



ASIAN INSTITUTE OF COMPUTER STUDIES
OUTCOMES-BASED EDUCATION CURRICULUM FOR BACHELOR OF SCIENCE IN COMPUTER SCIENCE

1ST YEAR 1ST SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CC111	Introduction to Computing	3	2	0	None	3
CC112	Fundamentals of Computer Programming 1	3	2	3	None	5
GE1	Understanding the Self	3	3	0	None	3
GE2	Readings in Philippine History	3	3	0	None	3
FIL111	Sining ng Pakikipagtalastasan	3	3	0	None	3
PE111	Gymnastics and Calisthenics	2	3	0	None	2
NSTP1	Literacy Training Service 1	3	3	0	None	3
Total No. of Units/Semester		20	20	3		22

1ST YEAR 2ND SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CC123	Intermediate Computer Programming 2	3	2	3	CC112	5
CS121	Discrete Structures 1	3	3	0	ALTRIG	3
FIL122	Panitikan	3	3	0	FIL111	3
GE3	The Contemporary World	3	3	0	None	3
GE4	Mathematics in the Modern World	3	3	0	None	3
PE122	Indoor Games	2	2	0	PE111	2
NSTP2	Literacy Training Service 2	3	3	0	NSTP1	3
Total No. of Units/Semester		20	20	3		22

2ND YEAR 1ST SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CC214	Data Structures and Algorithms	3	2	3	CC112, CC123	5
CS212	Discrete Structure 2	3	3	0	CS121	3
CS213	Object-Oriented Programming	3	2	3	CC112, CC123	5
GE5	Purposive Communication	3	3	0	None	3
GE6	Art Appreciation	3	3	0	None	3
CIS211	CISCO 1 – Network Fundamental	3	2	3	None	5
PE213	Dancing and Rhythmic Activities	2	2	0	PE122	2
Total No. of Units/Semester		20	17	9		26

2ND YEAR 2ND SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CC225	Information Management (Database Systems)	3	2	3	CC112, CC123, CS213	5
CS224	Algorithms and Complexity	3	3	0	CC214	3
MAT222	Differential Calculus (Math Elective)	3	3	0	MAT111	3
GE7	Science, Technology and Society	3	3	0	None	3
GE8	Ethics	3	3	0	None	3
PE224	Martial Arts	2	2	0	PE213	2
CIS222	CISCO 2 – Routing Protocols and Concepts	3	2	3	CIS211	5
Total No. of Units/Semester		20	18	6		24





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3RD YEAR 1ST SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CC316	Applications Development and Emerging Technologies	3	2	3	CC225	5
CS315	Automata Theory and Formal Languages	3	3	0	CS224	3
CS316	Architecture and Organization	3	3	0	3 rd Yr Standing	3
CS317	Information Assurance and Security	2	2	0	CC225	2
CSE311	CS Elective 1	3	2	3	3 rd Yr Standing	5
HUM311	Philippine Popular Culture	3	3	0	None	3
CIS313	CISCO 3 – Switching Basics and Intermediate Routing	3	2	3	CIS222	5
Total No. of Units/Semester		20	17	9		26

3RD YEAR 2ND SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CS328	Programming Languages	3	2	3	CS213	5
CS329	Software Engineering 1	3	2	3	CC112, CC123, CC214	5
CS330	Social Issues and Professional Practice	3	3	0	CS315, CS316, CS317, CSE311	3
CSE322	CS Elective 2	3	2	3	CSE311	5
ACT321	Fundamentals of Accounting	3	3	0	None	3
CIS324	CISCO 4 – Accessing WAN	3	2	3	CIS313	5
Total No. of Units/Semester		18	14	12		26

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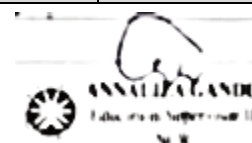
SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CS4111	Practicum (270 Hours)	5	0	5	4 th Yr in Good Standing	5
Total No. of Units/Semester		5	0	5		5

4TH YEAR 1ST SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CS4112	CS Thesis Writing 1	3	3	0	4 th Yr Standing	3
CS4113	Human Computer Interaction	1	1	0	4 th Yr Standing	1
CS4114	Operating Systems	3	2	3	CSE322, CS3117, CSE311	5
CS4115	Software Engineering 2	3	2	3	CS329	5
CSE413	CS Elective 3	3	2	3	CSE322	5
Total No. of Units/Semester		13	13	9		22

4TH YEAR 2ND SEMESTER

SUBJECT CODE	SUBJECT DESCRIPTION	UNITS	LEC	LAB	PRE-REQUISITES	Total Hours Per Week
CS4216	CS Thesis Writing 2	3	3	0	CS4112	3
CS4217	Networks and Communications	3	2	3	CS4114	5
RIZ411	Life and Works of Rizal	3	3	0	None	3
TNP421	Technopreneurship	3	2	3	4 th Yr Standing	5
Total No. of Units/Semester		12	10	6		16





