

## **Certificate: Computer Programming**

## Curriculum Chair: Professor Dennis Ramos Location: TECH-30 Telephone: (914) 606-6085 Email: Dennis.Ramos@sunywcc.edu ADVISOR NAME:

| Developmental Courses as required based on placement scores |   |
|---|---|
|   | No Developmental Courses Required   |
|   | <b>ENG 91</b> Writing for College 1 – Score of 4 E Code 1 and below                           |
|   | <b>ENG 92</b> Writing for College 2 – Score of 6 E Code 2                                     |
|   | ESL 94 Academic Writing 1 – Score of 5 or 6 E Code 6  |
|   | ESL 122 Academic Writing 2 (3 credits) – Score of 7 E Code 7                                  |
|   | MATH 92 Pre-Algebra – Arithmetic score 44 and below, Elementary Algebra 54 and below          |
|   | MATH 93 Beginning Algebra – Arithmetic score 45 and above, Elementary Algebra 54 and below OR |
|   | MATH 94 Math Literacy – Arithmetic score 45 and above, Elementary Algebra 54 and below        |
|   | <b>READ 93</b> Foundation of College Reading – Score of 57 and below                          |
|   | <b>READ 105</b> Analytical Reading (3 credits) – Score of 58 and higher                       |

|  | Program of Study   |
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|  | <b>COMSC 110<sup>1</sup></b> – Computer Programming 2: <b>COMSC 101 with a grade of "C" or higher is the prerequisite.</b> |
|  | <b>COMSC 116</b> – LINUX Operating System: <b>COMSC 101 with a grade of "C" or higher is the prerequisite.</b>             |
|  | COMSC 201A – Data Structures: COMSC 101 with a grade of "C" or higher is the prerequisite.<br>OR                           |
|  | <b>COMSC 214A</b> – Web Programming: <b>COMSC 110 with a grade of "C" or higher is the prerequisite.</b>                   |
|  | COMSC 207 – Java Programming: COMSC 110 with a grade of "C" or higher is the prerequisite.                                 |
|  | <b>COMSC 208A</b> – GUI Development: <b>COMSC 207</b> with a grade of "C" or higher is the prerequisite.                   |

The Computer Programming certificate is designed to enable working professionals to upgrade their programming skills or make a career change. Recipients of this certificate will develop the critical thinking skills integral to computer programming, including problem analysis, solutions design and program testing, in different up-to-date programming languages. The certificate is also appropriate for students who are studying (or who have earned degrees) in other academic disciplines such as Networking, Business, Computer Information Systems, Computer Graphics, Mathematics and Science. Courses involve programming in different languages such as C++, Java and C#.

<sup>&</sup>lt;sup>1</sup> Students must complete **COMSC 101 Computer Programming I** in order to take the first semester courses for this certificate. See the co-requisite and prerequisite for this course below. Speak to the curriculum chair for more information.