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



Programmer of the	
BIOTECHNOLOGY	
Biotechnology - AAS	CAD - Designer - Mechanical Drafting Specialization - Certificate 23
Biotechnology - Certificate	CAD - Designer - Electro - Mechanical Drafting Specialization - Certificate 24
CHEMICAL ENGINEERING TECHNOLOGY	CAD - Designer - Civil/Structural Drafting Spec Certificate
	CAD - Designer - Basic Piping Drafting - MSA
Chemical Engineering Technology - AAS	ELECTRONICS ENGINEERING TECHNOLOGY
CHEMICAL LABORATORY TECHNOLOGY	ZEECTTO. NEW ZETON ZECTTO TECHNOLOGY
Chemical Laboratory Technology - AAS	Biomedical Electronics Specialization - AAS
Chemical Laboratory Technology - Certificate	Electrical Power Specialization - AAS
Chemical Laboratory Technology - Polymer Technology Specialization - CERT 8	Computer Engineering Technology Specialization - AAS
Chemical Eaboratory Technology - Polymer Technology Specialization - CERT 0	Basic Electronics - Certificate
DRAFTING AND DESIGN ENGINEERING TECHNOLOGY	Computer Servicing/Networks - Certificate
General Computer Aided Design Drafting - AAS	Network Security - Certificate
General Computer Aided Design Drafting - Certificate	(Deactivated as of September 1, 2011)
Building Design Drafting Specialization - AAS	Engineering Science
Computer Aided Drafting - Architectural Drafting Specialization - CERT 12	
Electro-Mechanical Design Specialization - AAS	Engineering Science-AS
Computer Aided Drafting - Electro - Mechanical Design Specialization - CERT 14	Instrumentation and Controls Engineering Technology
Mechanical Design Drafting Specialization - AAS	Instrumentation and Controls Engineering Technology - AAS
Computer Aided Drafting - Machine Drafting Specialization - Certificate . 16	Instrumentation and Controls Engineering Technology - Certificate 35
Piping Design Drafting Specialization - AAS	Solar Energy Technology: Photovoltaic - Certificate
Computer Aided Drafting - Pipe Drafting Specialization - Certificate 18	Solar Energy Technology: Thermal - Certificate
Computer Aided Drafting - Civil Drafting Specialization - Certificate 19	Wind Energy Technology - Certificate
The following Computer-Aided Drafting (CAD) Designer Specialization certificates	Petroleum Engineering Technology
and MSA will be deactivated as of September 1, 2011): (20, 21, 22, 23, 24, 25 and 26)	Petroleum Engineering Technology - AAS
CAD - Designer - Certificate	Petroleum Engineering Technology - Certificate
CAD - Designer - Architectural Drafting Specialization - Certificate 21	Petroleum Engineering Technology: Offshore Drilling Technician - Certificate 42
CAD - Designer - Piping Drafting Specialization - Certificate	Process Technology
2.12 2.13.5.1. Tiping Braining Specialization Communic	Process Technology - AAS
	Process Technology - Process Operator - Certificate

FAVA EDU				LEGE SYSTEM SSTITUTION PETITION		Page 1 of 1
NAME:			SS#:		DATE:	
COLLEGE:			COUNSELOR/AI	OVISOR:	CATALOG YEAR	2: 12-13
I	BIOTECHN	OLOGY-	ASSOCIATE II	N APPLIED SCIENCE		
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)		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						

FA\	/A EDU				LEGE SYSTEM BSTITUTION PETITION	N		Page 1 of 1
NAME:				SS#:			DATE:	
COLLEGE:				COUNSELOR/A	DVISOR:		CATALOG YEAR:	12-13
	В	IOTECHNO			E - BIOTECHNOLOGY			
	HCCS Course Requirement	Transfer/St Institution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Disap	pproval	Approval Signature	Date
TSI testing is require	ed prior to first enrollment.							
FIRST YEAR								
FIRST SEMESTER								
ENGR 1201	Introduction to Engineering							
BITC 1311	Introduction to Biotechnology							
ENGL 1301	Composition I							
MATH 1314	College Algebra							
CHEM 1411	General Chemistry I OR							
SCIT 1414	Applied General Chemistry I							
Second Semest								
BITC 1402	Biotechnology Laboratory Methods							
	and Techniques							
BITC 1370	Introduction to Biochemistry							
BIOL 1406	General Biology I							
Third Semester	r							
BITC 1491	Special Topics in Biological Technology/							
	Technician							
BITC 2411	Biotechnology Laboratory Instrumentation							

FA_	VA EDU			LEGE SYSTEM BSTITUTION PETITION		Page 1 of 1
NAME:			SS#:		DATE:	
COLLEGE:			COUNSELOR/A	OVISOR:	CATALOG YEAR:	12-13
	CHEMICAL E	NGINEER		SSOCIATE IN APPLIED SCIEN	<b>_</b>	
	HCCS Course Requirement	Transfer/St Institution	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
ΓSI testing is req	uired prior to first enrollment.					
IRST YEAR						
IRST SEMESTE	R					
ENGR 120						
CTEC 139	1 Special Topics in Chemical Technology/Technician					
PTAC 130	8 Safety, Health, and Environment I					
ENGL 130	1 Composition I					
MATH 131	4 College Algebra					
SECOND SEME	STER					
SCIT 141	4 Applied General Chemistry I OR					
CHEM 141	1 General Chemistry					
SCIT 141	8 Applied Physics I OR					
PHYS 140	1 College Physics I					
MATH 132	5 Elements of Calculus with Applications					
PTAC 133	2 Process Instrumentation I					
THIRD SEMEST	ER					
CTEC 147	0 Principles of Pipeline Technology					
SCIT 240	1 Applied Organic Chemistry I OR					
CHEM 242	3 Organic Chemistry I					
PTAC 141	0 Process Technology I- Equipment					
SECOND YEAR	<del></del>					
FIRST SEMESTE	ER					
SCIT 154	3 Applied Analytical Chemistry					
SOCI 130						
CTEC 247	0 Process Control and Design					
PTAC 242	0 Process Technology II- Systems					
SECOND SEME						
CTEC 238	36 Internship- Chemical Technology/Tech. OR					
CTEC 139						
	Technology/Technician					
PTAC 244	<del></del>					
XXXX #3#	<del>-</del>					
CTEC 244						

