BIG BEND COMMUNITY COLLEGE

INDUSTRY, MANUFACTURING & TRADES

MANUFACTURING & PROCESS TECHNOLOGY (AAS-T) - MANUFACTURING EMPHASIS



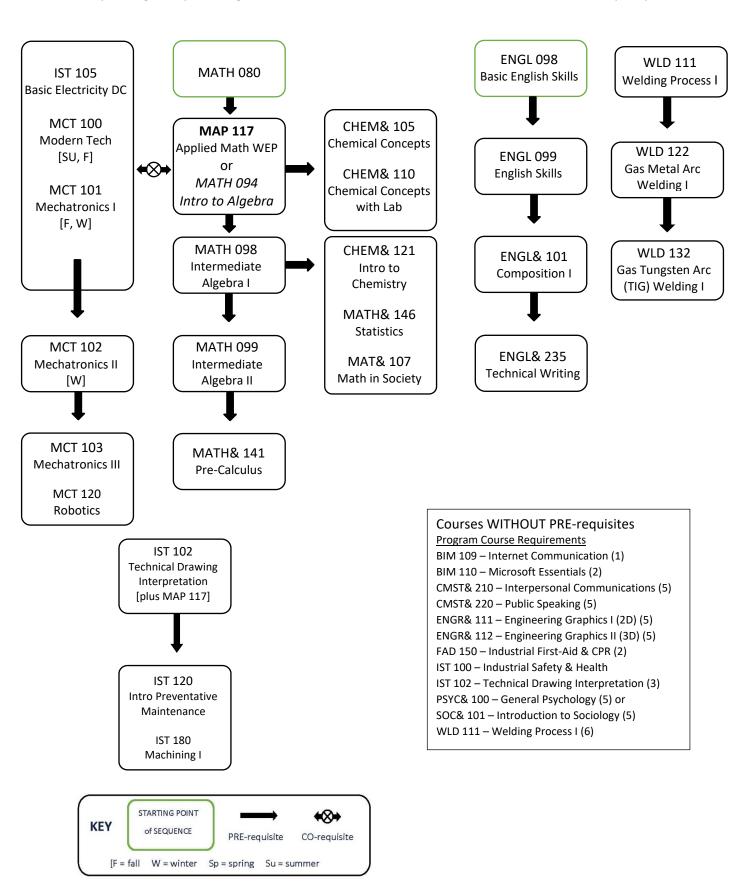
The Manufacturing and Process Technology degree provides students a broad range of career and academic options. The emphasis in MANUFACTURING provides for direct entry into the workforce in areas such as manufacturing production, processing, and select maintenance operations.

As students make progress toward the completion of the Associate of Applied Science – Transfer degree (AAS-T) they may also earn a certificate, which is recognized by local industry of incorporating the fundamental skills and knowledge needed for in entry-level positions. The AAS-T degree also provides students the option of transferring to Eastern Washington University to pursue a Bachelor of Science programs in Manufacturing Technology or a Bachelor of Science in Applied Technology. Students

ENTRY REQ	UIREMENTS
☐ Complete Admissions and Testing Processes	$\ \square$ Meet with an advisor prior to enrolling
CREDENTIAL R	EQUIREMENTS
Stackable Certificate of Achievemer	nt Core in Mechatronics (46 Credits)
 CMST& 210 – Interpersonal Communication (5) or CMST& 220 – Public Speaking (5) ENGL& 101 – Composition I (5) FAD 150 – Industrial First Aid & CPR (2) MAP 117 – Applied Math: Workforce Ed Programs (5) PSYC& 100 – General Psychology (5) or SOC& 101 – Introduction to Sociology (5) 	 □ BIM 109 – Internet Communications (1) □ BIM 110 – Microsoft Office Essentials (2) □ IST 100 – Introduction to Industrial Safety & Health (3) (currently under development for five credits) □ IST 102 – Technical Drawing Interpretation (3) □ MCT 100 – Intro to Modern Technology (5) □ MCT 101 – Mechatronics I (5) □ MCT 102 – Mechatronics II (5)
	ons (Minimum of 44 Credits)
	d on intended career or industry
Electricity and Electronics Skill Courses ☐ IST 107 – Industrial Electricity I (5) ☐ IST 170 – Intro. to Instrumentation (5) Mechanical Skill Courses ☐ IST 120 – Intro. to Prevention/Predictive Maint. (3) ☐ IST 130 – Intro. to Refrigeration and AC (5) ☐ IST 136 – Intro. to Industrial Boilers (5) ☐ IST 180 – Machining I (5) ☐ IST 182 – Machining II (5) ☐ IST 280 – Mechanical Power Transmission (5) ☐ IST 282 – Fluid Power Transmission (5) ☐ IST 284 – Pump Hydraulics/Mechanics (4) Fabrication Skill Courses ☐ WLD 111 – Welding Process I (6) ☐ WLD 122 – Gas Metal Arc Welding I (3) WLD 132 – Gas Tungsten Arc Welding I (TIG) (3)	Automation Skill Courses MCT 103 – Mechatronics III (5) MCT 120 – Robotics I (5) MCT 220 – Robotics II (5) Transfer Pathway Courses CHEM& 105 – Chemical Concepts (5) or CHEM& 110 – Chemical Concepts with Lab (5) or CHEM& 121 – Introductory Chemistry (5) or ENGL& 235 – Technical Writing (5) ENGR& 111 – Engineering Graphics I (CAD) (5) ENGR& 112 – Engineering Graphics II (Solidworks) (5) Approved Electives or Substitutions Approved Electives or Substitutions

