

## A 25 59 0 CP Information Technology: Computer Programming A.A.S.

First Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ENG 111 Writing & Inquiry	Pre-Requisites: ENG 002 Tier 1 Co-requisites: ENG 011	3			3	3
CIS 110 Introduction to Computers <b>OR</b> CIS 111 Basic PC Literacy	Pre-Requisites for CIS 110: ENG 002 Tier 1 and MAT 003 Tier 1  Pre-Requisites for CIS 111: none	1-2	2		3-4	2-3
CTS 115 Info Sys Business Concept	Pre-Requisites: ENG 002 Tier 1	3			3	3
CIS 115 Intro to Programming and Logic	Pre-Requisites: MAT 003 Tier 1	2	3		5	3
CSC 139 Visual Basic Programming	Co-Requisites: CIS 110 or CIS 111 or CIS 115	2	3		5	3
CTI 110 Web, Pgm, & DB Foundation	Pre-Requisites: none	2	2		4	3
<b>TOTAL SEMESTER HOURS</b>						<b>17-18</b>
First Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ENG 112 Writing/Research in the Disciplines	Pre-Requisites: ENG 111	3			3	3
CTI 120 Network & Sec Foundation	Pre-Requisites: CIS 110 or CIS 111	2	2		4	3
NOS 110 Operating Systems Concepts	Pre-Requisites: CIS 110 or CIS 111	2	3		5	3
CSC 239 Advanced Visual Basic Programming	Pre-Requisites: CSC 139	2	3		5	3
MAT 143 Quantitative Literacy <b>OR</b> MAT 152 Statistical Methods I <b>OR</b> MAT 171 Pre-calculus Algebra	Pre-Requisites for MAT 143 and MAT 152: MAT 003 Tier 1 and ENG 002 Tier 1 Co-Requisites for MAT 143: MAT 043 Co-Requisites for MAT 152: MAT 052  Pre-Requisites for MAT 171: MAT 003 Tier 2 or MAT 143 or MAT 152 Co-Requisites for MAT 171: MAT 071	2-3	2		4-5	3-4
WBL 110 World of Work	Pre-Requisites: none	1			1	1
<b>TOTAL SEMESTER HOURS</b>						<b>16-17</b>

Continued on next page

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Second Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
CTS 120 Hardware/Software Support  <b>OR</b> WBL 111, WBL 112, WBL 121, WBL 122, WBL 131, WBL 132, Work-Based Learning	Co-Requisites for CTS 120: CIS 110 or CIS 111  Pre-Requisites for WBL: None	2	3		5	1-3
CTS 285 Systems Analysis & Design	Pre-Requisites: CIS 115 Co-Requisites: DBA 110	3			3	3
CTS 240 Project Management	Pre-requisites: ENG 002 Tier 1 and CIS 110 or CIS 111	2	2		4	3
DBA 110 Database Concepts	Pre-Requisites: CIS 110 or CIS 111	2	3		5	3
NET 110 Networking Concepts	Pre-Requisites: CIS 110 or CIS 111	2	2		4	3
CSC 151 JAVA Programming	Pre-Requisites for CSC 151: CIS 110 or CIS 111 or CIS 115	2	3		5	3
<b>TOTAL SEMESTER HOURS</b>						<b>16-18</b>

Continued on next page

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Second Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
CSC 289 Programming Capstone Project  OR  CTS 289 System Support Project	Pre-Requisites: CTI 110, CTI 120, CTS 115, CTS 285, and  [(CSC 139 and CSC 239) or (CSC 151 and CSC 251) or (CSC 134 and CSC 234)]  Pre-Requisites: CTI 110, CTI 120, CTS 115, CTS 240 and CTS 285	1	4		5	3
CSC 251 Advanced JAVA Programming	Pre-Requisites for CSC 251: CSC 151	2	3		5	3
WEB 151 Mobile Application Dev I	Pre-Requisites: CSC 134, CSC 139, CSC 151 or other programming class (see advisor)	2	3		5	3
PSY 150 General Psychology OR SOC 210 Introduction to Sociology OR ECO 251 Prin. Of Microeconomics	Pre-Requisites for PSY 150: ENG 002 Tier 1  Pre-Requisites for SOC 210: ENG 002 Tier 1  Pre-Requisites for ECO 251: ENG 002 Tier 1 and MAT 003 Tier 1	3			3	3
DBA 120 Database Programming	Pre-Requisites: DBA 110	2	2		4	3
ART 111 Art Appreciation OR MUS 110 Music Appreciation OR PHI 240 Introduction to Ethics	Pre-Requisites for ART 111 or MUS 110: none  Pre-Requisites for PHI 240: ENG 111	3			3	3
<b>TOTAL SEMESTER HOURS</b>						<b>18</b>
<b>TOTAL SEMESTER HOURS REQUIRED FOR ASSOCIATE DEGREE</b>						<b>67-71</b>

Continued on next page