

Manufacturing Engineering Technology (BP/EP) Associate in Applied Science Degree

Semester Sequence

Offered at Brooklyn Park and Eden Prairie

First Semester

FLPW1101	Fluid Power Technology I	3
FLPW1231	Industrial Electricity I	3
METS1200	Industry Practices and Procedures	3
METS2000	Engineering Design Principles	3
	Choose one of the following if required for your specialization:	
ENGC1100	AutoCAD	4
ENGC1160	Inventor	4
ENGC1250	SOLIDWORKS I	4
ENGC2100	Basic Creo Parametric	4
	or	
	Choose three credits from your specialization courses	3

Total Credits 15

Second Semester

ENGC1011	Engineering Drawing	3
METS1020	Industrial Manufacturing Processes	3
	Choose one of the following:	
MACH1205	Brooklyn Park Campus Machine Tool Technology	3
PLST1041	and Introduction to Plastics Molding Processes	3
	or	
ARET1140	Eden Prairie Campus Computer Integrated Manufacturing	3
ENGC1050	and Additive Manufacturing	3
	Choose three credits from your specialization courses	3

Total Credits 15

Third Semester

METS1050	Quality Control	3
	Choose 3 credits from MnTC Goal Area 2	3
	Choose six credits from your specialization courses	6
	Choose one of the following:	
MATH2050	Applications of Quantitative Reasoning	3
MATH2150	Introduction to Statistics	3
MATH2200	College Algebra	4

Fourth Semester

METS2100	Statics and Strength of Materials	3
	General Education Electives	6
	Choose three credits from your specialization courses	3
	Choose one of the following:	
ENGL2121	Writing and Research	4
ENGL2125	Technical Writing	3

Total Credits 15

Automation Robotics Engineering Technology Specialization - 15 Credits

ARET1130	Maintenance Operations	2
ARET1155	Automation Controls	3
ARET1165	Vision Systems for QA/SPC	3
ARET1190	Programmable Logic Controllers	3
ARET1200	Introduction to Robotics	2
ARET2200	FANUC Robotics Operations	2

Engineering CAD Technology Specialization - 15 Credits

	Choose one of the following:	
ENGC1100	AutoCAD	4
ENGC1160	Inventor	4
ENGC1250	SOLIDWORKS I	4
ENGC2100	Basic Creo Parametric	4
	Choose at least eleven credits from:	
ENGC1021	Working Drawings	3
ENGC1041	Geometric Dimensioning & Tolerancing	3
ENGC1201	Industrial CAD Project	3
ENGC1255	SOLIDWORKS II	4
ENGC2110	Advanced Creo Parametric	4

Machine Tool Technology Specialization - 15 Credits

MACH1056	Blueprint Reading I	3
MACH1110	Turning Technology I	3
MACH1125	Milling Technology I	3
MACH2400	CNC Setup and Operation	3
MACH2406	CNC Programming	3

Welding and Metal Fabrication Specialization - 15 Credits

WLDG1135	Gas Metal Arc Welding I	3
WLDG1182	Blueprint Reading for Welders	2
WLDG1220	Gas Tungsten Arc Welding I	3
WLDG1350	Flux Cored Arc Welding I	3
	Choose four additional WLDG credits	4

Electronics Technology Specialization - 15 Credits

ELEC1000	DC Circuits	4
ELEC1050	AC Circuits	4
ELEC1100	Complex AC Circuits	3
ELEC1150	Diodes and Rectifiers	2
ELEC1200	Soldering Skills	1
	Choose one additional ELEC credit	1

Fluid Power Specialization - 15 Credits

	Choose one of the following:	
ENGC1100	AutoCAD	4
ENGC1160	Inventor	4
ENGC1250	SOLIDWORKS I	4
ENGC2100	Basic Creo Parametric	4

	Choose at least eleven credits from:	
FLPW1106	Fluid Power Technology II	4
FLPW1181	Pumps, Actuators, and Conductors	4
FLPW1191	Hydraulic Components	3
FLPW1236	Industrial Electricity II	3
FLPW1320	Hydraulic Circuits	2
FLPW1340	Pneumatic Circuits and Air Logic	4
FLPW2000	Programmable Logic Controllers	3

Plastics Engineering Technology Specialization - 15 Credits

PLST1008	Fundamentals of Plastics/Chemistry/Ingredients	4
PLST2007	Properties and Tests of Selected Plastics	4
PLST2011	Extrusion Molding Processes I	3
PLST2017	Extrusion Molding Processes II	4
PLST2035	Medical Device Polymer Processes	3
PLST2128	Injection Molding Process I	4
PLST2138	Injection Molding Process II	4
PLST2143	Injection Molding Process III	4

MnTC Goal Area 2

A complete list of MnTC courses and Goal Areas that can be used to meet General Education requirements can be found at www.hennepintech.edu. The same course cannot satisfy more than one MnTC Goal Area requirement.

BIOL2001	Biology in Society	4
BIOL2003	Nutrition and Health	3
BIOL2005	General Biology I	4
BIOL2040	Introduction to Forensic Science	3
BIOL2045	Human Biology	4
BIOL2125	Anatomy and Physiology I	4
BIOL2225	Anatomy and Physiology II	4
BIOL2235	Microbiology	4
COMM2060	Small Group Communication	3
MATH2050	Applications of Quantitative Reasoning	3
PHIL2100	Critical Thinking for College Success	3
PHYS2001	Introductory Physics	3
PHYS2015	Introductory Physics II	3
SOCI2100	Introduction to Sociology	3

Choose a Total of: 3 Credits

General Education Electives

Hennepin Technical College's 2000-level general education courses meet the guidelines of the Minnesota Transfer Curriculum (MnTC).

Choose a Total of: 6 Credits

Graduation (60 Credits)

Semester listings reflect the recommended sequence. Due to circumstances beyond our control, the information herein is subject to change without notice.

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