

### Applied Technology & Apprenticeship

# Stationary Steam Technician Certificate

(Maintenance Technology – Associate Degree path)

This certificate program is designed to equip students with the foundational skills and knowledge necessary to gain an entry level position in the stationary steam and boiler operation field. Through a blend of classroom lecture and application, students will learn the operation and maintenance of equipment; controls and balancing of heating, ventilation, and air conditioning systems; and electrical theory. Foundational areas, including applied mathematics and safety, will also be covered.

This program is designed to prepare students for success in a career as a stationary steam technician or boiler operator; however, students who are interested in this field should be aware that many regions require licensure. As the manufacturing and utility fields continue to expand and evolve, stationary steam technicians and boiler operators will be needed to operate, inspect, and maintain engines, boilers, and auxiliary equipment. This program is a good fit for individuals who are detail oriented and enjoy working with their hands. Those who graduate with this certificate have a foundational knowledge of the operation and maintenance of equipment found in utility and manufacturing facilities.

A certificate will	be awarded to students who successfully complete the following courses:							
Career Preparation and Related Courses			SUGGESTED SEQUENCE			CREDIT HOURS	CONTACT HOURS	
ATAM 1150	Shop Arithmetic					2	32	
ATSS 1150	Steam—Heat Fundamentals					2	32	
ATTR 1600	Industrial Safety—Skilled Trades					2	32	
ATAM 1160	Algebra					2	32	
ATPP 1100	Plumbing Fundamentals					2	32	
ATSS 1160	Steam—Steam Boilers (Low & High Pressure Operations)					2	32	
ATPP 1110	Plumbing—Drain, Waste & Vent					2	32	
ELEC 1300	Electric Theory—Electrical Equipment & Introduction to Machine Circuits					2	32	
CLCT 1200	Fundamentals of Air Conditioning & Refrigeration					3	64	
				Т	otal	19	320	

In cases where prior training or education is documented, specific courses may be substituted for one or more of the above courses as conditions warrant. Suggested alternate courses, which may also be used as electives toward an associate degree, are listed below for consideration. Contact the Applied Technology and Apprenticeship Department for details.

#### Suggested Alternative/Elective Courses:

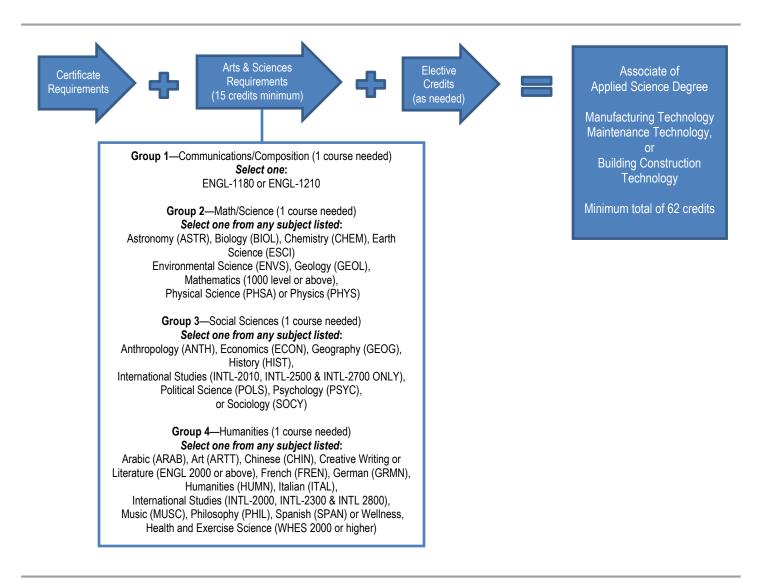
ATAM 1170	Geometry	CLCT 1700	Fundamentals of Controls
ATPP 1120	Plumbing—Heating	ATTR 1150	Technical Report Writing
ATAM 2150	Trigonometry	ATMT 1950	Science-Physics 1: Mechanics

## SEE SECOND PAGE/REVERSE SIDE FOR ASSOCIATE DEGREE REQUIREMENTS

## Associate of Applied Science Degree Requirements (Minimum 62 credit hours)

An Associate of Applied Science Degree is offered for those enrolled in or completing an Apprenticeship, Employee-In-Training, or General Certificate Program. Other college requirements apply, including the completion of the arts and sciences (general education) requirements, as well as attaining a minimum overall total of 62 credit hours. See Apprentice Coordinator or Advisor for details.

Students may graduate with an Associate of Applied Science Degree in Manufacturing Technology, Maintenance Technology or Building Construction Technology, depending on the Apprenticeship, Employee-In-Training or General Certificate Program area of specialty.



\*\*Information is subject to change. Please visit www.macomb.edu for the most current information.\*\*

For more information on the Stationary Steam Technician Certificate Program at Macomb, contact the Applied Technology and Apprenticeship Department at 586.445.7438 or <u>apprenticeship@macomb.edu</u>.