



TECHNICAL STUDIES

Associate of Applied Science (AAS)

Advising Sheet – Suggested Course Sequence

Student Name _____

Faculty Advisor _____

REQUIRED COURSES	CR	PRE-REQUISITE COURSES	APPROVED COURSE SUBSTITUTIONS	TERM THAT I PLAN TO TAKE OR √ TAKEN
ENG 115 Technical Writing	3	See Placement Test Scores	ENG 111	
MTH 111 Basic Technical Mathematics or MTH 130 Fundamentals of Reasoning	3	See Placement Test Scores	See Notes 2, 3	
SDV 101 Orientation to STEM	1		SDV 100	
Technical Electives	22-23		See Note 4	
MILESTONE: See technical elective requirements to earn a Career Studies Certificate (CSC) (See faculty advisor)				
CAD 201 Computer Aided Drafting and Design I	3			
IND 101 Quality Assurance Technology I	3			
IND 116 Applied Technology	3			
IND 137 Team Concepts & Problem Solving	3			
IND 197 Cooperative Education	3		IND 198 Seminar and Project	
IND 297 Cooperative Education	3		IND 298 Seminar and Project	
ITE 115 Introduction to Computer Applications and Concepts	3		See Note 8	
PHI 220 Ethics	3		ART 101, ART 102, REL 100, REL 230, or PHI 101	
PSY 200 Principles of Psychology	3			
SAF 130 Industrial Safety - OSHA-10	1		See Note 9	
SOC 200 Principles of Sociology	3			
Total Minimum Credits to Complete	60-61			

NOTES:

- Students are strongly encouraged to complete their SDV, ENG, and MTH requirements first.
- Welding and HVAC students are required to take MTH 130
- Approved course substitutions include MTH 154 and higher.
- The technical elective requirement can be satisfied by courses with the following prefixes: AIR, ARC, CAD, DRF, EGR, ELE, ENE, IND, MAC, MEC, SAF or WEL. Selection must be approved in advance by the faculty advisor.
- Students should regularly meet with their faculty advisor and check their advisement report in MyTyler – SIS.
- Courses noted as Fall only or Spring only are based on historical trends and current planning and may change without notice.
- This program is not intended for transfer to four-year colleges and universities. Students desiring to transfer should contact their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.
- Students with good computer skills may seek to satisfy this requirement by CLEP or internal exam.
- The SAF 130 class will be waived with a prior OSHA 10 or 30 certification. Proof of successful completion with a valid OSHA issued card will be required.



TECHNICAL STUDIES

Associate in Applied Science (AAS)

SUGGESTED TECHNICAL ELECTIVES:

Heating, Ventilation and Air Conditioning

	Credits
AIR 121 Air Conditioning and Refrigeration I	3
AIR 122 Air Conditioning and Refrigeration II	3
AIR 134 Circuits and Controls I	3
AIR 154 Heating Systems I	3
ELE 131 National Electrical Code I	3
ELE 150 A.C. and D. C. Circuit Fundamentals	4
ELE 159 Electric Motors	3
Total	22

Industrial Electricity

	Credits
ELE 133 Practical Electricity I	3
ELE 137 National Electrical Code – Industrial	3
ELE 150 A.C. and D. C. Circuit Fundamentals	4
ELE 156 Electrical Control Systems	3
ELE 159 Electrical Motors	3
ELE 239 Programmable Controllers	3
ELE 240 Advanced Programmable Logic Controllers	3
Total	22

Mechanical Maintenance

	Credits
MAC 181 Machine Blueprint Reading	3
ELE 150 A.C. and D. C. Circuit Fundamentals	4
ELE 159 Electrical Motors	3
MEC 161 Basic Fluid Dynamics – Hydraulic/Pneumatics	3
MAC 131 Machine Lab I	2
WEL 116 Welding I (Oxyacetylene)	2
MEC 154 Mechanical Maintenance I	3
MEC 254 Mechanical Maintenance II	3
Total	23

Precision Machining Technology

	Credits
MAC 121 Computer Numerical Control I	3
MAC 122 Computer Numerical Control II	3
MAC 123 Computer Numerical Control III	3
MAC 161 Machine Shop Practices I	3
MAC 162 Machine Shop Practices II	3
MAC 163 Machine Shop Practices III	3
MAC 164 Machine Shop Practices IV	3
MAC 130 Introduction to Electric Discharge Machining (EDM) or MAC 134 CMM Operation and Programming	2
Total	23

Precision Machining Computer Numerical Control (CNC)

	Credits
MAC 181 Machine Blueprint Reading I	3
MAC 121 Computer Numerical Control I	3
MAC 122 Computer Numerical Control II	3
MAC 123 Computer Numerical Control III	3
MAC 130 Introduction to Electric Discharge Machining (EDM)	2
MAC 134 CMM Operation and Programming	2
MAC 161 Machine Shop Practices I	3
MAC 162 Machine Shop Practices II	3
Total	22

Residential Electricity

	Credits
ELE 110 Home Electric Power	3
ELE 133 Practical Electricity I	3
ELE 127 Residential Wiring Methods	3
ELE 131 National Electrical Code I	3
ELE 138 National Electrical Code Review I	3
ELE 150 A.C. and D. C. Circuit Fundamentals	4
ELE 151 Electrical Troubleshooting	3
Total	22

Welding

	Credits
WEL 116 Welding I (Oxyacetylene)	2
WEL 150 Welding Drawing Interpretation	2
WEL 123 Shielded Metal Arc Welding (Basic)	3
WEL 160 Gas Metal Arc Welding	3
WEL 247 Welding Layout & Fabrication I	2
WEL 130 Inert Gas Welding	3
WEL 244 Weld Testing and Codes	2
WEL 248 Welding Layout & Fabrication II	2
WEL 141 Welder Qualification Test I	3
Total	22