

# Computer Science Information Technology Certificate of Achievement

Major Code: 0702.00

Total Units: 30

SLO#1 Understand the core components of operating systems & security.

SLO#2 Design/develop/implement software program written in Assembly Language to solve business/computer hardware/scientific problems.

SLO#3 Design/develop/implement/test software program which demonstrate the use of classes, objects and file operations to solve business & scientific problems using C++ language

SLO#4 Design/develop/implement/test software program which demonstrate the use of data structures such as lists and queues/stacks to solve business, computer hardware and scientific problems using Java Language

## Semester 1:

Course		Units
<b>CS 101</b>	Intro to Computer Science	3
<b>CIS 213 or (CIS 113)</b>	A+ software Intermediate Linux	3
CS Major Elective*		3
<b>Total Units</b>		<b>9</b>

## Semester 2:

Course		Units
<b>CS 116</b>	Programming in C++	3
<b>CIS 211</b>	Intro to Security	3
CS Major Elective*		3
<b>Total Units</b>		<b>9</b>

## Semester 3:

Course		Units
<b>CS 213</b>	Advanced programming in Java	3
<b>CS 118</b>	Microcomputer Assembly	3
<b>Total Units</b>		<b>6</b>

## Semester 4:

Course		Units
<b>CS 136</b>	Data Structures	3
CS Major Elective*		3
<b>Total Units</b>		<b>6</b>
<b>Total Degree Units</b>		<b>30</b>

\*CS Major Electives: **Choose an additional 9 units from the following**

<b>CIS 185</b>	(Direct Study- Computer Science - Information Technology)
<b>CIS 285</b>	(Direct Study- Computer Science - Information Technology)
<b>CIS 101</b>	(Intro to computer and their uses)
<b>CS 119</b>	(Programming in Python)
<b>MIT 220</b>	(Intro to Robotics)
<b>CIS 120</b>	(Database Design and Programming)
<b>CIS 213</b>	(A+ software)
<b>CIS 113</b>	(Intermediate Linux+)
<b>CS 131</b>	(Discrete Structure)
<b>CS 216</b>	(Object Oriented Programming in C++)
<b>CIS 219</b>	(Database Management Using Oracle)
<b>CIS 148</b>	(Web Development using HTML5 and CSS)
<b>CIS 150</b>	(Advanced Web Dev using Java Script and Ajax)
<b>CS 140</b>	(Programming for Mobile Devices)
<b>CS 141</b>	(Advance Programming for Mobile Devices)
<b>CIS 115</b>	(Advance Linux)
<b>CIS 237</b>	(Installing, Configuring and Administrating Microsoft SQL)