# Computer Information Systems - Programming

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.

### Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTIM 180</td>
<td>Computer and Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 281</td>
<td>Software Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 157</td>
<td>Introduction to Java</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>
</tbody>
</table>

**Total Credits: 15**

### Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTIM 171</td>
<td>Computer Configuration and Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 271</td>
<td>Database Concepts and Practices</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 168</td>
<td>Advanced Java</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>HU -</td>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>SS -</td>
<td>Social Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 15**

### Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTIM 221</td>
<td>Operating Systems Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 236</td>
<td>Computer Architecture</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 285</td>
<td>Python</td>
<td>3</td>
</tr>
<tr>
<td>MATH -</td>
<td>Math Elective</td>
<td>3</td>
</tr>
<tr>
<td>LA -</td>
<td>Liberal Arts Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 15**

### Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTIM 250</td>
<td>Current Issues in Computing</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 278</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTIM 236</td>
<td>Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CTIM -</td>
<td>CTIM Elective</td>
<td>3</td>
</tr>
<tr>
<td>SC -</td>
<td>Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 15**

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### 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 011 Introductory Algebra
- MATH 012 Intermediate Algebra

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### Milestones

Upon completion of the Object-oriented Programming Certificate, students are eligible to receive the Java Programming Certificate. Meet with your Academic Advisor for concurrent enrollment information.

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### 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.

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Taking **15 credits/semester** or **30 credits/year** will help you stay on track to finish your degree in two years.
Computer Information Systems - Programming
Associate in Applied Science

Program Notes

Be aware of prerequisites and review the Degree Works PLAN regularly.

Students must complete program modification forms to add below College-approved certificates as concurrent curriculum.

Upon successful completion of CTIM 281, CTIM 157 & CTIM 168 you are eligible to receive the Java Programming Certificate.

CTIM Elective: May be one 3-credit course or three 1-credit courses.

Math Electives: MATH 152 Topics in Math I or higher

Other Electives: Students choosing a humanities, science, or social science elective can select from the Course Elective Guide at massasoit.edu/electives.

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

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

Testing & Assessment
massasoit.edu/testing
x1991

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

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

Academic Resource Center
massasoit.edu/arc

Division Dean
Donna Wright
dwright10@massasoit.mass.edu
x1677

After Graduation/Completion

Check in with Career Services
Attend College/Job Fairs for future job placement

Upon successful completion of this degree, you will be able to construct programs in at least three widely used programming languages. You will be able to build on the constructs of sequence, selection, and repetition to develop programs using objects, methods, data abstraction, inheritance, and polymorphism. You will be prepared for jobs such as analyst programmer, application developer, computer programmer, internet programmer, and software developer.

Consider joining and/or visiting sites of professional organization such as:

Association for Computing Machinery: www.acm.org
Association for Women in Computing: www.awc-hq.org
Consortium for Computing Sciences in Colleges Northeast: www.ccsne.org

Visit www.careergps.mass.edu for more information about employment opportunities in your field of study.

Resources for Future Planning

Transfer Services
massasoit.edu/transfer
x1461

Career Services
massasoit.edu/careerservices
x1406

Brockton
1 Massasoit Boulevard
Brockton, MA 02302

Canton
900 Randolph Street
Canton, MA 02021

Middleborough
49 Union Street
Middleborough, MA 02346

508-588-9100
massasoit.edu

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