



2018 CURRICULUM FOR BACHELOR OF SCIENCE IN COMPUTER ENGINEERING (BScpE)

IMPORTANT : REGISTRATION IN ANY COURSE WITHOUT ALL THE PREREQUISITES, CORRECT SEQUENCE AND AUTHORIZED LOAD SHALL NOT BE GIVEN ANY CREDIT REGARDLESS OF THE GRADE OBTAINED.
EVALUATION IS TENTATIVE AND MAY BE REVISED FOR SOME VALID CAUSES OR REASONS OR IF OMISSIONS AND/OR LACK OF UNITS CREDITED BE DISCOVERED LATER.

		Student's Name and Signature					
COURSE CODE		DESCRIPTIVE TITLE				PREREQUISITE(S)	
			Lecture Hours	Laboratory Hours	Credit Units		
FIRST YEAR, FIRST SEMESTER (20 UNITS)							
MATH	018	Calculus 1	3	0	3		
MATH	025	Discrete Mathematics	3	0	3		
CHM	001	Chemistry for Engineers	3	3	4		
CPE	101	Computer Engineering as a Discipline	1	0	1		
CPE	102	Programming Logic and Design	0	6	2		
CPE	103	Computer System Administration and Troubleshooting	0	3	1		
CPE	104	Computer-Aided Drafting	0	3	1		
GEC	001	Understanding the Self	3	0	3		
PE	101	Physical Education 1	2	0	2		
NSTP	001	National Service Training Program 1	(3)	0	(3)		
FIRST YEAR, SECOND SEMESTER (23 UNITS)							
MATH	019	Calculus 2	3	0	3	MATH 018	
TECH	101	Introduction to Engineering Entrepreneurship	3	0	3		
GEM	001	Life and Works of Rizal	3	0	3		
PHYS	111	Calculus-Based Physics	3	3	4		
CPE	105	Object-Oriented Programming	0	6	2	CPE 102	
GEE	001B	GE Elective 1 - Gender and Society	3	0	3		
GEC	006	Art Appreciation	3	0	3		
PE	102	Physical Education 2	2	0	2		
NSTP	002	National Service Training Program 2	(3)	0	(3)	NSTP 001	
SECOND YEAR, FIRST SEMESTER (26 UNITS)							
MATH	021	Differential Equations	3	0	3	MATH 019	
ECE	201A	Fundamentals of Electronic Circuits	3	3	4	PHYS 111	
EE	200D	Fundamentals of Electrical Circuits	3	3	4	PHYS 111	
CPE	200	Data Structures and Algorithms	0	6	2	CPE 105	
CPE	202	Database Management System	0	6	2	CPE 105	
MATH	022B	Linear Algebra with MATLAB	2	3	3	MATH 019, MATH 025	
GEC	004	Mathematics in the Modern World	3	0	3		
GEE	002B	GE Elective 2 - Living in the IT Era	3	0	3		
PE	201	Physical Education 3	2	0	2		
SECOND YEAR, SECOND SEMESTER (26 UNITS)							
MATH	026B	Numerical Methods	3	0	3	MATH 021, MATH 022B	
CPE	203	Logic Circuits and Design	3	3	4	ECE 201A, EE 200D	
ECE	308A	Data and Digital Communications	3	0	3	PHYS 111	
CPE	204	Computer Engineering Drafting and Design	0	3	1	ECE 201A, EE 200D	
CPE	205	Software Design	3	3	4	CPE 200, CPE 202	
CPE	206	Computer Networks 1	2	3	3	CPE 103	
CPEC	202	Cognate/Elective Course 1	2	3	3	See track for pre-requisite(s)	
ME	304A	Engineering Economics	3	0	3		
PE	202	Physical Education 4	2	0	2		
THIRD YEAR, FIRST SEMESTER (26 UNITS)							
CPE	300	Optimization Techniques	3	0	3	MATH 021	
CPE	316	Introduction to HDL	0	3	1	CPE 203	
ECE	309A	Feedback and Control Systems	3	0	3	MATH 026B	
CPE	317	Fundamentals of Mixed Signals and Sensors	3	0	3	ECE 201A	
CPE	306	Computer Networks 2	2	3	3	CPE 206	
CPEC	301	Cognate/Elective Course 2	2	3	3	See track for pre-requisite(s)	
CPE	023	Engineering Data Analysis	3	3	4	MATH 018, MATH 025	
GEE	003B	GE Elective 3 - People and the Earth's Ecosystem	3	0	3		
GEC	003	The Contemporary World	3	0	3		
THIRD YEAR, SECOND SEMESTER (25 UNITS)							
GEC	005	Purposive Communication	3	0	3		
BOSH	101	Basic Occupational Safety and Health	3	0	3	3rd Year Standing	
CPE	309	Methods of Research	2	0	2	CPE 300, CPE 023	
CPE	310	Computer Architecture and Organization	3	3	4	CPE 316	
CPE	311	Operating Systems	3	0	3	CPE 205	
CPEC	302	Cognate/Elective Course 3	2	3	3	See track for pre-requisite(s)	
CPE	314	Computer Networks 3	2	3	3	CPE 306	
GEC	008	Ethics	3	0	3		
CPE	318	Computer System Performance Evaluation	0	3	1	CPE 023	

