

Gunsmithing Curriculum

Contact Us:

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Program Overview

These certificates will introduce prospective gunsmiths to the hand tools, blueprint reading skills, schematic understanding, basic machine tool operations and the nomenclature used in Gunsmithing. Emphasis is placed on safety in the shop environment and the completion of Gunsmithing related projects from blueprints using hand and machine tools. During the hands-on shop class, students will work on a final project that will be completed in the second semester of the certificate program.

After completing both certificates, students should have gained the knowledge and confidence to set up a Gunsmithing shop or become employed by a company that requires this type of skill.

Students interested in this program will be required to undergo a criminal background check before enrolling.

PROGRAM REQUIREMENTS

A.A.S. Major in General Technology, Gunsmithing*

This A.A.S. degree in General Technology with a concentration in Gunsmithing provides additional training for students desiring to either own their own business or gain employment with a major firearm manufacturer. Students desiring to start their own business can receive additional education and training by enrolling in the Entrepreneur program. While students desiring to work for a major manufacturer can enroll in the Machine Tool or Welding programs. In any of the degreed programs, students receive an additional 12 hours of focused material along with the 5 general education courses and the complete Gunsmithing curriculum. In the Introduction to Gunsmithing section students receive training in basic hand tools, blueprint reading, precision instrument usage/reading, stock refinishing, metal treatment, cycle of operations of the 8 major action types, welding, lathe and mill theory practical

application and the building of a bolt action firearm. In the Advanced Gunsmithing section students carve, inlet, shape and finish a wooden and synthetic stock for the firearm they built in the first section along with checkering. Additionally, students will work in a gunsmith shop environment where they will diagnose, repair and complete cost analysis for all the firearms they are assigned. Additional courses include: Ballistics, Sights, Triggers, Military Conversions, Safety and Business.

*CRIMINAL RECORD CHECKS FOR GUNSMITHING STUDENTS

Criminal Record Check: Students in specific Gunsmithing programs are required to have a criminal background check. These are conducted by an outside agency at the student's expense. Pending criminal charges or conviction may make the student ineligible for enrollment, participation in courses or taking the examinations.

GENERAL EDUCATION	CREDIT HOURS	
ENG 101 English Composition I	3.0	
or ENG 165 Professional Con	nmunications	
MAT 170 Algebra, Geometry and Trig or MAT 171 Algebra, Geometr	•	
Social/Behavioral Science Elective		
Lab Science or Mathematics		
Humanities/Fine Arts	3.0	

SUBTOTAL: 15.0

REQUIRED CORE SUBJECT AREAS — PRIMARY SPECIALTY

COURSES		CREDIT HOURS
GSM 101	Gunsmithing I	4.0
GSM 102	Gunsmithing II	4.0
GSM 105	Gunsmithing Welding	2.0
GSM 106	Gunsmith Safety	1.0
GSM 107	Gunsmith Machine Tool	4.0
GSM 120	Basic Stockmaking	3.0
GSM 122	General Repair of Shotguns	3.0
GSM 222	Handgun Technology	3.0

SUBTOTAL: 24.0

SECONDARY SPECIALTY

(Choose 12 credit hours from Options A, B or C)