FA	VA EDU			IMUNITY COLI RANSFER SUB	LEGE SYSTEM STITUTION PETITION		Page 1 of 2
NAME:				SS#:		DATE:	
COLLEGE:				COUNSELOR/AD	VISOR:	CATALOG YEAR	: 12-13
	CHEMICAL	LABORATO	RY TEC	HNOLOGY- ASS	SOCIATE IN APPLIED SCIEN		
	HCCS Course Requirement	Transfer/Su Institution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is requi	red prior to first enrollment.						
FIRST YEAR							
FIRST SEMESTER	3						
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 SEMES	TER						
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 SEMESTE	R						
SCIT 1543	Applied Analytical Chemistry						
SCIT 1415	Applied General Chemistry II OR						
ÇHEM 1412	General Chemistry II						
SECOND YE	AR						
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)						<b>_</b>

<sup>\*</sup>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.

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION									
NAME:				SS#:			DATE:		
COLLEGE:				COUNSELOR/AD	OVISOR:		CATALOG YEAR		
	CHEMICAL I	LABORATO	ORY TECI			PLIED SCIENCE		·	
	HCCS Course Requirement Transfer/Substitution Institution Course		ubstitution Course	Substitute (SU) Transfer (TR)	Comme	nt/Disapproval	Approval Signature	Date	
SECOND SEMEST	TER		I						
SCIT 2402	Applied Organic Chemistry II OR								
CHEM 2425	Organic Chemistry II								
XXXX #3##	Department Approved Program-								
	Related Elective*								
CTEC 2381	Cooperative Education OR								
CTEC 2386	Internship-Chemical Technology/Tech. OR								
CTEC 2333	Comprehensive Studies in Chemical								
	Technology								
CTEC 2431	Applied Instrumental Analysis II								
*Electives: PTAC 23	314, PTAC 2334; GEOL 1403, GEOL 1404; CTEC 2441, CTEC 1349,	CTEC 1345, CTEC 24	43, CTEC 2445, C	TEC 1401, EPTC 1427, EPTC	2414 or other department ap	proved elective.			

FAVA EDU				LEGE SYSTEM BSTITUTION PETITION		Page 1 of 1
NAME:			SS#:		DATE:	
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAF	 ₹: 12-13
	HEMICAL L			DLOGY - CERTIFICATE	<u> </u>	
HCCS Course Requirement	Transfer/Su Institution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering						
CTEC 1213 Introduction to Chemical Technology						
MATH 1314 College Algebra						
SCIT 1414 Applied General Chemistry I OR						
CHEM 1411 General Chemistry I						
Second Semester						
SCIT 2401 Applied Organic Chemistry I OR						
CHEM 2423 Organic Chemistry I						
SCIT 1543 Applied Analytical Chemistry						
Third Semester						
SCIT 2402 Applied Organic Chemistry II OR						
CHEM 2425 Organic Chemistry II						
CTEC 1441 Applied Instrumental Analysis						

FAVA ED				LEGE SYSTEM BSTITUTION PETITION		Page 1 of 1
NAME:			SS#:		DATE:	
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG \	/EAR: 12-13
	RY TECHNOI	LOGY - C		- POLYMER TECHNOLOGY		
HCCS Course Requirement	Transfer/St Institution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Disapprova	Approval Signature	
TSI testing is required prior to first enrollment. FIRST YEAR						
FIRST SEMESTER						
ENGR 1201 Introduction to Engineering						
CTEC 1213 Introduction to Chemical Technology						
MATH 1314 College Algebra						
CHEM 1411 General Chemistry I OR						
SCIT 1414 Applied General Chemistry I						
Second Semester						
CHEM 2423 Organic Chemistry I OR						
SCIT 2401 Applied Organic Chemistry I						
CTEC 2441 Polymers I						
SCIT 1543 Applied Analytical Chemistry						
THIRD SEMESTER						
CTEC 1441 Applied Instrumental Analysis I						
CTEC 2443 Polymers II						
			_			
			_			
			_			

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION  Page 1 of 1										
NAME:			SS#:		DATE:					
COLLEGE:			COUNSELOR/AI	DVISOR:	CATALOG YEAF	: 12-13				
DRAFTING AND DESIGN EN	NGINEERIN	G TECH	NOLOGY - AA	AS - GENERAL COMPUTER-A	IDED DESIGN DRAFTIN	G				
HCCS Course Requirement	Transfer/Su Institution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date				
TSI testing is required prior to first enrollment.										
IRST YEAR										
IRST SEMESTER										
ENGR 1201 Introduction to Engineering OR										
EAD 1200 Workforce Development with Critical Thinking	5									
DFTG 1305 Technical Drafting										
ENGL 1301 Composition I										
MATH 1314 College Algebra										
PSYC 2301 Introduction to Psychology										
DFTG 1309 Basic Computer-Aided Drafting										
econd 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										
HIRD SEMESTER										
AATH 1316 Plane Trigonometry										
ECOND YEAR										
irst Semester										
OFTG 2332 Advanced CAD										
OFTG 2302 Machine Drafting										
OFTG 2323 Pipe Drafting										
XXXX #3## Humanities/Fine Arts General Ed. Elective										
DFTG 1310 Specialized Basic Computer Aided										
Drafting (CAD)										
econd 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 Draftin	g									