NO STUDENT SHALL BE ALLOWED TO TAKE FOURTH YEAR PROFESSIONAL COURSES UNLESS HE HAS COMPLETED THE BASIC AND THE THIRD YEAR COURSES INCLUDING PE AND NSTP.

COURSE CODE	DESCRIPTIVE TITLE				PREREQUISITE(S)
		Lecture Hours	Laboratory Hours	Credit Units	
FOURTH YEAR, SUMMER (7 UNITS)					
CPE 410	Introduction to Intellectual Property	0	3	1	3rd Year Standing
CPE 408	Emerging Technologies in CpE	2	3	3	3rd Year Standing
CPE 409	Seminars and Field Trips	0	3	1	3rd Year Standing
CPE 308	CpE Laws and Professional Practice	2	0	2	3rd Year Standing
FOURTH YEAR, FIRST SEMESTER (24 UNITS)					
CPE 400	Embedded Systems	3	3	4	CPE 310
CPE 405	Microprocessors	3	3	4	CPE 310
CPE 406	CpE Design 1	2	3	3	CPE 309
CPE 416	Digital Signal Processing and Application	3	3	4	MATH 026B
CPE 407	Computer Networks Design	2	3	3	CPE 314
GEC 002	Readings in Philippine History	3	0	3	
GEC 007	Science, Technology and Society	3	0	3	
FOURTH YEAR, SECOND SEMESTER (6 UNITS)					
CPE 413	CpE Design 2	1	6	3	Graduating
CPE 414	On-the-Job Training for Computer Engineering	3	240	3	4th Year Standing
ELECTIVE COURSES					
NOTE: A STUDENT MAY CHOOSE ANY OF THE TRACK ELECTIVES BELOW AND ONCE A TRACK ELECTIVE IS CHOSEN, ALL COURSES IN THE TRACK MUST BE TAKEN.					
Track Elective 1: Systems Administration					
CPE 207	System Administration Fundamentals	2	3	3	CPE 206 (C)
CPE 307	Managing Enterprise Servers	2	3	3	CPE 207
CPE 312	Enterprise Security	2	3	3	CPE 307
Track Elective 2: Cybersecurity					
CPE 209	Fundamentals of Cybersecurity	2	3	3	CPE 206 (C)
CPE 320	Computer Security Management	2	3	3	CPE 209
CPE 315	Forensics of Cybersecurity	2	3	3	CPE 320
Track Elective 3: Robotics					
CPE 331A	Principles of Robotics	2	3	3	CPE 203 (C)
CPE 332	Programming Robots	2	3	3	CPE 331A
CPE 343	Robot Design	2	3	3	CPE 332
Track Elective 4: Technopreneurship					
TECH 102	Technopreneurship 2	3	0	3	ME 304A, TECH 101
TECH 103	Technopreneurship 3	3	0	3	TECH 102
TECH 104	Technopreneurship 4	2	3	3	TECH 103
Track Elective 5: Data Science					
COE 003	Computational Thinking with Phyton	2	3	3	CPE 200
COE 004	Inferential Thinking by Resampling	2	3	3	COE 003
COE 005	Prediction and Machine Learning	2	3	3	COE 004
Track Elective 6: Railway Engineering					
RWE 001	Introduction to Railway Systems and Engineering	3	0	3	
RWE 002A	Railway Management and Governance and Operations	3	0	3	RWE 001
RWE 003A	Advanced Topic on Railway Engineering	3	0	3	RWE 002A
TOTAL NO. OF UNITS					189

CREDENTIALS SUBMITTED:

- () F138 () PSA Birth Certificate
 () GMC () Transfer Credential
 () F137A () TOR

DEFICIENCY/IES

Evaluated by: _____

Date: _____

Received by: _____

Date: _____