

# Computer Programming

Certificate Program 2011-2012

Program Requirements .....	25
Additional Requirements .....	5
<b>TOTAL CREDITS.....</b>	<b>30</b>

## PROGRAM INFORMATION:

This certificate program targets students interested in careers in Information Technology. It is designed for holders of an AA, AS and/or baccalaureate degree who have an interest in a career change or job enhancement. The program shares curriculum with related courses from Business and Computer Networking to provide graduates with a diverse skill set. For additional information about our computer science program, visit our Web site at <http://www.AnokaRamsey.edu>. **This certificate is currently being offered on a two-year, part-time basis.**

## PROGRAM GOALS:

By completing this certificate, students will achieve the following learning goals:

- 1) be fluent in two or more programming languages;
- 2) write computer programs to solve any type of problem;
- 3) understand ethical and moral issues as related to Computer Science applications;
- 4) write Windows-based programs;
- 5) write Graphical User Interface programs that are platform independent; and,
- 6) write Object-Oriented programs.

## APPLICATION:

To receive this certificate, submit a Certificate Application to the Records and Registration Office. Applications are available in Academic Advising Services, or the Records and Registration Offices on either campus.

## DEVELOPMENTAL COURSES:

Some students may need preparatory courses in the areas of mathematics, or typing/ keyboarding. Courses numbered below 1000 will not apply toward this program.

## COMPLETION REQUIREMENTS:

- A minimum of 12 semester credits must be completed at Anoka-Ramsey Community College.
- A minimum cumulative grade point average (GPA) of 2.0 in courses numbered 1000 or above at ARCC.
- A minimum grade of C or higher must be earned in all Program requirements.
- All Program requirements must be completed at Anoka-Ramsey Community College.
- Courses must be completed within 3 years. Students may petition to extend the window beyond the 3 years.
- All course requirements must be complete before a certificate will be awarded.

## Program Requirements: 25 credits

<input type="checkbox"/>	CSCI 1101* Introduction to Computer Science and Problem Solving	3
<input type="checkbox"/>	CSCI 1106* Fundamentals of Computer Science I	4
<input type="checkbox"/>	CSCI 1107* Fundamentals of Computer Science II	4
<input type="checkbox"/>	CSCI 1115* Visual Basic Programming	3
<input type="checkbox"/>	CSCI 1125* Java Programming	3
<input type="checkbox"/>	CSCI 2253* Assembly Language Programming	4
<input type="checkbox"/>	MATH 2100* Discrete Mathematics	4

## Additional Requirements: 5 credits

Select courses from the following to fulfill the 30-credit requirement:

<input type="checkbox"/>	BUS 1119* Introduction to Relational Databases	3
<input type="checkbox"/>	BUS 1180 Developing Web Pages	3
<input type="checkbox"/>	CNET 2101 Data Telecommunications & Computer Networks	3
<input type="checkbox"/>	CSCI 1155 Introduction to Functional Language Programming	1

GAINFUL EMPLOYMENT DISCLOSURE REPORT

\* Course has a prerequisite. Prerequisites are listed on the course schedule and in the ARCC Catalog Course Descriptions pages.

NOTE: The requirements of this program are subject to change without notice. You are encouraged to contact an academic advisor, Cambridge Campus 763.433.1840 or Coon Rapids Campus 763.433.1240, for course planning assistance and information about transfer credit evaluation.