FA	_VA EDU0			LEGE SYSTEM  SSTITUTION PETITION			Page 1 of 1
NAME:			SS#:			DATE:	
COLLEGE:			COUNSELOR/A	DVISOR:		CATALOG YEAR:	12-13
	COMPUT	TER AIDED		L DRAFTING CERTIFICA	TE		
	HCCS Course Requirement	Transfer/Su Institution	Substitute (SU) Transfer (TR)	Comment/Disappro		Approval Signature	Date
TSI testing is rea	quired prior to first enrollment.						
FIRST YEAR							
FIRST SEMESTER							
ENGR 1201							
LEAD 1200	Workforce Development with Critical Thinking						
DFTG 1305	Technical Drafting						
DFTG 1309	Basic Computer-Aided Drafting						
MATH 1314	College Algebra						
DFTG 1310	Specialized Basic Computer-Aided Drafting						
SECOND SEMES	TER						
DFTG 1358	Electrical/ Electronics Drafting						
DFTG 2319	Intermediate Computer-Aided Drafting						
DFTG 1333	Mechanical Drafting						
DFTG 1317	Architectural Drafting- Residential						
DFTG 2308	Instrumentation Drafting						
Second Year							
- IRST SEMESTER							
ARCE 1352	Structural Drafting						
DFTG 2323	Pipe Drafting						
DFTG 2330	Civil Drafting						
DFTG 1329	Electro-Mechanical Drafting						
DFTG 2332	Advanced CAD						
	<del></del>						

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION									
NAME:			SS#:		DATE:				
COLLEGE:			COUNSELOR/A	CATALOG YEAF	2: 12-13				
DRAFTING AND DESIGN ENGI	NEERING '								
HCCS Course Requirement	Transfer/Su Institution	ibstitution 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									
<del>-</del>									

HOUSTON COMMUNITY COLLEGE SYSTEM  — FAVA EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION									
NAME:			SS#:		DATE:				
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	 R: 12-13			
	AFTING - (	CERTIFIC		ITECTURAL DRAFTING SPI		<del></del>			
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)			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									
DFTG 1309 Basic Computer-Aided Drafting SRVY 1301 Introduction to Surveying									
SRVY 1301 Introduction to Surveying  MATH 1314 College Algebra						<del>- </del>			
MAIH 1314 College Algebra			_			1			
Second Semester						-			
ARCE 1352 Structural Drafting									
DFTG 1317 Architectural Drafting-Residential									
DFTG 2319 Intermediate Computer-Aided Drafting									
DFTG 2330 Civil Drafting						1			
2000									
SECOND YEAR									
First Semester									
DFTG 2328 Architectural Drafting- Commercial									
DFTG 2300 Intermediate Architectural Drafting-									
Residential									
DFTG 1376 Revit Residential									
ARCE 2352 Mechanical and Electrical Systems									

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:			SS#:			DATE:					
COLLEGE:			COUNSELOR/AI	OVISOR:		CATALOG YEAR:	12-13				
DRAFTING AND DESIGN ENGIN	EERING TE	ECHNOL	OGY - AAS - E	LECTRO-MECHANICA	L DESIGN SPEC	CIALIZATION					
HCCS Course Requirement	Transfer/Su Institution	lbstitution Course	Substitute (SU) Transfer (TR)	Comment/Disap	proval	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											

HOUSTON COMMUNITY COLLEGE SYSTEM  FAYA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION										
NAME:			SS#:		DATE:					
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEA	R: 12-13				
	AFTING - CH			ROMECHANICAL DESIGN S		· ·				
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)			Date				
TSI testing is required prior to first enrollment. FIRST YEAR										
FIRST SEMESTER										
ENGR 1201 Introduction to Engineering										
DFTG 1305 Technical Drafting										
DFTG 1309 Basic Computer-Aided Drafting										
Second Semester										
DFTG 2319 Intermediate Computer-Aided Drafting										
DFTG 1358 Electrical/Electronics Drafting										
DFTG 1333 Mechanical Drafting										
SECOND YEAR										
First Semester										
DFTG 1329 Electromechanical Drafting										
DFTG 2335 Advanced Technologies in Mechanical										
Design and Drafting										
SECOND SEMESTER										
DFTG 2305 Printed Circuit Board Design										
DFTG 1394 Special Topics in Electrical/ Electronics										
Drafting and Electrical/ Electronics CAD/CAI	DD									
DFTG 2380 Cooperative Education										
			-							

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:			SS#:			DATE:					
COLLEGE:			COUNSELOR/AI	OVISOR:		CATALOG YEAR: 12-13					
DRAFTING AND DESIGN ENGINE	ERING TE	CHNOL	OGY - AAS - M	ECHANICAL DESI	GN DRAFTING SPE	CIALIZATION					
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)	Comment/I		Approval Signature	Date				
TSI testing is required prior to first enrollment.											
IRST 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											
ECOND YEAR											
IRST 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											
ECOND SEMESTER											
DFTG 2370 Intermediate CompAided 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											
HIRD SEMESTER											
DFTG 2358 Advanced Machine Design					-						

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:			SS#:		DATE:						
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	: 12-13					
	DRAFTIN	G - CERT		ACHINE DRAFTING SPECIA	I .	<u> </u>					
HCCS Course Requirement	Transfer/Su Institution	ubstitution Course	Substitute (SU) Transfer (TR)		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											
DFTG 1309 Basic Computer-Aided Drafting											
MATH 1314 College Algebra											
DFTG 1310 Specialized Basic Computer Aided Drafting											
SECOND SEMESTER											
DFTG 2319 Intermediate Computer-Aided Drafting											
DFTG 1333 Mechanical Drafting											
DFTG 1329 Electro-Mechanical Drafting											
DFTG 1358 Electrical/Electronics Drafting											
THIRD SEMESTER											
DFTG 2308 Instrumentation Drafting											
DFTG 2302 Machine Drafting											
DFTG 2306 Machine Design											
DFTG 2335 Advanced Technologies in Mechanical											
Design and Drafting											

