UNIVERSITY OF THE PHILIPPINES MINDANAO

Office of the University Registrar

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Approved on June 24, 2003

FIRST YEAR, FIRST SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
MATH 17	Algebra & Trigonometry	5		5	
GE		3		3	
GE		3		3	
GE		3		3	
GE		3		3	
GE		3		3	
PE 1	Foundations of Physical Fitness	(2)		(2)	
NSTP 1	National Service Training Program	(3)		(3)	
				20	

FIRST YEAR, SECOND SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 11	Introduction to Computer Science	3		3	MATH 11 or MATH 17
CMSC 56	Discrete Mathematical Structures in Computer Science I	3		3	MATH 17
MATH 26	Analytic Geometry & Calculus I	3		3	MATH 17
GE		3		3	
GE		3		3	
GE		3		3	
PE 2/4		(2)		(2)	
NSTP 2	National Service Training Program	(3)		(3)	
				18	

SECOND YEAR, FIRST SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 21	Fundamentals of Programming	2	1	3	CMSC 11
CMSC 57	Discrete Mathematical Structures in Computer Science II	3		3	CMSC 56
MATH 27	Analytic Geometry & Calculus II	3		3	MATH 26
PHYS 3	General Physics I	2	1	3	
STAT 1	Elementary Statistics	2	1	3	MATH 11 or MATH 17
GE		3		3	
PE 2/3/4		(2)		(2)	
				18	

SECOND YEAR, SECOND SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 123	Data Structures	3		3	CMSC 21, CMSC 57 or COI
CMSC 130	Logic Design & Digital Computer Circuits	2	1	3	CMSC 11, CMSC 57 or COI
MATH 28	Analytic Geometry & Calculus III	3		3	MATH 27
PHYS 13	General Physics II	2	1	3	PHYS 3
STAT 101	Statistical Methods	2	1	3	STAT 1
GE		3		3	
PE 2/3/4		(2)		(2)	
				18	

THIRD YEAR, FIRST SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 124	Design & Implementation of Programming Languages	2	1	3	CMSC 123 or COI
CMSC 127	File Processing & Database Systems	2	1	3	CMSC 123 or COI
CMSC 131	Introduction to Computer Organization & Machine Level Programming	2	1	3	CMSC 21, CMSC 130 or COI
CMSC 150	Numerical & Symbolic Computations	2	1	3	MATH 28, MATH 38, CMSC 123
GE		3		3	
GE		3		3	
				18	

THIRD YEAR, SECOND SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 125	Operating Systems	2	1	3	CMSC 123, CMSC 131 or COI
CMSC 128	Introduction to Software Engineering I	2	1	3	CMSC 123 or COI
CMSC 132	Computer Architecture	3		3	CMSC 131 or COI
	ELECTIVE - Computer Science			3	
GE		3		3	
GE		3		3	
				18	

THIRD YEAR, SUMMER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 198*	Practicum			3	COI

FOURTH YEAR, FIRST SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 137	Data Communications & Networking	2	1	3	CMSC 125 & CMSC 132
CMSC 141	Automata & Languages Theory	3		3	CMSC 124 or COI
CMSC 190*	Special Problems	1		1	COI
CMSC 199	Undergraduate Seminar	1		1	COI
CMSC 200	Undergraduate Thesis	(3)		(3)	COI
ENG 10	Writing of Scientific Paper	3		3	Junior Standing
	ELECTIVE - Computer Science			3	
	ELECTIVE - Free			3	
				17 (or 19)	

FOURTH YEAR, SECOND SEMESTER

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 142	Design & Analysis of Algorithms	3		3	CMSC 124 or COI
CMSC 190*	Special Problems	2		2	COI
CMSC 200	Undergraduate Thesis	(3)		(3)	COI
PI 100	The Life & Works of Jose Rizal	3		3	Junior Standing
	ELECTIVE - Computer Science			3	
	ELECTIVE - Free			3	
GE		3		3	
				17 (or 18)	

TOTAL NUMBER OF UNITS - 147

* The student may choose either (CMSC 198 and CMSC 190) or CMSC 200.

NOTE: The specification of the domain [i.e., GE (AH), GE (SSP) and GE (MST) of the GE courses for any semester is intended primarily to help the students keep track of the number of GE units he/she has taken in each domain. Nothing in this document therefore prevents a student, for example, from taking a GE course in the AH or NSM domain, when the checklist provides a GE (SSP) course for a particular year or semester, so long as the number of required GE units in each domain is complied with.

General Education

ARTS and HUMANITIES DOMAIN (15 units)		**SOCIAL SCIENCE and PHILOSOPHY DOMAIN** (15 units)		**NATURAL SCIENCE and MATHEMATICS DOMAIN** (15 units)	
AH 1	COMM I	SSP 1	HIST I	MST 1	NASC I
AH 2	COMM II	SSP 2	HIST II	MST 2	NASC II
AH 3	COMM III	SSP 3	SOSC I	MST 3	MATH I
4H 4	HUM I	SSP 4	SOSC II	MST 4	STS
AH 5	HUM II	SSP 5	PHLO I	MST 5	Biotechnology & Society
AH 6	Visual Comm & Society	SSP 6	Wika at PagkaPilipino	MST 6	Biodiversity Challenge
AH 7	Significant Themes in Lit	SSP 7	Hitchiker's Guide to Mindanao		

ELECTIVES: Free electives may be taken from any course in any of the degree programs available at UP in Mindanao provided they are approved by the Adviser.

Course No.	Course Description	Lecture	Lab	Units	Prerequisite/s
CMSC 129	Principles of Compiler Design	2	1	3	CMSC 124
CMSC 161	Interactive Computer Graphics	2	1	3	CMSC 123 & MATH 120 or COI
CMSC 170	Introduction to Artificial Intelligence	2	1	3	CMSC 124
CMSC 172	Robot Modeling	3		3	CMSC 161
CMSC 180	Introduction to Parallel Computing	2	1	3	CMSC 132
CMSC 191	Special Topics	3		3	
MGT 101	Concepts & Dynamics of Management	3		3	COI
MGT 111	Principles of Accounting	3		3	COI
MGT 131	Introduction to Human Relations & Behavior in Organizations	3		3	COI
STAT 162	Experimental Designs I	2	1	3	STAT 1 or COI
STAT 164	Statistics for Biological Sciences	3		3	STAT 1
STAT 181	Statistical Computing	2	1	3	COI
STAT 182	Statistical Packages	2	1	3	STAT 101 or STAT 162 & AMAT 150 or CMSC 21