Tool and Die/Moldmaking (BP) Associate in Applied Science Degree

Semester Sequence - Part-Time

Offered at Brooklyn Park Only

First Semester

MACH1056	Blueprint Reading I	3
MACH1100	Introduction to Machining Technology	3
MACH1105	Drilling and Sawing Processes	2

Total Credits 8

Second Semester

MACH1110	Turning Technology I	3
MACH1125	Milling Technology I	3
MACH1135	Precision Grinding	2

Total Credits 8

Summer Semester

MATH1150	Applications of Quantitative Reasoning	3
	or	
MATH1400	College Algebra	4
	General Education Electives	3

Total Credits 6

Third Semester

MACH1120	Turning Technology II	3
MACH1130	Milling Technology II	3
MACH1140	Introduction to CNC	3

Total Credits 9

Fourth Semester

MACH2410	CAD/CAM	3
MACH2420	Blueprint Reading II for Machinists	2
MACH2425	Geometry/Trigonometry for Machinists	2
	Technical Studies Electives	2

Total Credits 9

Summer Semester

ENGL1070	Technical Writing	3
	or	
ENGL1100	Writing and Research	4

Total Credits 3

Fifth Semester

MACH2400	CNC Setup and Operation	3
MACH2406	CNC Programming	3
MACH2450	Fundamentals of EDM	2

Total Credits 8

Sixth Semester

MACH2455	Die/Mold Design	3
MACH2460	Die Construction	3
MACH2465	Mold Construction	3

Total Credits 9

Summer Semester

PHIL1100	Critical Thinking for College Success	3
	or	
PHYS1005	Introductory Physics I	3

Total Credits 3

Seventh Semester

MACH2415	CNC Milling	3
MACH2500	Introduction to Swiss-Style Machining	3
	General Education Electives	3

Total Credits 9

Technical Studies Electives

Recommended:

MACH1145	Machinists Reference Materials	1
MACH1900	Specialized Lab	1 - 4
MACH2430	CNC Machining Centers	3
MACH2435	CNC Turning Centers	3
MACH2440	Quality Assurance	2
MACH2450	Fundamentals of EDM	2
MACH2600	Introduction to Quality Assurance	3
MACH2610	Inspection Processes	3
MACH2615	Inspection Equipment and Techniques	3
MACH2620	Quality Systems	3
MACH2625	Computer Analysis of Manufacturing Data	2
METS1000	Computers in Manufacturing	3
ENGC1050	Additive Manufacturing	3
ENGC1250	SOLIDWORKS I	4

Choose a Total of: 2 Credits

General Education Electives

A complete list of Minnesota Transfer Curriculum (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.

Choose a Total of: 6 Credits

Graduation (72 Credits)

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

2/3/2023 : BP 4305 / EP