Manufacturing Programs

Machining Technology

2 Machining Technology-AAS
3 Machining Technology-Basic-Certificate
4 Machining Technology-Intermediate-Certificate

Manufacturing Engineering Technology

5 Manufacturing Engineering Technology-AAS
6 Manufacturing Engineering Technology-Certificate
7 Manufacturing Process-Certificate (Deactivated as of September 1, 2011)
8 Manufacturing Engineering Technology-Plastic Engineering Technology Specialization-AAS
9 Manufacturing Engineering Technology-Plastic Engineering Technology-Certificate

Welding

10 Basic Welding Helper-Certificate
11 Advanced Welding-Certificate

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SS#:	DATE:
COLLEGE:	COUNSELOR/ADVISOR:	CATALOG YEAR: 11-12

MACHINING TECHNOLOGY - ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
TECM 1301 Industrial Mathematics						
MCHN 1302 Print Reading for Machining Trades						
ENTC 1347 Safety and Ergonomics						
MCHN 1308 Basic Lathe						
MCHN 1313 Basic Milling Operations						
SECOND SEMESTER						
ITSC 1309 Integrated Software Applications I						
MCHN 2433 Advanced Lathe Operations						
MCHN 2437 Advanced Milling Operations						
MCHN 1320 Precision Tools and Measurement						
SECOND YEAR						
FIRST SEMESTER						
ENGL 1301 Composition I						
MCHN 2303 Fundamentals of Computer Numerical Controls						
(CNC) Machine Controls						
HYDR 1345 Hydraulics and Pneumatics						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
XXXX #3## Math/Natural Science General Ed. Elective						
SECOND SEMESTER						
ENGL 1302 Composition II OR						
ARTS 1316 Foundation Drawing I						
XXXX #3## Social/Behavioral Science General Ed. Elective						
MCHN 1305 Metals and Heat Treatment						
MCHN 2447 Specialized Tools and Fixtures						
MCHN 1370 Lean Manufacturing-Machinist						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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MACHINING TECHNOLOGY - BASIC - CERTIFICATE

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to completion of first enrollment.						
First Semester						
LEAD 1200 Workforce Development with Critical Thinking						
TECM 1301 Industrial Mathematics						
MCHN 1302 Print Reading for Machining Trades						
ENTC 1347 Safety and Ergonomics						
MCHN 1308 Basic Lathe						
MCHN 1313 Basic Milling Operations						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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MACHINING TECHNOLOGY - INTERMEDIATE - CERTIFICATE

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to completion of first enrollment.						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
TECM 1301 Industrial Mathematics						
MCHN 1302 Print Reading for Machining Trades						
MCHN 1308 Basic Lathe						
MCHN 1313 Basic Milling Operations						
ENTC 1447 Safety and Ergonomics						
SECOND SEMESTER						
ITSC 1309 Integrated Software Applications I						
MCHN 2433 Advanced Lathe Operations						
MCHN 2437 Advanced Milling Operations						
MCHN 1320 Precision Tools and Measurement						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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NAME:	SS#:	DATE:
COLLEGE:	COUNSELOR/ADVISOR:	CATALOG YEAR: 11-12

MANUFACTURING ENGINEERING TECHNOLOGY - ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI Testing required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
TECM 1301 Industrial Mathematics						
MCHN 1302 Print Reading for Machining Trades						
ENTC 1347 Safety and Ergonomics						
INMT 1345 Computer Numerical Controls						
MCHN 1338 Basic Machine Shop I						
SECOND SEMESTER						
ITSC 1309 Integrated Software Applications I						
HYDR 1345 Hydraulics and Pneumatics						
INMT 1343 Computer Aided Design/Computer Aided Manufacturing (CAD/CAM)						
MCHN 2331 Operation of CNC Turning Centers						
SECOND YEAR						
FIRST SEMESTER						
ENGL 1301 Composition I						
ELPT 1311 Basic Electrical Theory						
ENTC 2331 Manufacturing Materials						
ELPT 1341 Motor Control						
INCR 1302 Physics of Instrumentation						
SECOND SEMESTER						
XXXX #3## Math/Natural Science General Ed. Elective						
ENGL 1302 Composition II OR						
ARTS 1316 Foundation Drawing I						
XXXX #3## Social/Behavioral Science General Ed. Elective						
ELPT 1355 Electronic Applications						
ELMT 1301 Programmable Logic Controllers						
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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

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MANUFACTURING ENGINEERING TECHNOLOGY - ASSOCIATE IN APPLIED SCIENCE

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
THIRD SEMESTER						
INMT 1317 Industrial Automation						
ENTC 2314 Facility Operation and Maintenance I OR						
INMT 1311 Computer Integrated Manufacturing						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
INMT 1370 Lean Manufacturing-Manufacturing Engineering						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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MANUFACTURING ENGINEERING TECHNOLOGY - CERTIFICATE - MANUFACTURING ENGINEERING TECHNOLOGY

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to completion of first enrollment.						
First Semester						
LEAD 1200 Workforce Development with Critical Thinking						
TECM 1301 Industrial Mathematics						
MCHN 1302 Print Reading for Machining Trades						
ENTC 1347 Safety and Ergonomics						
INMT 1345 Computer Numerical Controls						
MCHN 1338 Basic Machine Shop I						
Second Semester						
ITSC 1309 Integrated Software Applications I						
HYDR 1345 Hydraulics and Pneumatics						
INMT 1343 Computer Aided Design/Computer Aided Manufacturing (CAD-CAM)						
MCHN 2331 Operation of CNC Turning Centers						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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MANUFACTURING ENGINEERING TECHNOLOGY - CERTIFICATE - MANUFACTURING PROCESSES

