BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

EFFECTIVE ACADEMIC YEAR 2018-2019

(Updated Program of Study as of Academic Year 2020-2021)

COURSE CODE	COURSE TITLE	HOURS LEC	HOURS LAB	UNITS	PRE-REQUISITE
FIRST YEAR					
FIRST SEMESTER		**18**	**6**	**25**	
CpE131	Computer Engineering as a Discipline	1	0	1	
CpE161	Programming Logic and Design 1	2	3	3	
CHEM131	Chemistry for Engineers, lec	3	0	3	
CHEM181	Chemistry for Engineers, lab	0	3	1	
MATH137	Engineering Calculus 1	3	0	3	
MATH031	Mathematics in the Modern World	3	0	3	
STS031	Science, Technology and Society	3	0	3	
PSYCH031	Understanding the Self	3	0	3	
PE103	Movement Enhancement			2	
NSTP111	National Service Training Program 1			3	
SECOND SEMESTER		**17**	**6**	**24**	
CpE162	Programming Logic and Design 2	2	3	3	CpE161
CpE132	Discrete Mathematics	3	0	3	MATH137
MATH138	Engineering Calculus 2	3	0	3	MATH137
PHYS132	Physics for Engineers, lec	3	0	3	MATH137
PHYS182	Physics for Engineers, lab	0	3	1	MATH137
ENGL031	Purposive Communication	3	0	3	
SOCSCI032	The Contemporary World	3	0	3	
PE104	Fitness Exercises			2	PE103
NSTP112	National Service Training Program 2			3	NSTP111
SECOND YEAR					
FIRST SEMESTER		**20**	**6**	**24**	
CpE261	Object Oriented Programming 1 for CpE	2	3	3	CpE162
MATH237	Differential Equations	3	0	3	MATH138
ES031	Engineering Data Analysis	3	0	3	MATH137
EE231A	Fundamentals of Electrical Circuits, lec	3	0	3	PHYS132
EE281A	Fundamentals of Electrical Circuits, lab	0	3	1	PHYS132
HUM031	Art Appreciation	3	0	3	
GE-CpE1	General Education Elective 1	3	0	3	
PHILO031	Ethics	3	0	3	
PE205	Physical Activities Towards Health and Fitness I			2	PE103
SECOND SEMESTER		**15**	**15**	**22**	
CpE232	Numerical Methods	3	0	3	MATH237
CpE234	Advanced Engineering Mathematics for CpE	3	0	3	MATH237
CpE262	Object Oriented Programming 2 for CpE	1	3	2	CpE261
CpE264	Data Structures and Algorithms for CpE	2	6	4	CpE261
ECE254	Fundamentals of Electronic Circuits, lec	3	0	3	EE231A
ECE204	Fundamentals of Electronic Circuits, lab	0	3	1	EE281A
ES083	Computer-Aided Design and Drafting	0	3	1	
GE-CpE2	General Education Elective 2	3	0	3	
PE206	Physical Activities Towards Health and Fitness II			2	PE103

SUMMER TERM		**5**	**3**	**6**	
CpE330	Operating Systems for CpE	3	0	3	CpE264
CpE340	Modern System Analysis and Design	2	3	3	CpE261
THIRD YEAR					
FIRST SEMESTER		**20**	**12**	**24**	
CpE331	Data and Digital Communications	3	0	3	ECE254, ECE204
CpE333	Basic Occupational Health and Safety	3	0	3	
CpE335	Feedback and Control Systems	3	0	3	CpE234, EE231A, EE281A
CpE361	Logic Circuits and Design	3	3	4	ECE254, ECE204
CpE363	Software Design	3	3	4	CpE264
CpE381	Computer Engineering Drafting and Design	0	3	1	ECE254, ECE204
CpEPE361	Track Course 1	2	3	3	CpE262, CpE264
ES038	Technopreneurship	3	0	3	
SECOND SEMESTER		**19**	**15**	**24**	
CpE334	Methods of Research	3	0	3	ES031, CpE361, ENGL031
CpE336	CpE Laws and Professional Practice	2	0	2	
CpE364	Computer Networks and Security	3	3	4	CpE331
CpE366	Microprocessors	3	3	4	CpE361
CpE368	Fundamentals of Mixed Signals and Sensors	3	3	4	ECE254, CpE361
CpE382	Introduction to HDL	0	3	1	CpE162, ECE254, CpE361
CpEPE362	Track Course 2	2	3	3	CpEPE361
GE-CpE3	General Education Elective 3	3	0	3	
SUMMER TERM		**6**	**0**	**6**	
CpE460	On The Job Training (240 hours)	6	0	6	CpE366, CpE340
FOURTH YEAR					
FIRST SEMESTER		**14**	**21**	**21**	
CpE461	Embedded Systems	3	3	4	CpE366
CpE463	Computer Architecture and Organization	3	3	4	CpE366
CpE465	Digital Signal Processing	3	3	4	CpE335
CpE481	CpE Practice and Design 1	0	6	2	CpE366, CpE334
CpEPE463	Track Course 3	2	3	3	CpEPE362
CpECC481	CpE Comprehensive Evaluation Course 1	0	3	1	4th Year Standing
ES032	Engineering Economics	3	0	3	ES031
SECOND SEMESTER		**14**	**9**	**17**	
CpE432	Emerging Technologies in CpE	3	0	3	CpE363
CpE462	CpE Practice and Design 2	2	6	4	CpE481
CpE482	Seminars and Field Trips	0	3	1	CpE481
ES034	Engineering Management	3	0	3	
SOCSCI031	Readings in Philippine History	3	0	3	
RIZAL031	The Life and Works of Rizal	3	0	3	
GRAND TOTAL		**148**	**93**	**193**	

LIST OF ELECTIVES					
Software Development					
CpEPE361SD	Software Development 1	2	3	3	CpE262, CpE264
CpEPE362SD	Software Development 2	2	3	3	CpEPE361SD
CpEPE463SD	Software Development 3	2	3	3	CpEPE361SD
Embedded System					
CpEPE361ES	Embedded Systems 1	2	3	3	CpE262, CpE264
CpEPE362ES	Embedded Systems 2	2	3	3	CpEPE361ES
CpEPE463ES	Embedded Systems 3	2	3	3	CpEPE361ES
GENERAL EDUCATION ELECTIVES					
ENGL014	Technical Writing/ Communication	3	0	3	
SSP031	Creative Thinking Tools	3	0	3	
ES036	Environmental Science and Engineering	3	0	3	

Software Development					
CpEPE361SD	Software Development 1	2	3	3	CpE262, CpE264
CpEPE362SD	Software Development 2	2	3	3	CpEPE361SD
CpEPE463SD	Software Development 3	2	3	3	CpEPE361SD
Embedded System					
CpEPE361ES	Embedded Systems 1	2	3	3	CpE262, CpE264
CpEPE362ES	Embedded Systems 2	2	3	3	CpEPE361ES
CpEPE463ES	Embedded Systems 3	2	3	3	CpEPE361ES