

C 25 59 0 CP Fundamentals of Computer Programming Certificate

First Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
CIS 110 Introduction to Computers OR 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
CTI 110 Web, Pgm, & DB Foundation	Pre-Requisites: none	2	2		4	3
CIS 115 Intro to Programming and Logic	Pre-Requisites: MAT 003 Tier 1	2	3		5	3
CSC 139 Visual Basic Programming OR CSC 151 JAVA Programming	Co-Requisites for CSC 139: CIS 110 or CIS 111 or CIS 115 Pre-Requisites for CSC 151: CIS 110 or CIS 111 or CIS 115	2	3		5	3
TOTAL SEMESTER HOURS						11-12
Second Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
CTI 120 Network & Sec Foundation	Pre-Requisites: CIS 110 or CIS 111	2	2		4	3
CSC 239 Advanced Visual Basic Programming OR CSC 251 Adv JAVA Programming	Pre-Requisites for CSC 239: CSC 139 Pre-Requisites for CSC 251: CSC 151	2	3		5	3
TOTAL SEMESTER HOURS						6
TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE						17-18