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A. SUMMARY OF UNITS

DESCRIPTION	UNITS
General Education Courses	27.0
Filipino Courses	6.0
Common Courses	18.0
Professional Courses	50.0
Additional Professional Courses	18.0
Professional CS Electives	9.0
Additional Math Requirement	3.0
Literature Course	3.0
P.E. Courses	8.0
N.S.T.P. Courses	6.0
Total Units	148.0

B. BREAKDOWNS PER COURSE

General Education Courses (9)				27.0
Course Code	Knowledge Area Course	Course Title	Units	
GE1	GE	Understanding the Self/Pag-unawa sa Sarili	3.0	
GE2	GE	Readings in Philippine History/Mga Babasahin Hinggil sa Kasaysayan ng Pilipinas	3.0	
GE3	GE	The Contemporary World/Ang Kasalukuyang Daigdig	3.0	
GE4	GE	Mathematics in the Modern World/Matematika sa Makabagong Daigdig	3.0	
GE5	GE	Purposive Communication/Malayuning Komunikasyon	3.0	
GE6	GE	Art Appreciation/Pagpapahalaga sa Sining	3.0	
GE7	GE	Science, Technology and Society/Agham, Teknolohiya at Lipunan	3.0	
GE8	GE	Ethics/Etika	3.0	
RIZ411	GE	Life and Works of Rizal	3.0	
Filipino Courses (2)				6.0
FIL111	FIL	Sining ng Pakikipagtalastasan	3.0	
FIL122	FIL	Panitikan	3.0	
Common Courses (6)				18.0
CC111	CC	Introduction to Computing	3.0	
CC112	SDF	Fundamentals of Programming	3.0	
CC123	SDF	Intermediate Programming	3.0	
CC214	SDF	Data Structures and Algorithms	3.0	
CC225	IM	Information Management	3.0	
CC316	IM	Application Development and Emerging Technologies	3.0	
Professional/Core Courses (17)				50.0
CS121	DS	Discrete Structures 1	3.0	
CS212	DS	Discrete Structures 2	3.0	
CS213	SDF	Object-Oriented Programming	3.0	
CS224	AL	Algorithms and Complexity	3.0	
CS3210	SP	Social Issues and Professional Practice	3.0	
CS315	AL	Automata Theory and Formal Language	3.0	
CS316	AR	Architecture and Organization	3.0	
CS317	IAS	Information Assurance and Security	2.0	
CS328	PL	Programming Languages	3.0	



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CS329	SE	Software Engineering 1	3.0	
CS4111	PRC	Practicum (270 Hours)	5.0	
CS4112	THS	CS Thesis Writing 1	3.0	
CS4113	PRC	Human Computer Interaction	1.0	
CS4114	OS	Operating Systems	3.0	
CS4115	SE	Software Engineering 2	3.0	
CS4216	THS	CS Thesis Writing 2	3.0	
CS4217	NC	Networks and Communications	3.0	
Additional Professional Courses (6)			18.0	
CIS211	CIS	CISCO 1 – Network Fundamentals	3.0	
CIS222	CIS	CISCO 2 – Routing Protocols and Concepts	3.0	
CIS313	CIS	CISCO 3 – Switching Basics and Intermediate Routing	3.0	
CIS324	CIS	CISCO 4 – Accessing WAN	3.0	
ACT321	ACT	Principles of Accounting	3.0	
TNP421	TNP	Technopreneurship	3.0	
Professional CS Electives (3)			9.0	
CSE311	CS Elective 1		3.0	
CSE322	CS Elective 2		3.0	
CSE413	CS Elective 3		3.0	
Additional Math Requirement (1)			3.0	
MAT222	MEL	Math Elective – Differential Calculus	3.0	
Literature Course (1)			3.0	
HUM311	HUM	Philippine Popular Culture	3.0	
PE COURSES (4)			8.0	
PE111	PE	Gymnastics and Calisthenics	2.0	
PE122	PE	Indoor Games	2.0	
PE213	PE	Dancing and Rhythmic Activities	2.0	
PE224	PE	Martial Arts	2.0	
NSTP COURSES (2)			6.0	
NSTP1	NSTP	Literacy Training Service 1	3.0	
NSTP2	NSTP	Literacy Training Service 2	3.0	
Total Units			148.0	

Professional CS Electives:

1. *PD - Parallel and Distributed Computing*
2. *SF - System Fundamentals*
3. *IS - Intelligent Systems*
4. *GV - Graphics and Visual Computing*
5. *CS - Computational Science*

Prepared by:

(Signed)

PROF. MANUEL LUIS C. DELOS SANTOS, MSCS

DEAN, Computer Science Department

References: CMO No. 25 Series of 2015, CMO No. 20 Series of 2013 and CMO No. 4 Series of 2018