**HVAC – Building Systems Energy Management**

This academic map is a suggested semester-by-semester guide to keep you on a clear pathway to program completion. Your academic advisor will provide you with clear direction needed to stay on course and discuss scheduling options with you. Taking courses not reflected on this map may result in courses not counting toward the completion of your requirements.

Please note that program-specific courses are only offered on the Canton Campus.

### Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC 111</td>
<td>Basic Electricity and Control Theory</td>
<td>4</td>
</tr>
<tr>
<td>HVAC 113</td>
<td>Intro to HVAC/R</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 107</td>
<td>Computer Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH - - -</td>
<td>Math Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
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### Semester 2

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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>HVAC 118</td>
<td>Load Calculation and Duct Design</td>
<td>3</td>
</tr>
<tr>
<td>HVAC 114</td>
<td>Heat Principles and Application</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 109</td>
<td>Intermediate CAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 105</td>
<td>Speech Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
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</table>

### Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DIES 223</td>
<td>CNG Engines</td>
<td>3</td>
</tr>
<tr>
<td>HVAC 201</td>
<td>Refrigeration Principles and Application</td>
<td>4</td>
</tr>
<tr>
<td>HVAC 206</td>
<td>Hydronic and Piping Design</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td>SC - - -</td>
<td>Science Elective</td>
<td>4</td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
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</table>

### Semester 4

<table>
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<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGT 401</td>
<td>Co-Op Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>DIES 141</td>
<td>Fundamentals Standby Power</td>
<td>4</td>
</tr>
<tr>
<td>HVAC 223</td>
<td>Service Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HVAC 224</td>
<td>HVAC Systems Control</td>
<td>4</td>
</tr>
<tr>
<td>SS - - -</td>
<td>Social Science Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

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### Milestones

After students complete HVAC 223 Service Procedures in the 3rd semester, they have the opportunity to acquire EPA and 410 certifications.

### About Developmental Courses

Developmental courses do not satisfy graduation requirements, but they are required for those who place into them and will appear on the student's transcript. Placement into one of the following courses indicates that a student needs additional preparation before enrolling in college-level courses:

- ENGL 091 Preparing for College Reading I
- ENGL 092 Preparing for College Reading II
- ENGL 095 Reading and Writing Seminar
- ENGL 099 Introductory Writing
- MATH 001-003 Prep College Math I-III
- MATH 010 Fundamentals of Mathematics
- MATH 060 Math Literacy
- MATH 011 Introductory Algebra
- MATH 012 Intermediate Algebra

### Route to Success

Summer and/or Winter Session classes may be available for your program to help you finish on time. See your advisor and/or visit the online course search for availability.

**Ready to Go**

Courses have no prerequisites or developmental courses.

**Semester-specific Course Offerings**

Courses are not offered all semesters.

**Minimum Grade Requirement**

Students must earn a minimum grade to remain in the program.

**Electives**

For details on eligible electives, please see reverse.

Taking 15 credits/semester or 30 credits/year will help you stay on track to finish your degree in two years.
HVAC – Building Systems Energy Management

Program Notes

Articulation agreements are in place for students coming from vocational technical high schools. Students coming from Southeastern Regional Vocational Technical High School are able to receive credits for:

- HVAC111
- HVAC113
- HVAC201
- ENGT401

Math Elective: MATH 125 Technical Math I or higher

Some courses may have prerequisites, which are courses that must be taken prior to a particular course. For details, log into DegreeWorks through your MyMassasoit portal.

A minimum of 68 credits and 20 courses is required for completion. The same course may not be used to satisfy two different course requirements.

After Graduation/Completion

After graduation and completion of 4,000 hours of work students will be eligible to take the Refrigeration state license exam.

After graduation students will have completed:

- 527 CMR 12.00 = 230 hours – electrical code
- 527 CMR 9.00 = 700 hours – refrigeration and air conditioning

Resources for Academic Success at Massasoit

All College phone numbers are 508-588-9100 + extension.

Registrar's Office
massasoit.edu/registrar
registrar@massasoit.mass.edu

Brockton A240, Upper Level x1949
Canton Enrollment Center x2677
Middleborough Main Office x4002

Testing & Assessment
massasoit.edu/testing
x1991

Financial Aid
massasoit.edu/finaid
fao@massasoit.mass.edu

Brockton A131A, Lower Level x1479
Canton Enrollment Center x2008

Advisement & Counseling Center
massasoit.edu/advisement-counseling
advisementcounseling@massasoit.edu

Brockton Student Center, Lower Level x1461
Canton First Floor, C120 x2677
Middleborough Main Office x4002

Academic Resource Center
massasoit.edu/arc

Brockton Student Center, Lower Level x1801
Canton First Floor, C126 x2516
Middleborough Main Office x4002

Division Dean
Carine Sauvignon
ergenttech@massasoit.mass.edu
x2106

Resources for Future Planning

Transfer Services
massasoit.edu/transfer
x1461

Career Services
massasoit.edu/careerservices
x1406

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