated Circuits						

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ELECTRONICS ENGINEERING TECHNOLOGY - AAS - COMPUTER ENGINEERING TECHNOLOGY SPECIALIZATION

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
EDUC 1300 <i>or</i> Learning Framework						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
CETT 1321 Electronic Fabrication						
CPMT 1449 Computer Networking Technology						
SECOND SEMESTER						
CETT 1403 DC Circuits						
CETT 1425 Digital Fundamentals						
MATH 1316 Plane Trigonometry						
XXXX #3## Social/Behavioral Science General Ed. Elective						
ENGL 2311 Technical and Industrial Correspondence and Report Writing						
THIRD SEMESTER						
PHYS 1401 College Physics I						
XXXX #3## Program - Related Elective						
SECOND YEAR						
FIRST SEMESTER						
CETT 1405 AC Circuits						
CETT 1429 Solid State Devices						
CETT 1331 Programming for Discrete Electronic Devices						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
SECOND SEMESTER						
CETT 1445 Microprocessor						
XXXX #4## Program - Related Elective						
CETT 1457 Linear Integrated Circuits						

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ENGINEERING SCIENCES - ENGINEERING SCIENCE - AS

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
FRESHMEN YEAR						
FIRST SEMESTER (FALL)						
HIST 1301 American History I						
ENGL 1301 Composition I						
MATH 2413 Calculus I						
CHEM 1411 General Chemistry I						
ENGR 1201 Introduction to Engineering						
SECOND SEMESTER (SPRING)						
ENGR 1204 Engineering Graphics						
ENGL 1302 Composition II						
MATH 2414 Calculus II						
PHYS 2325 University Physics I						
PHYS 2125 University Physics I Laboratory						
GOVT 2305 American National Government <u>OR</u>						
GOVT 2306 Texas Government						
SOPHOMORE YEAR						
FIRST SEMESTER (FALL)						
ENGR 2304 Programming for Engineers						
ECON 2301 Economics <u>OR</u>						
ECON 2302 Economics						
ENGR 2301 Engineering Mechanics - Statics						
MATH 2415 Calculus III (Multi-Variable Calculus)						
PHYS 2326 University Physics II						
PHYS 2126 University Physics II Laboratory						
SECOND SEMESTER (SPRING)						
ENGR 2305 Electrical Circuits I						
ENGR 2105 Electrical Circuits I Laboratory						
MATH 2320 Differential Equations						
XXXX #3## Engineering Elective *						
XXXX #3## Visual and Performing Arts Elective †						
XXXX #3## Humanities ‡						

* Students interested in pursuing mechanical or civil engineering should take ENGR 2302. Students interested in pursuing electrical engineering should take COSC 1436. Students interested in pursuing industrial engineering should take ENGR 23XX. † Visual and Performing Arts Elective: See HCC core list. ‡ Humanities Elective: See HCC core list.

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INSTRUMENTATION AND CONTROLS ENGINEERING TECHNOLOGY - ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
INTC 1312 Instrumentation and Safety						
PTAC 1308 Safety, Health, and Environment I						
CETT 1403 DC Circuits						
MATH 1314 College Algebra						
SECOND SEMESTER						
INTC 1456 Instrumentation Calibration						
SPCH #3## Speech Elective						
MATH 1316 Trigonometry						
INTC 1441 Principles of Automatic Control						
CPMT 1449 Computer Networking Technology OR						
ITNW 1425 Fundamentals of Networking Technologies OR						
ITCC 1401 Exploration - Networking Fundamentals						
SECOND YEAR						
FIRST SEMESTER						
INTC 1343 Application of Industrial Automatic Controls						
INTC 2330 Instrumentation Systems Troubleshooting						
ENGL 1301 Composition I						
XXXX #3## Program-Related Elective						
PHYS 1401 College Physics						
SECOND SEMESTER						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
XXXX #3## Social/Behavioral Science General Ed. Elective						
RBTC 1301 Programmable Logic Controllers						
INTC 2370 Linking Process Control Systems						
INTC 2336 Distributed Control & Programmable Logic OR						
INTC 2380 Cooperative Education-Instrumentation Technology/Technician						

**HOUSTON COMMUNITY COLLEGE SYSTEM
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PETROLEUM ENGINEERING TECHNOLOGY - ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
PTRT 1301 Introduction to Petroleum Industry						
MATH 1314 College Algebra						
ENGL 1301 Composition I						
ITSC 1301 Introduction to Computers						
PTAC 1308 Safety, Health, and Environment I						
SECOND SEMESTER						
PTRT 1470 Petroleum Data Management I- Exploration						
CTEC 1401 Applied Petrochemical Technology						
PTRT 1471 Exploration and Production I						
PTRT 1370 Petroleum Geology						
THIRD SEMESTER						
PTRT 1472 Petroleum Data Management II- Drilling and Production						
PTRT 2373 Principles of Enhanced Oil and Gas Recovery and Hydraulic Fracturing						
SECOND YEAR						
FIRST SEMESTER						
PTRT 1473 Exploration and Production II						
MATH 1325 Elements of Calculus with Applications						
PTRT 2370 Petroleum Operations						
XXXX #3## Approved Humanities/ Fine Arts General Ed. Elective						
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PROCESS TECHNOLOGY - ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/ Institution	Substitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
PTAC 1302 Introduction to Process Technology						
ENGL 1301 Composition I						
MATH 1314 College Algebra						
PTAC 1308 Safety, Health and Environment I						
XXXX#3## Social/Behavioral Science/General Education Elective						
SECOND SEMESTER						
SCIT 1418 Applied Physics <i>OR</i>						
PHYS 1401 College Physics						
CTEC 1471 Principles of Industrial Chemistry						
PTAC 1410 Process Technology I - Equipment						
PTAC 1332 Process Instrumentation I						
SECOND YEAR						
FIRST SEMESTER						
SPCH 1311 Introduction to Speech Communication						
PTAC 2314 Principles of Quality						
PTAC 2420 Process Technology II - Systems						
PTAC 1354 Industrial Processes						
BMGT 1301 Supervision						
SECOND SEMESTER						
PTAC 1350 Industrial Economics						
XXXX #3## Approved Humanities/Fine Arts General Ed. Elective						
CTEC 2445 Unit Operations						
PTAC 2446 Process Troubleshooting						