FAVA EDU0	HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION										
NAME:			SS#:		DATE:						
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	12-13					
DRAFTING AND DESIGN ENC	GINEERING	G TECHN			G SPECIALIZATION						
HCCS Course Requirement	Transfer/Su Institution		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											

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:			SS#:		DATE:						
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	: 12-13					
	ED DRAF			PIPE DRAFTING SPECIALI	<u>.</u>	-					
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)		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											
DFTG 1309 Basic Computer-Aided Drafting											
DFTG 1310 Specialized Basic Computer Aided Drafting											
MATH 1314 College Algebra											
Second Semester											
DFTG 2319 Intermediate Computer-Aided Drafting											
DFTG 2323 Pipe Drafting											
ARCE 1352 Structural Drafting											
DFTG 1333 Mechanical Drafting						<u> </u>					
THIRD SEMESTER											
DFTG 2302 Machine Drafting						ļ					
DFTG 2308 Instrumentation Drafting						ļ					
DFTG 1396 Special topics in Computer Graphics: Piping											
Design Systems OR						<b> </b>					
DFTG 2371 Advanced Tech. Process Plant						<b>.</b>					
Design-Autoplant						<b> </b>					
DFTG 2345 Advanced Pipe Drafting						<u> </u>					
						<b> </b>					
						<b> </b>					
						<b>_</b>					
						<u> </u>					
						<u> </u>					
			-								

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:			SS#:		DATE:						
COLLEGE:			COUNSELOR/A	DVISOR:	CATALO	OG YEAR: 12-13					
	ED DRAFT			CIVIL DRAFTING SPECIA							
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)								
TSI testing is required prior to first enrollment. FIRST YEAR											
FIRST SEMESTER											
ENGR 1201 Introduction to Engineering OR						<del></del>					
LEAD 1200 Workforce Development with Critical Thinking						<del></del>					
DFTG 1305 Technical Drafting											
DFTG 1309 Basic Computer-Aided Drafting											
SRVY 1301 Introduction to Surveying											
MATH 1314 College Algebra											
SECOND SEMESTER											
DFTG 2319 Intermediate Computer-Aided Drafting											
DFTG 2321 Topographical Drafting											
SRVY 1341 Land Surveying											
ARCE 1352 Structural Drafting											
DFTG 1310 Specialized Basic Computer Aided Drafting											
THIRD SEMESTER											
DFTG2327 Landscape Drafting											
SRVY 2348 Plane Surveying											
DFTG 1393 Special topics in Civil Drafting and											
Civil Engineering											
DFTG 2330 Civil Drafting											

HOUSTON COMMUNITY COLLEGE SYSTEM  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION										
NAME:			SS#:		DA	 .TE:				
COLLEGE:			COUNSELOR/A	DVISOR:	CA	TALOG YEAR:	12-13			
	MPUTER A			SIGNER - CERTIFICATI						
HCCS Course Requirement	Transfer/S Institution		Substitute (SU) Transfer (TR)		proval	Approval Signature	Date			
TSI testing is required prior to first enrollment.										
FIRST YEAR										
FIRST SEMESTER										
ENGR 1201 Introduction to Engineering										
DFTG 1305 Technical Drafting										
DFTG 1309 Basic Computer-Aided Drafting										
							1			
Second Semester							1			
DFTG 2317 Descriptive Geometry							1			
DFTG 2323 Pipe Drafting										
DFTG 2330 Civil Drafting										
DFTG 1333 Mechanical Drafting										
This certificate will be deactivated as of September 1, 2011.										
No new students will be admitted into the program.										
							1			
							1			
							1			
	1	1								
	1	<u> </u>					<del></del>			
							•			

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:			SS#:		DATE:						
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	CATALOG YEAR: 12-13					
COMPUTER AIDED DRAFT	ING - DESI	GNER - C	ERTIFICATE	- ARCHITECTURAL DRAFTI	NG SPECIALIZATION						
HCCS Course Requirement	Transfer/Su Institution	ubstitution 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											
DFTG 1309 Basic Computer- Aided Drafting						-					
SECOND SEMESTER											
DFTG 1317 Architectrual Drafting- Residential											
ARCE 1352 Structural Drafting											
Third Semester											
DFTG 2300 Intermediate Architectural Drafting- Residential											
DFTG 2328 Architectural Drafting- Commercial											
			-			-					
	<u> </u>										
This certificate will be deactivated as of September 1, 2011.											
No new students will be admitted into the program.											
						-					
	<u> </u>										
	<u> </u>					<del></del>					
						+					
	<u> </u>										
			1								
						1					

FA	HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:				SS#:		DATE:						
COLLEGE:				COUNSELOR/A	DVISOR:	CATALOG YEA	R: 12-13					
	COMPUTER AIDED DR.	AFTING - D	ESIGNE		ATE - PIPING DRAFTING SPE	<b>.</b>						
	HCCS Course Requirement	Transfer/St Institution		Substitute (SU) Transfer (TR)		Approval Signature	Date					
	uired prior to first enrollment.											
First Year FIRST SEMESTE	0						-					
ENGR 1201	Introduction to Engineering						-					
DFTG 1305	Technical Drafting						_					
DFTG 1303 DFTG 1309							-					
DF 10 1309	Basic Computer- Aided Draiting						-					
SECOND SEMES	STER											
DFTG 2323	Pipe Drafting											
DFTG 2308												
THIRD SEMESTE	ER											
ARCE 1352	Structural Drafting											
DFTG 2345	Advanced Pipe Drafting											
This certifica	te will be deactivated as of September 1, 2011.											
No new stude	ents will be admitted into the program.											