M&PT – MANUFACTURING PRE-REQUISITE FLOW CHART

Start by talking with your assigned advisor to determine which courses to take first based on your placement scores.



M&P MANUFAG	CTURING QUARTERLY PROGRAM PLA	AN (YEAR ONE)
FALL (16 CR)	WINTER (15 CR)	SPRING (15 CR)
IST 100 (3)	BIM 109 (1)	CMST& 210 or 220 (5)
IST 102 (3)	BIM 110 (2)	MCT 102 (5)
MAP 117 (5)	FAD 150 (2)	PSYC& 100 or SOC& 101 (5)
MCT 100 (5)	ENGL& 101(5)	
	MCT 101 (5)	
	ADVISING	
FALL	WINTER	SPRING
☐ BBCC Foundation scholarship app	☐ Assess program plan with advisor	☐ Assess program plan with advisor
☐ Fill out FAFSA or WAFSA for next	☐ Complete letter of intent for Year 2	☐ Prepare for Year 2
year		☐ Apply for Certificate of
☐ Meet with your advisor		Achievement
_	_	_

M&PT	MANUFACTURING QUARTE	RLY PROGRAM PLAN (YEAR	RTWO)
SUMMER (CR)	FALL (15 CR)	WINTER (15 CR)	SPRING (15 CR)
OPTIONAL QUARTER	SELECT COURSES WITH YOUR	SELECT COURSES WITH YOUR	SELECT COURSES WITH YOUR
Work with advisor to identify	ADVISOR BASED ON DESIRED	ADVISOR BASED ON DESIRED	ADVISOR BASED ON DESIRED
courses	SKILLS & CAREER	SKILLS & CAREER	SKILLS & CAREER
	ADVI	SING	
SUMMER	FALL	WINTER	SPRING
☐ Fill out FAFSA or WAFSA	☐ Assess program plan	☐ Assess program plan with	☐ Apply for graduation
for next year	with advisor	advisor	☐ Utilize Career Services for
☐ Meet with your advisor	☐ Complete letter of intent	☐ Explore career and	assistance with resume,
	for Year 2	transfer options	interview prep, etc.

	QUARTERL	Y REGISTRAT	ION PLANNIN	G	
QUARTER FALL	□ WINTER □ SPRING □ SU	MMER	REGISTRATIO	N ACCESS CODE	
CLASS	TITLE	CREDITS	DAYS	TIME	ITEM #

	QUARTERL	Y REGISTRAT	ION PLANNIN	G	
QUARTER FALL	. □ WINTER □ SPRING □ SUMMER		REGISTRATION ACCESS CODE		
CLASS	TITLE	CREDITS	DAYS	TIME	ITEM #

_
_
_
ъ
_
-
٠.
_
п
••

	QUARTERI	_Y REGISTRA ⁻	TION PLANNIN	IG		Z
QUARTER FAL	L □ WINTER □ SPRING □ SU	JMMER	REGISTRATIC	N ACCESS CODE		NAME:
CLASS	TITLE	CREDITS	DAYS	TIME	ITEM #	Ü
	QUARTERI	_Y REGISTRA [~]	TION PLANNIN	IG .		
QUARTER FAL	L □ WINTER □ SPRING □ SU	JMMER	REGISTRATIC	N ACCESS CODE		
CLASS	TITLE	CREDITS	DAYS	TIME	ITEM #	I
	QUARTEF	RLY REGISTRAT	ION PLANNING	i		
QUARTER FAL	L □ WINTER □ SPRING □ SU	JMMER	REGISTRATIC	N ACCESS CODE		
CLASS	TITLE	CREDITS	DAYS	TIME	ITEM #	
			1	<u> </u>		
	OUARTERI	Y REGISTRA	TION PLANNIN	IG		S.
OLIARTER FAL	L □ WINTER □ SPRING □ SU			ON ACCESS CODE		 I
CLASS	TITLE	CREDITS	DAYS	TIME		
CLASS	IIIEE	CKEDITS	DATS	TIIVIL	II LIVI #	
		1	1			
		V PECISTRA	TION PLANNIN	IG		
OLIABTED TIES						
	L WINTER SPRING SI			ON ACCESS CODE	ITENA "	
CLASS	TITLE	CREDITS	DAYS	TIME	ITEM #	
		1				
		1				
		1				
	•					