OPTION A	- MACHINE TOOL TECHNOLOGY		
MTT 120	Machine Tool Print Reading3.0		
MTT 121	Machine Tool Theory I		
MTT 122	Machine Tool Practice I4.0		
MTT 123	Machine Tool Theory II		
	Machine Tool Practice II4.0		
MTT 126	Machine Tool Practice III4.0		
MTT 130	Fundamentals of Geometric Dimensions		
	and Tolerancing		
MTT 141	Metals and Heat Treatment		
MTT 143	Precision Measurement2.0		
MTT 161	Machine Tool Maintenance Theory2.0		
MTT 222	Tool and Diemaking Practice I4.0		
MTT 224	Tool and Diemaking Practice II4.0		
MTT 250	Principles of CNC		
MTT 251	CNC Operations		
MTT 253	CNC Programming and Operation3.0		
OPTION B	- WELDING		
WLD 103	Print Reading I		
WLD 105	Print Reading II		
WLD 106	Gas and Arc Welding4.0		
WLD 113	Arc Welding II4.0		
WLD 115	Arc Welding III4.0		
WLD 117	Specialized Arc Welding4.0		
WLD 132	Inert Gas Weld Ferrous4.0		
WLD 136	Advanced Inert Gas Welding2.0		
WLD 154	Pipefitting and Welding4.0		
WLD 208	Advanced Pipe Welding		
OPTION C	- BUSINESS/ENTREPRENEURSHIP		
ACC 101	Accounting Principles I		
BUS 121	Business Law		
CPT 101	Introduction to Computers		
MGT 120	Small Business Management		
MKT 101	Marketing		
MKT 135	Customer Service Techniques3.0		
	•		
OTHER COURSES REQUIRED FOR GRADUATION			
COURSE	S* CREDIT HOURS		
	Approved Elective		
	Approved Elective		
	Approved Elective		

*Students may use credits in this section to develop a third technical specialty or to enhance the primary and secondary specialties.

SUBTOTAL: 12.0 TOTAL CREDIT HOURS: 63.0

Introduction to Gunsmithing Certificate

This certificate will introduce the novice gunsmith to the hand tools, blueprint reading skills, schematic understanding, basic machine tool operations and the nomenclature used in Gunsmithing. Emphasis is placed on safety in the shop environment and the completion of Gunsmithing related projects from blueprints using hand and machine tools. Upon completion, students should be able to read and work from blueprints and schematics using hand and basic machine tool setups. During the hands-on shop class, the student will also be working on a final project that will be completed in the second semester of the certificate program. Students interested in this program will be required to undergo a criminal background check before enrolling.

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REQUIRED COURSE INFORMATION

COURSES		CREDIT HOURS
GSM 101	Gunsmithing I	4.0
GSM 102	Gunsmithing II	4.0
GSM 104	Advanced Metal Finishing	4.0
GSM 105	Gunsmithing Welding	2.0
GSM 106	Gunsmith Safety	1.0
GSM 107	Gunsmith Machine Tool	4.0
GSM 121	Barrel Fitting/Alterations	3.0
GSM 230	Business for Gunsmiths	3.0

SUBTOTAL: 25.0 TOTAL CREDIT HOURS: 25.0

Advanced Gunsmithing Certificate*

This certificate is designed for students who have completed the Introduction to Gunsmithing certificate. Advanced metal finishing, custom barrel fitting, modern stock refurbishing and manufacture, rifle and shotgun trigger and firing mechanisms, design and function of handguns will be the emphasis of this certificate. Safety in the shop environment and the completion of Gunsmithing projects using schematics and specialized hand and machine tools will be required. Students should be capable of working on various firearms and understand the procedures required before attempting the specialized work involved. During the hands-on shop class, the student will also be working on a final project that will be completed in the second semester of the certificate program. Upon completion of the certificate, the student should have gained the knowledge and confidence to set up a Gunsmithing shop or become employed by a company that requires this type of skill.

REQUIRED COURSE INFORMATION

COURSE	S	CREDIT HOURS
GSM 103	Gunsmithing III	4.0
GSM 120	Basic Stockmaking	3.0
GSM 122	General Repair of Shotguns	3.0
GSM 220	Rifle Stockmaking	4.0
GSM 221	Advanced Repair Technology	73.0
GSM 222	Handgun Technology	3.0
GSM 223	Gunsmithing Techniques	3.0
MTT 141	Metals and Heat Treatment	3.0

SUBTOTAL: 26.0 TOTAL CREDIT HOURS: 26.0

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>>> Visit www.ptc.edu/gunsmithing to learn more.