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION										
NAME:			SS#:			DATE:				
COLLEGE:			COUNSELOR/A	DVISOR:		CATALOG YEAR: 12-13				
COMPUTER AIDED DRAFT	ING - DESI	GNER - C			FTING SPECIALI					
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)			Approval Signature	Date			
TSI testing is required prior to first enrollment.										
First Year										
First Semester										
ENGR 1201 Introduction to Engineering										
DFTG 1305 Technical Drafting										
DFTG 1309 Basic Computer- Aided Drafting										
Second Semester										
DFTG 1333 Mechanical Drafting										
DFTG 2302 Machine Drafting										
THIRD SEMESTER										
DFTG 1329 Electro- Mechanical Drafting										
DFTG 2306 Machine Design										
This certificate will be deactivated as of September 1, 2011.										
No new students will be admitted into the program.										
						<u></u>				
						<u></u>				
						<u></u>				
						<u></u>				
						<u></u>				
						ļ				
						<u></u>				
						<u></u>	<b></b>			
						<u></u>	<b></b>			

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION										
NAME:			SS#:		DATE:					
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR:	: 12-13				
COMPUTER AIDED DRAFTING -	DESIGNER	R - CERTI	FICATE - ELF	ECTRO MECHANICAL DRAFTIN	G SPECIALIZATION					
HCCS Course Requirement	Transfer/Su Institution	ubstitution 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										
DFTG 1309 Basic Computer- Aided Drafting										
SECOND SEMESTER						<u> </u>				
DFTG 1333 Mechanical Drafting						<del> </del>				
DFTG 1358 Electrical/ Electronics Drafting						<del> </del>				
DF1G 1338 Electrical/ Electronics Draiting										
THIRD SEMESTER										
DFTG 1329 Electro- Mechanical Drafting										
DFTG 2305 Printed Circuit Board Design										
						<del> </del>				
This certificate will be deactivated as of September 1, 2011.										
No new students will be admitted into the program.						<u> </u>				
1 0										
						<u> </u>				
			<del> </del>			<del> </del>				
			1							

FAVA EDU				LEGE SYSTEM BSTITUTION PETITION		Page 1 of 1
NAME:			SS#:	DATE:		
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	: 12-13
COMPUTER AIDED DRAFTING	G - DESIGN	ER - CER	RTIFICATE- CI	VIL/ STRUCTURAL DRAFTIN	G SPECIALIZATION	
HCCS Course Requirement	Transfer/St Institution		Substitute (SU) Transfer (TR)		Approval Signature	Date
TSI testing is required prior to first enrollment.  First Year						
FIRST SEMESTER ENGR 1201 Introduction to Engineering						
DFTG 1305 Technical Drafting DFTG 1309 Basic Computer- Aided Drafting						
SECOND SEMESTER  ARCE 1352 Structural Drafting  SRVY 1301 Introduction to Surveying						
THIRD SEMESTER  DFTG 2338 Final Project-Advanced Drafting  DFTG 2330 Civil Drafting						
This certificate will be deactivated as of September 1, 2011.  No new students will be admitted into the program.						

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION										
NAME:			SS#:		DATE:					
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR:	CATALOG YEAR: 12-13				
COMPUTER AIDED DRAFTING - D	ESIGNER -									
HCCS Course Requirement	Transfer/Su	ubstitution	Substitute (SU)		Approval	Date				
	Institution	Course	Transfer (TR)		Signature					
First Year										
First Semester										
DFTG 1305 Technical Drafting										
DFTG 1309 Basic Computer- Aided Drafting										
SECOND SEMESTER										
DFTG 1371 Process Plant Layout										
DFTG 2372 Piping Plans & Equipment										
This MSA will be deactivated as of September 1, 2011.										
No new students will be admitted into the program.										
						<u> </u>				
			_							
			<b>_</b>							

FAVA EDU				LEGE SYSTEM STITUTION PETITION	ON		Page 1 of 1	
NAME:			SS#:			DATE:		
COLLEGE:			COUNSELOR/AI	OVISOR:		CATALOG YEAR:	12-13	
ELECTRONICS ENGINEE	RING TEC	HNOLOG			NICS SPECIALIZA			
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)	Comment/Dis		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								

FAVA EDUC				LEGE SYSTEM SSTITUTION PETITION			Page 1 of 1
NAME:			SS#:			DATE:	
COLLEGE:			COUNSELOR/AI	OVISOR:		CATALOG YEAR: 12-13	
ELECTRONICS ENGINEERING	G TECHNO	LOGY -			OGY SPECIAI		
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)	Comment/Disappro		Approval Signature	Date
SI testing is required prior to first enrollment.							
IRST YEAR							
FIRST SEMESTER							
EAD 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							
HIRD SEMESTER							
PHYS 1401 College Physics I							
XXXX #3## Humanities/Fine Arts General Ed. Elective							
ECOND 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							

FA\	/A EDUC				LLEGE SYSTEM BSTITUTION PETITION		Page 1 of 1
NAME:				SS#:		DATE:	
COLLEGE:				COUNSELOR/A	DVISOR:	CATALO	G YEAR: 12-13
	ELECTRONICS ENGINEERING T	ECHNOLO	OGY - AA				
	HCCS Course Requirement	Transfer/Substitution Institution Course		Substitute (SU) Transfer (TR)	-		val Date
TSI testing is require	d prior to first enrollment.						
FIRST YEAR							
First Semester							
LEAD 1200	Workforce Development with Critical Thinking						
EDUC 1300	or Learning Framework						
ENGL 1301	Composition I						
MATH 1314	College Algebra						
CETT 1321	Electronic Fabrication						
CPMT 1449	Computer Networking Technology						
SECOND SEMESTE	R						
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 SEMESTE	R						
CETT 1445	Microprocessor						
XXXX #4##	Program - Related Elective						
CETT 1457	Linear Integrated Circuits						