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to completion of first enrollment.						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
ENTC 2431 Manufacturing Materials						
INMT 1443 Computer Aided Design/Computer Aided						
Manufacturing (CAD-CAM)						
INMT 1445 Computer Numerical Controls						
ENTC 1447 Safety and Ergonomics						
SECOND SEMESTER						
RBTC 1305 Robotics Fundamentals						
INMT 1411 Computer Integrated Manufacturing						
INMT 1380 Cooperative Education-Industrial/						
Manufacturing Technology						
INMT 1291 Special Topics in Manufacturing Technology						
/Tech.						
ENTC 1491 Special Topics-Engineering Technology,						
General						
This certificate will be deactivated as September 1, 2011.						
No new students will be admitted into this certificate program.						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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NAME:	SS#:	DATE:
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MANUFACTURING ENGINEERING TECHNOLOGY - AAS - PLASTIC ENGINEERING TECHNOLOGY SPECIALIZATION

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to first enrollment.						
FIRST YEAR						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
PLTC 1301 Introduction to Plastics						
ENGL 1301 Composition I						
TECM 1301 Industrial Mathematics						
ENTC 2331 Manufacturing Materials						
SECOND SEMESTER						
XXXX #3## Humanities/Fine Arts General Ed. Elective						
XXXX #3## Math/Natural Science General Ed. Elective						
PLTC 1303 Plastics Composites						
PLTC 1306 Plastic Quality Control						
INMT 1343 Computer Aided Design/Computer Aided Manufacturing (CAD-CAM)						
SECOND YEAR						
FIRST SEMESTER						
ENGL 1302 Composition II OR						
ARTS 1316 Foundation Drawing I						
HYDR 1345 Hydraulics and Pneumatics						
PLTC 1445 Plastic Processes I						
XXXX #3## Social/Behavioral Science General Ed. Elective						
ENTC 1347 Safety and Ergonomics						
SECOND SEMESTER						
INMT 1311 Computer Integrated Manufacturing						
PLTC 1343 Mold Design and Maintenance						
INMT 1317 Industrial Automation						
PLTC 2446 Plastic Processes II						
PLTC 2331 Troubleshooting Plastic Processes						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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COLLEGE:	COUNSELOR/ADVISOR:	CATALOG YEAR: 11-12

MANUFACTURING ENGINEERING TECHNOLOGY -CERTIFICATE - PLASTIC ENGINEERING TECHNOLOGY

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to completion of first enrollment.						
First Semester						
LEAD 1200 Workforce Development with Critical Thinking						
PLTC 1301 Introduction to Plastics						
HYDR 1345 Hydraulics and Pneumatics						
TECM 1301 Industrial Mathematics						
ENTC 2331 Manufacturing Materials						
Second Semester						
PLTC 1303 Plastics Composites						
PLTC 1306 Plastic Quality Control						
INMT 1343 Computer Aided Design/Computer Aided Manufacturing (CAD-CAM)						
INMT 1317 Industrial Automation						
PLTC 1445 Plastic Processes I						
Third Semester						
INMT 1311 Computer Integrated Manufacturing						
PLTC 1343 Mold Design and Maintenance						

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HOUSTON COMMUNITY COLLEGE SYSTEM
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NAME:	SS#:	DATE:
COLLEGE:	COUNSELOR/ADVISOR:	CATALOG YEAR: 11-12

WELDING TECHNOLOGY - CERTIFICATE - BASIC WELDING HELPER

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to completion of first enrollment.						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
TECM 1301 Industrial Mathematics						
WLDG 1421 Introduction to Welding Fundamentals						
WLDG 1313 Introduction to Blueprint Reading for Welders						
WLDG 1407 Introduction to Welding Using Multiple Process						

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HOUSTON COMMUNITY COLLEGE SYSTEM
EDUCATIONAL PLAN/TRANSFER SUBSTITUTION PETITION

NAME:	SS#:	DATE:
COLLEGE:	COUNSELOR/ADVISOR:	CATALOG YEAR: 11-12

WELDING TECHNOLOGY - CERTIFICATE - ADVANCED WELDING

HCCS Course Requirement	Transfer/Substitution Institution	Course	Substitute (SU) Transfer (TR)	Comment/Disapproval	Approval Signature	Date
TSI testing required prior to completion of first enrollment.						
FIRST SEMESTER						
LEAD 1200 Workforce Development with Critical Thinking						
TECM 1301 Industrial Mathematics						
WLDG 1421 Introduction to Welding Fundamentals						
WLDG 1313 Introduction to Blueprint Reading for Welders						
WLDG 1407 Introduction to Welding Using Multiple Process						
SECOND SEMESTER						
WLDG 1430 Introduction to Gas Metal Arc MIG Welding						
(GMAW)						
WLDG 1434 Introduction to Gas Tungsten Arc TIG Welding						
(GTAW)						
WLDG 1435 Introduction to Pipe Welding						
THIRD SEMESTER						
WLDG 2447 Advanced Gas Metal Arc MIG Welding (GMAW)						
WLDG 2451 Advanced Tungsten Arc Welding (GTAW)						
WLDG 2453 Advanced Pipe Welding						