Big Bend Community College WORKFORCE EDUCATION PROGRAM REQUIREMENTS

Certificate of Achievement

Students working toward a Certificate of Achievement need to develop a program plan with the faculty advisor in their Workforce Education area of interest. The plan must include all related instruction components. The Certificate of Achievement is designed to provide recognition for the student who has not completed an Associate in Applied Science degree program.

Certificate of Accomplishment

Students working toward a Certificate of Accomplishment need to develop a program plan with the faculty advisor in their Workforce Education area of interest. The Certificate of Achievement is designed to provide recognition for the student who does not complete a Certificate of Achievement or an Associate in Applied Science degree program.

Changes or substitutions for course work in the college catalog must be listed and approved by the advisor. It is essential that students meet quarterly with their advisor before registration to review progress and plan their program.

Each program plan must be approved by the Workforce Education program advisor and Dean of Workforce Education. Certificates will be issued out of the Dean of Workforce Education Instructional Services office.

☐ Certificate of Achievement	QTR & YR Completed:
☐ Certificate of Achievement	QTR & YR Completed:
Title of Certificate:	
A dutie on A nonneurals	
Advisor Approval:	
Advisor	Date
Program Completion Approval:	
Dean of Workforce Education	Date
Instructional Commission Office Assistant	
Instructional Services Office Assistant	Date

NAME:	
	SID:
	1

Big Bend Community College WORKFORCE EUDCATION PROGRAM REQUIREMENTS

Associate in Applied Science Degree

Credit Requirement: Completion of the total credit requirements of the approved Workforce Education Program Plan. Minimum of 90 quarter hours. It is the student's responsibility to insure that he/she meets all of the technical and general education degree requirements.

MATHEMATICS REQUIREMENT: 3-5 credits* in mathematics courses as stated in the approved Professional/Technical Program Plan.

_	_	_	_	_	_	_	_	_	_	_
*AMT program requires two MAP 100 credits	MATH 147	MATH& 146	MATH& 141	MATH& 107	MAP 119	MAP 117	MAP 103	MAP 101	MAP 100	BUS 102
two MAP 100 credits	Finite Mathematics	Intro to Statistics	Pre-calculus I	Math in Society	Applied Mathematics for Workforce II	Applied Mathematics for Workforce I	Applied Mathematics (MMT/IET)	Applied Mathematics (AUT/WLD)	Applied Mathematics (AMT)*	Business Mathematics

WRITTEN COMMUNICATIONS REQUIREMENT: 3-5 credits in written communications courses as stated in the approved Professional/Technical Program Plan.

BUS 121	Business English
ENGL& 101	English Composition I
ENGL 109	Applied Technical Writing

ORAL COMMUNICATIONS REQUIREMENT: 3-5 credits in oral communications courses as stated in the approved Professional/Technical Program Plan.

AVF 225	Effective Communications in Flight Instruction
CMST 100	Human communications
CMST& 210	Interpersonal Communications
CMST& 220	Public Speaking

HUMAN RELATIONS REQUIREMENT: 3-5 credits in human relations courses as stated in the approved Professional/Technical Program Plan.

BUS 120	Human Relations on the Job
EDUC& 115	Child Development
PSYC& 100	General Psychology
SOC& 101	Intro to Sociology

INDUSTRIAL FIRST AID REQUIREMENT: 2 credits in Industrial First Aid or equivalent or higher certification as stated in the approved Professional/Technical Program Plan.

Current First Aid/CPR	FAD 150	
Current First Aid/CPR, First Responder, or EMT card	Industrial First Aid and CPR plus Bloodborne Pathogens	

Approval:	Student Name
	SID#

Program Completion Approval:

Advisor

Date

Dean of Workforce Education Date

Each program must be approved by the Workforce Education program advisor. Program changes and substitutions must be approved by the program advisor prior to application for degree.