FA\	HOUSTON COMMUNITY COLLEGE SYSTEM FAVA EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION											
NAME:				SS#:		DATE:						
COLLEGE:				COUNSELOR/A	DVISOR:	CATALOG YEAF	2: 12-13					
	ELECTRONICS EN	NGINEERI			ERTIFICATE - BASIC ELECTRO							
	HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)		Approval Signature	Date					
TSI testing is require	d prior to first enrollment.											
FIRST SEMESTER												
LEAD 1200	Workforce Development with Critical Thinking											
EDUC 1300	or Learning Framework											
MATH 1314	College Algebra											
CETT 1321	Electronic Fabrication											
CPMT 1449	Computer Networking Technology											
SECOND SEMESTE	R											
CETT 1403	DC Circuits											
CETT 1425	Digital Fundamentals											
MATH 1316	Plane Trigonometry											
THIRD SEMESTER												
CETT 1405	AC Circuits											
CETT 1429	Solid State Devices											

FAVA EDUC				LEGE SYSTEM BSTITUTION PETI	TION		Page 1 of 1	
NAME:			SS#:			DATE:		
COLLEGE:			COUNSELOR/A	OVISOR:		CATALOG YEAR: 12-13		
ELECTRONICS ENGINEERING TEC	CHNOLOG	Y - CER			ING/NETWORKS SP			
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)		Disapproval	Approval Signature	Date	
TSI testing is required prior to first enrollment.								
First Semester								
LEAD 1200 Workforce Development with Critical Thinking								
EDUC 1300 <i>or</i> Learning Framework								
CETT 1321 Electronic Fabrication								
MATH 1314 College Algebra								
XXXX #4## Program-Related Elective								
SECOND SEMESTER								
CETT 1403 DC Circuits								
CETT 1425 Digital Fundamentals								
CPMT 1449 Computer Networking Technology								
1 3 63								

FAVA EDU				LEGE SYSTEM BSTITUTION PETITION		Page 1 of 1
NAME:			DATE:			
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	: 12-13
	NGINEERI			ERTIFICATE - NETWORK SECU		
HCCS Course Requirement	Transfer/Su Institution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing is required prior to first enrollment.						
First Semester						
ENGR 1201 Introduction to Engineering						
CPMT 1303 Introduction to Computer Technology						
CPMT 1411 Introduction to Computer Maintenance						
ITCC 1401 Exploration-Network Fundamentals						
Second Semester						
ITSY 1300 Fundamentals of Information Security						
ITNW 1351 Fundamentals of Wireless LANs						
CPMT 2449 Advanced Computer Networking Technology						
ITCC 1404 Cisco Expl. 2-Routing Protocols & Concepts						
THIRD SEMESTER						
XXXX #3## Department Approved Elective						
XXXX #3## Department Approved Elective						
CPMT 2434 Network Security						
This certificate is deactivated as of September 1, 2011.						
No new students will be admitted into the program.						ļ
						<b>.</b>
						<b>.</b>
						<b> </b>
						<u> </u>
						<b> </b>
						<b> </b>
						<b> </b>
						<b> </b>
						<b> </b>

FA\	VA EDU				LEGE SYSTEM STITUTION PETITI	ON		Page 1 of 1
NAME:				SS#:			DATE:	
COLLEGE:				COUNSELOR/AD	VISOR:		CATALOG YEAR	: 12-13
	EN	IGINEERIN	G SCIEN		ERING SCIENCE - A	S		
	HCCS Course Requirement	Transfer/Solution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Dis	sapproval	Approval Signature	Date
FRESHMEN Y	'EAR							
FIRST SEMES	TER (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 SEME	STER (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							
SOPHOMORI								
FIRST SEMES		_						
ENGR 2304								
ECON 2301	Economics <u>OR</u>							
ECON 2302								
ENGR 2301								
	Calculus III (Multi-Variable Calculus)							
	University Physics II							
	University Physics II Laboratory							
	iester (Spring)							
ENGR 2305	Electrical Circuits I							
ENGR 2105	Electrical Circuits I Laboratory							
MATH 2320	Differential Equations				<del> </del>			
XXXX #3##	Engineering Elective *				<del> </del>			
XXXX #3##	Visual and Performing Arts Elective †							
XXXX #3##	Humanities ‡							
* Students interes	ested in pursuing mechanical or civil engineering shoul	d take ENGR 2302	. Students inte	rested in pursuing elec-	rical engineering should take CC	SC 1436. Students intereste	d in pursuing industrial e	naineerina should

take ENGR 23XX. † Visual and Performing Arts Elective: See HCC core list. ‡ Humanities Elective: See HCC core list.

Return to Main Index Page

FA	EDUC				LEGE SYSTEM  BSTITUTION PET	FITION		Page 1 of 1	
NAME:				SS#:			DATE:		
COLLEGE:				COUNSELOR/A	DVISOR:		CATALOG YEAR:	12-13	
	INSTRUMENTATION AND O	CONTROLS	S ENGIN			OCIATE IN APPLIED S			
	HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)		nt/Disapproval	Approval Signature	Date	
		Institution	I	Transfer (Tre)					
	ired prior to first enrollment.						<del> </del>		
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							<del> </del>	
SECOND SEMES									
INTC 1456	Instrumentation Calibration							<del> </del>	
SPCH #3##	Speech Elective							-	
MATH 1316	Trigonometry							-	
INTC 1441	Principles of Automatic Control								
CPMT 1449	Computer Networking Technology <i>OR</i>							<b> </b>	
ITNW 1425	Fundamentals of Networking Technologies <i>OR</i>							<b> </b>	
ITCC 1401	Exploration - Networking Fundamentals						<u></u>	<b> </b>	
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							<b></b>	
SECOND SEMES									
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								

