



## Object-oriented Programming

College-approved Certificate

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		Credits
CTIM 157	Introduction to Java	3 <input type="checkbox"/>
CTIM 168	Advanced Java	3 <input type="checkbox"/>
CTIM 281	Intro to Software Design & Development	3 <input type="checkbox"/>
CTIM 285	Python	3 <input type="checkbox"/>
CTIM 371	Programming in C++	3 <input type="checkbox"/>
CTIM 372	Advanced Programming in C++	3 <input type="checkbox"/>

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CONGRATULATIONS  
**You've Arrived!**

### 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		

### 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.

## 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.

## Program Notes

This certificate fits into the AAS degree in Computer Information Systems – Programming. All courses within this certificate are required within the CIS Programming Option Degree.

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 18 credits and 6 courses is required for completion. The same course may not be used to satisfy two different course requirements.**

## After Graduation/Completion

Upon successful completion of this certificate, 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.

Consider joining and/or visiting sites of professional organization such as:  
 Association for Computing Machinery: [www.acm.org](http://www.acm.org)  
 Association for Women in Computing: [www.awc-hq.org](http://www.awc-hq.org)  
 Consortium for Computing Sciences in Colleges Northeast: [www.ccsne.org](http://www.ccsne.org)

Visit [www.careergps.mass.edu](http://www.careergps.mass.edu) for more information about employment opportunities in your field of study.

## Resources for Academic Success at Massasoit

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

### Registrar's Office

[massasoit.edu/registrar](http://massasoit.edu/registrar)  
[registrar@massasoit.mass.edu](mailto:registrar@massasoit.mass.edu)

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

### Testing & Assessment

[massasoit.edu/testing](http://massasoit.edu/testing)  
 x1991

### Financial Aid

[massasoit.edu/finaid](http://massasoit.edu/finaid)  
[fao@massasoit.mass.edu](mailto:fao@massasoit.mass.edu)

Brockton	A131A, Lower Level	x1479
Canton	Enrollment Center	x2008

### Advisement & Counseling Center

[massasoit.edu/advisement-counseling](http://massasoit.edu/advisement-counseling)  
[advisementcounseling@massasoit.edu](mailto:advisementcounseling@massasoit.edu)

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

### Academic Resource Center

[massasoit.edu/arc](http://massasoit.edu/arc)

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

### Division Dean

Donna Wright  
[dwright10@massasoit.mass.edu](mailto:dwright10@massasoit.mass.edu)  
 x1677

## Resources for Future Planning

### Transfer Services

[massasoit.edu/transfer](http://massasoit.edu/transfer)  
 x1461

### Career Services

[massasoit.edu/careerservices](http://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**