

## Maintenance Mechanic—Building 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 as a building maintenance mechanic. Through a blend of classroom lecture and hands-on experience, students will learn plumbing, electrical, air conditioning, and heating systems theory. Foundational areas, including applied mathematics, blueprint reading, and welding, will also be covered.

This program is designed to prepare students for success as a general maintenance mechanic in a variety of building settings. As the construction industry continues to grow, skilled maintenance mechanics will be in demand to perform routine preventative building maintenance and repair in the residential, commercial and industrial sectors. This program is a good fit for individuals who enjoy being active and working with their hands, with an emphasis on mechanical reasoning, troubleshooting, and problem solving. Those who graduate with this certificate will have a well-rounded skillset necessary to be an effective and efficient building maintenance mechanic.

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
CNST 1100	Blueprint & Math—Residential	■	□	□	□	2	32
ATDD 1950	Drafting Essentials	■	□	□	□	2	32
ATWD 1110	Fundamentals of Gas & Arc Welding	■	□	□	□	2	32
ATPP 1100	Plumbing Fundamentals	■	□	□	□	2	32
ATAM 1160	Algebra	□	■	□	□	2	32
CNST 1150	Blueprint & Math—Commercial	□	■	□	□	2	32
ATBC 1250	Construction—Wiring Residential	□	■	□	□	2	32
ATBC 1180	Construction—Electrical Blueprint Reading Residential	□	■	□	□	2	32
ATBC 1260	Construction—Wiring Commercial & Industrial	□	□	■	□	2	32
ATPP 1110	Plumbing—Drain, Waste & Vent	□	□	■	□	2	32
ELEC 1300	Electrical Equipment & Introduction to Machine Circuits	□	□	■	□	2	32
ATPP 1120	Plumbing—Heating	□	□	■	□	2	32
ATPP 1130	Plumbing—Code	□	□	□	■	2	32
CLCT 1200	Fundamentals of Air Conditioning & Refrigeration	□	□	□	■	3	64
CLCT 1600	Duct Layout & Fabrication	□	□	□	■	3	64
Total						34	576

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:

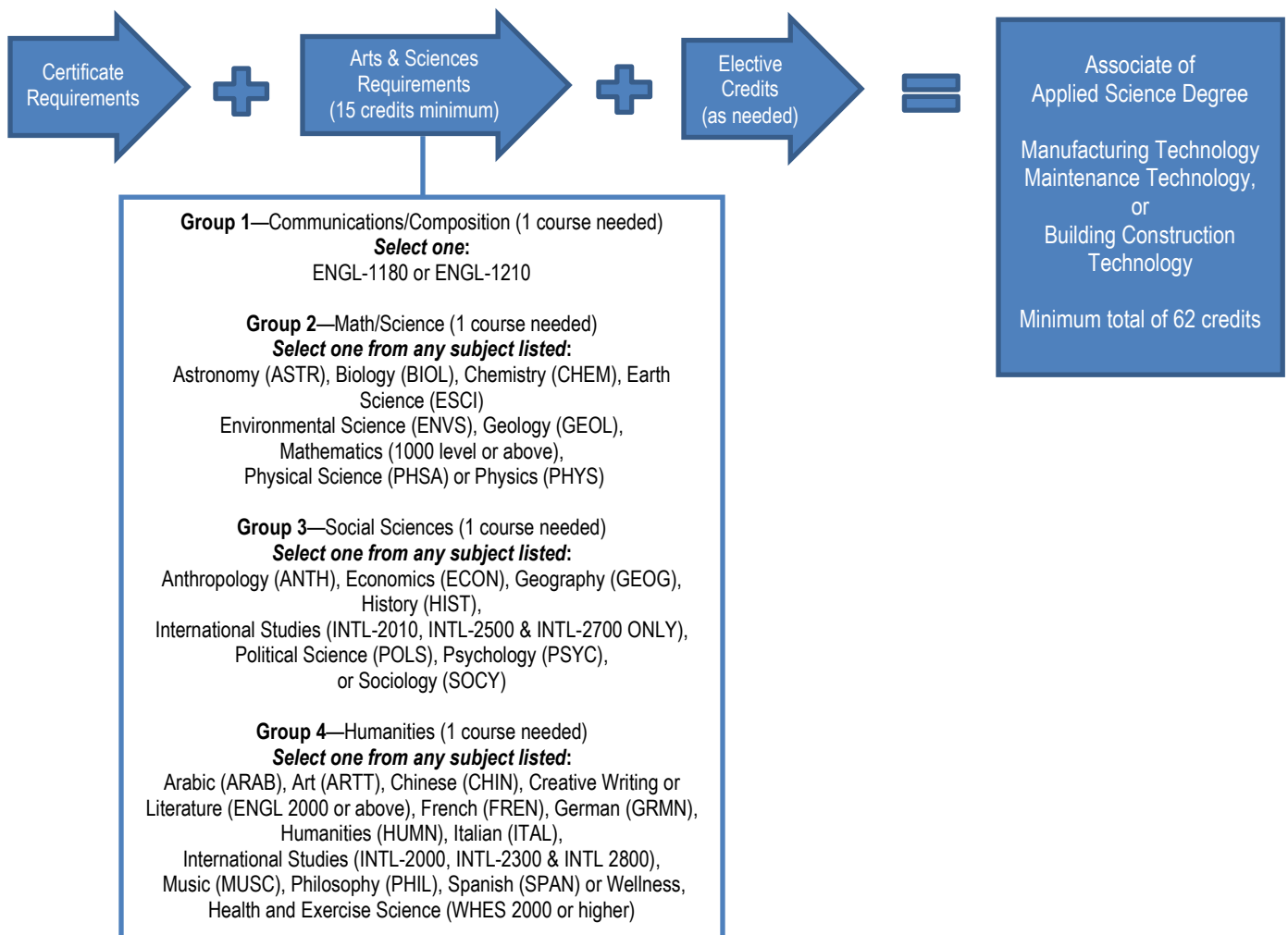
ELEC 1310	Basic Direct & Alternating Current Motor Control Circuits	ATTR 1600	Industrial Safety—Skilled Trades
MECT 1320	Industrial Hydraulic Fundamentals	ATBC 1190	Construction—Electrical Blueprint Reading Commercial
ELEC 2410	National Electrical Code	CNST 1160	Construction Cost Estimating

**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](http://www.macomb.edu) for the most current information.\*\*

For more information on the Maintenance Mechanic – Building Certificate Program at Macomb, contact the Applied Technology and Apprenticeship Department at 586.445.7438 or [apprenticeship@macomb.edu](mailto:apprenticeship@macomb.edu).