FAVA	EDUC				LLEGE SYSTEM BSTITUTION PETITIO	ON		Page 1 of 1	
NAME:				DATE:					
COLLEGE:				COUNSELOR/A	DVISOR:		CATALOG YEAR: 12-13		
	INSTRUMENTATI	ON AND C	CONTRO		ING TECHNOLOGY -	- CERTIFICATE			
HCCS	Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)			Approval Signature	Date	
TSI testing is required prior to	first enrollment.								
FIRST YEAR									
FIRST SEMESTER									
LEAD 1200 Workfor	rce Development with Critical Thinking								
INTC 1312 Instrum	entation and Safety								
PTAC 1308 Safety,	Health, and Environment I								
CETT 1403 DC Circ	cuits								
MATH 1314 College	Algebra								
SECOND SEMESTER									
INTC 1456 Instrum	entation Calibration								
INTC 1441 Principl	es of Automatic Control								
MATH 1316 Trigono	ometry								
THIRD SEMESTER									
INTC 1343 Applica	tion of Industrial Automatic Controls								
RBTC 1301 Progran	nmable Logic Controllers								
INTC 2370 Linking	Process Control Systems								
INTC 2336 Distribu	ited Control and Programmable Logic								

FAVA EDUC				LEGE SYSTEM BSTITUTION PETITION	ON		Page 1 of 1	
NAME:			SS#:			DATE:		
COLLEGE:			COUNSELOR/A	DVISOR:		CATALOG YEAR: 12-13		
INSTRUMENTATION AND CONTROLS ENG	INEERING	TECHN			NERGY TECHNOI	L L		
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)			Approval Signature	Date	
TSI testing is required prior to first enrollment.								
FIRST YEAR								
First Semester								
LEAD 1200 Workforce Development with Critical Thinking								
SOLR 1370 Principles of Solar Photovoltaic								
SOLR 1371 Solar Safety Operations								
MATH 1314 College Algebra								
SOLR 1372 Off-Grid Solar Energy								
SECOND SEMESTER								
SCIT 1418 Applied Physics								
SOLR 1470 PV Installation Maintenance & Troubleshooting								
ELPT 1457 Industrial Wiring								
SOLR 1373 Solar Energy Systems								
THIRD SEMESTER								
ELPT 1364 Practicum-Electrical and Power Transmission								
Installation/Installer, General <i>OR</i>								
ELPT 1391 Special Topics in Electrical and Power								
Transmission Installer, General								
SOLR 1471 Photovoltaic Electrical Systems								
			_					
					<del>-</del>			

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION									
NAME:			SS#:		С	DATE:			
COLLEGE:			COUNSELOR/A	DVISOR:	(	ATALOG YEAR:	12-13		
INSTRUMENTATION AND CONTROLS	ENGINEER	RING TE							
HCCS Course Requirement	Transfer/Su Institution	ubstitution Course	Substitute (SU) Transfer (TR)	Comment/Disappro	oval	Approval Signature	Date		
TSI testing is required prior to first enrollment.							i		
FIRST YEAR									
First Semester									
LEAD 1200 Workforce Development with Critical Thinking									
SOLR 1374 Principles of Solar Thermal Technology									
SOLR 1371 Solar Safety Operations									
MATH 1314 College Algebra									
SECOND SEMESTER									
SCIT 1418 Applied Physics							·		
SOLR 1372 Off-Grid Solar Energy									
CNBT 1302 Mechanical, Plumbing & Electrical Systems									
in Construction I							·		
THIRD SEMESTER							1		
ELPT 1364 Practicum-Electrical and Power Transmission									
Installation/Installer, General OR									
ELPT 1391 Special Topics in Electrical and Power									
Transmission Installer, General									
SOLR 1472 Solar Thermal Installation Maintenance and									
Troubleshooting									
			_						

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION								
NAME:			SS#:	DATE:				
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEA	AR: 12-13		
INSTRUMENTATION AND CONT	ROLS ENG	INEERIN						
HCCS Course Requirement	Transfer/St Institution		Substitute (SU) Transfer (TR)			Date		
TSI testing is required prior to first enrollment.								
FIRST YEAR								
First Semester								
LEAD 1200 Workforce Development with Critical Thinking								
CETT 1402 Electricity Principles								
WIND 1300 Introduction to Wind Energy								
CETT 1409 DC-AC Circuits								
MATH 1314 College Algebra								
Second Semester								
WIND 2310 Wind Turbine Materials and								
Electro-Mechanical Equipment								
ELMT 1305 Basic Fluid Power								
SCIT 1418 Applied Physics								
ENGL 1301 Composition I								
WIND 1302 Wind Safety								
THIRD SEMESTER								
WIND 2459 Wind Power Delivery System								
	ļ							
	ļ							
						_		
						_		
	ļ							
	ļ							
	ļ							

FA	HOUSTON COMMUNITY COLLEGE SYSTEM FAVA EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION								
NAME:				DATE:					
COLLEGE:				CATALOG YE	AR: 12-13				
	PETROLEUM I	ENGINEER		COUNSELOR/AI	ASSOCIATE IN APPLIED S				
	HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)			Date		
TSI testing is req	uired prior to first enrollment.								
FIRST YEAR									
FIRST SEMESTER	R								
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 SEMES	TER								
PTRT 1470	Petroleum Data Management I- Exploration								
CTEC 1401	Applied Petrochemical Technology								
PTRT 1471	Exploration and Production I								
PTRT 1370	Petroleum Geology								
THIRD SEMESTE	ER								
PTRT 1472	Petroleum Data Management II- Drilling								
	and Production								
PTRT 2373	Principles of Enhanced Oil and Gas Recovery								
	and Hydraulic Fracturing								
SECOND YEAR									
FIRST SEMESTE									
	Exploration and Production II								
MATH 1325	Elements of Calculus with Applications								
	Petroleum Operations								
XXXX #3##	Approved Humanities/ Fine Arts General Ed.								
	Elective								
	(Continued on Page 2)								

