



**Cebu Doctors' University**  
**College of Arts and Sciences**  
**Department of Computer Science**

1 Dr. P. V. Larrazabal Jr. Avenue, North Reclamation, 6014 Mandaue City, Cebu, Philippines

**BACHELOR OF SCIENCE IN COMPUTER SCIENCE<sup>a</sup>**

(Effective Academic Year 2011 - 2012)



**First Semester**

**FIRST YEAR**

**Second Semester**

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>Engl 11</b>	Study and Thinking Skills	3	0	3
	<b>Fil 11</b>	Komunikasyon sa Akademikong Filipino	3	0	3
	<b>Hist 10</b>	Philippine History, Government, and Constitution	3	0	3
	<b>Anthro 11</b>	Philippine Society and Culture with Family Planning	3	0	3
	<b>Math 11</b>	College Algebra	3	0	3
	<b>CS 110</b>	Fundamentals of Computer Science	2	3	3
	<b>CS 111</b>	Programming I	3	3	4
	<b>PE 11</b>	Physical Fitness & Self testing Activities	2	0	2
	<b>NSTP 1</b>	National Service Training Program 1	3	0	3
			25	6	27

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>Engl 12</b>	Writing in the Discipline	3	0	3
	<b>Fil 12</b>	Pagbasa at Pagsulat Tungo sa Pananaliksik	3	0	3
	<b>Hist 12</b>	Life and Works of Rizal	3	0	3
	<b>Spch 11</b>	Oral and Aural Communication	3	0	3
	<b>Math 15</b>	Plane Trigonometry and Analytic Geometry	3	0	3
	<b>CS 121</b>	Discrete Mathematics in Computer Science I	3	0	3
	<b>CS 122</b>	Programming II	2	3	3
	<b>CS 123</b>	Multimedia Systems	2	3	3
	<b>PE 12</b>	Rhythmic Activities and Dancing	2	0	2
	<b>NSTP 2</b>	National Service Training Program 2	3	0	3
			27	6	29

**First Semester**

**SECOND YEAR**

**Second Semester**

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>Econ 11</b>	Health Economics with Taxation and Land Reform	3	0	3
	<b>Human 11</b>	Introduction to the Arts	3	0	3
	<b>Math 210</b>	Calculus	5	0	5
	<b>CS 210</b>	Discrete Mathematics in Computer Science II	3	0	3
	<b>CS 211</b>	Object-Oriented Programming I	2	3	3
	<b>CS 212</b>	Digital Design	2	3	3
	<b>CS 213</b>	Internet and Web Programming	2	3	3
	<b>PE 13</b>	Games and Sports	2	0	2
			22	9	25

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>Engl 17</b>	World Literature	3	0	3
	<b>Math 220</b>	Probability and Statistics for Computer Science	3	0	3
	<b>CS 220</b>	Comp. Organization and Assembly Lang. Prog <sup>1</sup>	2	3	3
	<b>CS 221</b>	Object-Oriented Programming II	2	3	3
	<b>CS 222</b>	Data Structures and Algorithms I	2	3	3
	<b>CS 223</b>	Database Systems I	2	3	3
		CS Elective I	2	3	3
	<b>PE 14</b>	Recreational Activities	2	0	2
			18	15	23

**The title ASSOCIATE IN COMPUTER TECHNOLOGY (ACT) may be awarded after the completion of the Second Year Curriculum.**

**First Semester**

**THIRD YEAR**

**Second Semester**

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>Philo 12</b>	Philosophy of Man	3	0	3
	<b>Engl 310</b>	Business Correspondence and Tech'l Comm	3	0	3
	<b>Physics11</b>	College Physics 1	3	6	5
	<b>CS 310</b>	Mathematical Methods in Computer Science	2	3	3
	<b>CS 314</b>	Data Structures and Algorithms II	3	0	3
	<b>CS 315</b>	Database Systems II	3	0	3
	<b>CS 316</b>	Operating Systems	2	3	3
	<b>CS 318</b>	Software Engineering	2	3	3
		CS Elective II	2	3	3
			23	18	29

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>Psych 11</b>	General Psychology	3	0	3
	<b>Mngt 320</b>	Leadership and Management	3	0	3
	<b>Physics12</b>	College Physics 2	3	6	5
	<b>CS 320</b>	Automata and Language Theory	3	0	3
	<b>CS 321</b>	Design and Analysis of Algorithms	3	0	3
	<b>CS 322</b>	Networks and Internet Technology	2	3	3
	<b>CS 323</b>	Modeling and Simulation	2	3	3
		CS Elective III	2	3	3
		CS Free Elective 1	2	3	3
			23	18	29

**Summer**

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>CS 328</b>	Professional Ethics	3	0	3
		CS Elective IV	2	3	3
		CS Free Elective 2	2	3	3
			7	6	9

**First Semester**

**FOURTH YEAR**

**Second Semester**

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>CS 410</b>	Computability and Complexity Theory	3	0	3
	<b>CS 411</b>	Artificial Intelligence	2	3	3
	<b>CS 415</b>	Thesis I (Methods of Research)	3	0	3
	<b>CS 416<sup>b</sup></b>	On-the-Job Training I (324 hrs)	0	0	6
		CS Elective V	2	3	3
		CS Free Elective 3	2	3	3
			12	9	21

FG	Course No.	Course Description	Lec hrs	Lab hrs	Units
	<b>CS 420</b>	Trends, Seminars, and Field Trips in Comp Sci	3	0	3
	<b>CS 422</b>	Programming Languages	2	3	3
	<b>CS 425</b>	Thesis II (Software Project)	3	0	3
	<b>CS 427<sup>c</sup></b>	On-the-Job Training II (324 hrs)	0	0	6
		CS Free Elective 4	3	0	3
			11	3	18

**NOTE:** 1. Both the lecture and the laboratory components of a subject must be passed to earn the credit assigned to it.

2. Elective subjects may be added at the discretion of the Department Chairman. Name of Student \_\_\_\_\_ ID No. \_\_\_\_\_  
 Evaluated by and date of evaluation \_\_\_\_\_