BS Computer Science
UP Tacloban College
STUDY PLAN (153 units)

FIRST YEAR

First Semester				Second Semester			
Course Number	**Course Title**	**Units**	**Prerequisite**	**Course Number**	**Course Title**	**Units**	**Prerequisite**
GE Core 1		3		GE Core 2		3	
GE Elective 1		3		GE Core 3		3	
Math 18	Precalculus Mathematics	5	None	GE Elective 2		3	
CMSC 10	Introduction to Computer Science	1	None	Math 53	Calculus I	4	Math 18
CMSC 11	Fundamentals of Programming 1	3	None	CMSC 12	Fundamentals of Programming 2	3	CMSC 11
CMSC 56	Discrete Mathematical Structures in Computer Science 1	3	None	CMSC 57	Discrete Mathematical Structures in Computer Science 2	3	CMSC 56
PE 1		(2)		PE 2		(2)	
NSTP 1		(3)		NSTP 2		(3)	NSTP 1
	TOTAL	**18**			**TOTAL**	**19**	

SECOND YEAR

First Semester				Second Semester			
Course Number	**Course Title**	**Units**	**Prerequisite**	**Course Number**	**Course Title**	**Units**	**Prerequisite**
GE Core 4		3		Math 55	Calculus III	4	Math 54
Math 54	Calculus II	4	Math 53	Physics 71	Elementary Physics I	4	Math 53
CMSC 13	Survey of Programming Paradigms	3	CMSC 12	Physics 71.1	Elementary Physics I Laboratory	1	Coreq: Physics 71
CMSC 122	Data Structures and Algorithms 1	3	CMSC 12	CMSC 123	Data Structures and Algorithms 2	3	CMSC 122
CMSC 124	Automata and Language Theory	3	CMSC 57	CMSC 127	File Processing and Database Systems	3	CMSC 122
Qualified Elective 1		3		CMSC 130	Logic Design and Digital Computer	3	CMSC 11

				Circuits		
PE 2		(2)		Qualified Elective 2	3	
				PE 2	(2)	
	TOTAL	**19**			**TOTAL**	**21**

<table>
<tr><td colspan="7" align="center">THIRD YEAR</td></tr>
<tr><td colspan="3" align="center">First Semester</td><td colspan="4" align="center">Second Semester</td></tr>
<tr><td>Course Number</td><td>Course Title</td><td>Units</td><td>Prereq-uisite/Course Stipula-tion</td><td>Course Number</td><td>Course Title</td><td>Units</td><td>Prereq-uisite/Course Stipula-tion</td></tr>
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Course Number	Course Title	Units	Prereq-uisite/Course Stipula-tion	Course Number	Course Title	Units	Prereq-uisite/Course Stipula-tion
GE Core 5		3		GE Elective 3		3	
Stat 105	Introduction to Statistical Analysis	3	Math 18	GE Elective 4		3	
CMSC 128	Introduction to Software Engineering	3	CMSC 122	CMSC 121	Internet Technologies	3	CMSC 13
CMSC 133	Computer Organization and Architecture with Assembly Programming	3	CMSC 12, CMSC 130	CMSC 125	Operating Systems	3	CMSC 122, CMSC 133
CMSC 141	Design and Implementation of Programming Languages	3	CMSC 122	CMSC 199.1	Research in Computer Science I	3	Junior standing
CMSC 189	Technical Writing for Computer Science	3	Junior standing	Qualified Elective 4		3	
Qualified Elective 3		3					
	TOTAL	**21**			**TOTAL**	**18**	

	MIDYEAR						
Course Number	**Course Title**	**Units**	**Prerequisite/Course Stipula-tion**				
CMSC 195	Practicum	3	Junior standing				
	TOTAL	3					

FOURTH YEAR							
First Semester				*Second Semester*			
Course Number	**Course Title**	**Units**	**Prereq-uisite/Course Stipula-tion**	**Course Number**	**Course Title**	**Units**	**Prereq-uisite/Course Stipula-tion**
GE Core 6		3		GE Core 7		3	
GE Elective 5		3		CMSC 129	Software Project Management	3	CMSC 128
CMSC 196	Undergraduate Seminar	1	Senior standing	CMSC 175	Introduction to Computer Security	3	CMSC 57
CMSC 135	Data Communication and Networking	3	CMSC 125	CMSC 192	Computing, Ethics, and Society	3	Junior standing
CMSC 199.2	Research in Computer Science II	3	CMSC 199.1	PI 100	The Life and Works of Jose Rizal	3	None
Qualified Elective 5		3		Qualified Elective 6		3	
	TOTAL	16			TOTAL	18	