FAVA EDU	HOUSTON COMMUNITY COLLEGE SYSTEM FAVA EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION								
NAME:			DATE:						
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	: 12-13			
	ENGINEER			ASSOCIATE IN APPLIED SCI					
HCCS Course Requirement	Transfer/So Institution		Substitute (SU) Transfer (TR)		Approval Signature	Date			
(Continued from Page 1)									
SECOND SEMESTER									
PTRT 2331 Well Completions									
PTRT 2371 Principles of Reservoir Engineering									
XXXX #3## Approved Social/ Behavioral Science General									
Education. Elective									
PTRT 2423 Natural Gas Production									
Third Semester									
PTRT 2372 Internship/ Petroleum Technology/ Technician									
PTRT 2470 Petroleum Data Management III- Facilities and									
Performance									
and Performance									
			1						
			<u> </u>			1			
						1			
						1			
						1			

FA	HOUSTON COMMUNITY COLLEGE SYSTEM FAVA EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION									
NAME:					DATE:					
COLLEGE:				COUNSELOR/A	OVISOR:		CATALOG YEAR: 12-13			
	PETI	Ε		-						
	HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)	Comment/Disapp		Approval Signature	Date		
TSI testing is req	uired prior to first enrollment.									
FIRST YEAR										
IRST SEMESTER	₹									
LEAD 1200	Workforce Development with Critical Thinking									
PTRT 1301	Introduction to Petroleum Industry									
MATH 1314	College Algebra									
ENGL 1301	Composition I									
PTAC 1308	Safety, Health, and Environment I									
TSC 1301	Introduction to Computers									
SECOND SEMES	TER									
PTRT 1470	Petroleum Data Management I- Exploration									
CTEC 1401	Applied Petrochemical Technology									
PTRT 1471	Exploration and Production I									
PTRT 1370	Petroleum Geology									
THIRD SEMESTE	R									
PTRT 1472	Petroleum Data Management II- Drilling									
	and Production									
PTRT 2373	Principles of Enhanced Oil and Gas Recovery									
	and Hydraulic Fracturing									
PTRT 2372	Internship - Petroleum Technology/Technician									
	1 33									
				1						
		I	I	1			1	l		

HOUSTON COMMUNITY COLLEGE SYSTEM  FAVA  EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION								
NAME:			SS#:		DATE:			
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAF	 ₹: 12-13		
PETROLEUM ENGINEE	RING TEC			RE DRILLING TECHNICIAN -	CERTIFICATE			
HCCS Course Requirement	Transfer/St Institution		Substitute (SU) Transfer (TR)		Approval Signature	Date		
'SI testing is required prior to first enrollment.								
IRST YEAR								
First Semester								
LEAD 1200 Workforce Development with Critical Thinking								
PTRT 1301 Introduction to Petroleum Industry								
PTAC 1308 Safety, Health, and Environment I								
SECOND SEMESTER								
PTRT 1403 Drilling						1		
PTRT 2331 Well Completions						1		
PTRT 1321 Oil Field Hydraulics						<del> </del>		
						1		
THIRD SEMESTER						<del>- </del>		
PTRT 2372 Internship - Petroleum Technology/Technician						1		
r						<u> </u>		
						<u> </u>		
						<u> </u>		
						1		
						<del>- </del>		
						1		
						<del> </del>		
						1		
						1		
						1		
						1		
						1		
						1		
						1		
						1		
						1		
						1		
			1			1		
	I	I	1		I	1		

FA	VA EDUC				LEGE SYSTEM BSTITUTION PETITION	Γ		Page 1 of 1
NAME:				SS#:		DATE:		
COLLEGE:				COUNSELOR/A	DVISOR:		CATALOG YEAR:	12-13
	PROC	CESS TECH	INOLOG		E IN APPLIED SCIENCE	E		
	HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)	Comment/Disapp		Approval Signature	Date
TSI testing is requi	ired prior to first enrollment.							
FIRST YEAR								
FIRST SEMESTER								
LEAD 1200	Workforce Development with Critical Thinking							
PTAC 1302	Introduction to Process Technology						<u> </u>	
ENGL 1301	Composition I						<u> </u>	
MATH 1314	College Algebra							
PTAC 1308	Safety, Health and Environment I							
XXXX#3##	Social/Behavioral Science/General Education							
	Elective							
SECOND SEMES							<u> </u>	
SCIT 1418	Applied Physics <u>OR</u>						<u></u>	•
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 SEMES								
	Industrial Economics							
XXXX #3##	Approved Humanities/Fine Arts General Ed.							
OTE C 2445	Elective							
CTEC 2445	Unit Operations							
PTAC 2446	Process Troubleshooting							

FAVA EDU0				LEGE SYSTEM BSTITUTION PETITION		Page 1 of 1
NAME:			SS#:		DATE:	
COLLEGE:			COUNSELOR/A	DVISOR:	CATALOG YEAR	: 12-13
PROCE	ESS TECHN	OLOGY -	- CERTIFICAT	ΓE - PROCESS OPERATOR	•	
HCCS Course Requirement	Transfer/Su Institution		Substitute (SU) Transfer (TR)		Approval Signature	Date
TSI testing is required prior to first enrollment.						
First Semester						
ENGR 1201 Introduction to Engineering						
PTAC 1302 Introduction to Process Technology						
MATH 1314 College Algebra						
PTAC 1308 Safety, Health and Environment I						
PTAC 1410 Process Technology I - Equipment						
SECOND SEMESTER						
PTAC 1332 Process Instrumentation I						
PTAC 2420 Process Technology II - Systems						
PTAC 2314 Principles of Quality						
SCIT 1414 Applied General Chemistry I OR						
CHEM 1411 General Chemistry I						
THIRD SEMESTER						
PTAC 2438 Process Technology III - Operations OR						
CTEC 2445 Unit Operations						
PTAC 2446 Process Troubleshooting						