



PRECISION MACHINING TECHNOLOGY

Develop skills to design and make fine metal parts using computer numerical control machines

“I know that sitting in a classroom is not for me, but the PMT program was so much more. I did real things that were hands-on that gave me confidence to build real stuff.

KVCC’s PMT program was challenging, but working in the lab was addictive. The better I got at making things, the more I wanted to do it.”

Virtually all manufactured products depend on America’s precision machining industry at some point during their production. As new technologies continue to shape the manufacturing industry, companies have an immediate demand for machinists with college-level skills. A precision machinist (PMT) works very much like a sculptor, transforming raw material into something of great value. Additionally, the one-year welding certificate is designed to provide entry level welding skills.

What Precision Machining Technology graduates do:

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|---|------------------------------|
| Remove metal with lathes, mills, and drills | Fabricate metal-based parts |
| Use software to run CNC-based equipment | Calculate and measure angles |
| Design products to specifications | Innovate better methods |
| Observe and enforce safety procedures | Maintain machines |

Students will learn:

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|-----------------------------------|-----------------------------|
| Shaping different types of metals | Safety protocols |
| CNC principles and methods | Principles of parts design |
| CNC programming | Metallurgy |
| Fundamental welding | Determination of tolerances |

Precision Machining Technology graduates work in:

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|----------------------|----------------------------|
| Manufacturing plants | Small businesses |
| Fabrication plants | Machine shops |
| Automotive companies | Technical training centers |



Program entry requirements:

To see the entrance requirements for this program, please view the pages ahead, and visit www.kvcc.me.edu/prereq

For further questions about the program, please contact Jeff Godin at:

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or go to:

www.kvcc.me.edu/pmt



PRECISION MACHINING TECHNOLOGY

Course #	Course Title	Credits	Prerequisites (Co-requisites)
Associate in Applied Science Degree			
<u>FIRST SEMESTER</u>			
— —	BPT126	Technical Print Reading and Sketching	3
— —	CPT117	Software Applications I.....	3 Computer ACCUPLACER score of 76 or greater, CPT018, or permission of instructor
— —	MAT114	Technical Math.....	3 Min. Accuplacer arithmetic score of 55
— —	PMT101*	Introduction to Precision Machining.....	3 (BPT126, CPT117, MAT114)
— —	PMT102*	Manual Milling and Turning.....	4 (BPT126, CPT117, MAT114, PMT101)
<u>SECOND SEMESTER</u>			
— —	ENG108	Technical Writing.....	3 Min. Accuplacer writing score of 74
— —	MAT117	College Algebra	3 High school algebra, min. Accuplacer algebra score of 75, or successful completion of MAT031
— —	PMT111*	Fundamentals of Precision Machining Tech. II.....	7 PMT101 (CPT140, MAT217)
— —	PMT210*	Master Cam.....	3
<u>THIRD SEMESTER</u>			
— —	COM104	Introduction to Communication OR	
— —	COM105	Interpersonal Communication.....	3
— —	MAT218	Trigonometry	3 Minimum grade of “C” in MAT117 or MAT119
— —	PMT201*	Fundamentals of Precision Machining Tech. III.....	7 CPT140, PMT111 (CPT240, MAT218)
<u>FOURTH SEMESTER</u>			
— —	PHY111	Elements of Physics	4 Minimum grade of “C” in MAT117 or MAT119
— —	PMT211*	Fundamentals of Precision Machining Tech. IV.....	4 CPT240, MAT218, PMT201
— —	PMT226*	Experiential Education.....	3
— —	_____	Humanities Elective.....	3
— —	_____	Social Science Elective.....	3
		TOTAL CREDITS	62

Certificate

<u>FIRST SEMESTER</u>			
— —	BPT126	Technical Print Reading and Sketching	3
— —	CPT117	Software Applications I.....	3 Computer ACCUPLACER score of 76 or greater, CPT018, or permission of instructor
— —	MAT114	Technical Math.....	3 Min. Accuplacer arithmetic score of 55
— —	PMT101*	Introduction to Precision Machining.....	3 (BPT126, CPT117, MAT114, PMT102)
— —	PMT102*	Manual Milling and Turning.....	4 (BPT126, CPT117, MAT114, PMT101)
<u>SECOND SEMESTER</u>			
— —	CPT140	Computer Aided Design I	3 (MAT117, BPT125 or BPT126)
— —	ENG108	Technical Writing.....	3 Min. Accuplacer writing score of 74
— —	MAT117	College Algebra	3 High school algebra, min. Accuplacer algebra score of 75, or successful completion of MAT031
— —	PMT111*	Fundamentals of Precision Machining Tech. II.....	7 PMT101 (CPT140, MAT217)
— —	PMT217*	Metal Fabrication	1
		TOTAL CREDITS	33

Criteria for Graduation

Students in the Precision Machining Technology program must complete 31 credits for a Certificate and 64 credits for an Associate Degree, achieve a minimum grade of “C” in all core courses (*), and attain a final GPA of 2.0 or higher.

PRECISION MACHINING TECHNOLOGY

Course #	Course Title	Credits	Prerequisites (Co-requisites)
<u>Welding Certificate</u>			
<u>FIRST SEMESTER</u>			
— —	BPT126 Technical Print Reading and Sketching	3	
— —	MAT114 Technical Math.....	3	Min. Accuplacer arithmetic score of 55
— —	SAF101 OSHA 30 Standards	2	
— —	WLD101* Welding I.....	6	(BPT126, MAT114, SAF101)
<u>SECOND SEMESTER</u>			
— —	ENG108 Technical Writing.....	3	Min. Accuplacer writing score of 74
— —	PMT101* Introduction to Precision Machining.....	3	(BPT126, CPT117, MAT114)
— —	WLD102* Welding II	6	BPT126, MAT114, SAF101, WLD101 (ENG108, PMT101)
TOTAL CREDITS		26	

Criteria for Graduation

Students in the Welding Certificate program must complete 26 credits, achieve a minimum grade of “C” in all core courses (*), and attain a final GPA of 2.0 or higher.