# BACHELOR OF SCIENCE IN COMPUTER ENGINEERING Per CMO No. 87, series of 2017

# Effective School Year 2018-2019

# FIRST YEAR

First Semester						
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.	
ENM 131	Engineering Calculus I	3		3		
EPS 131	Chemistry for Engineers	3	3	4		
ENS 131	Computer Eng'g as Discipline (Eng'g Orientation)	2		2		
COE 131	Programming Logic & Design		6	2		
GE 1	Understanding the Self	3		3		
GE 2	Readings in Philippine History	3		3		
GE 3	The Contemporary World	3		3		
PE 1	Physical Fitness and Health	2		2		
NSTP 1	National Training Service Program 1	3		3		
	TOTAL	22	9	25		
*ENM 011	Algebra 1	2		2		
*ENM 012	Plane & Spherical Trigonometry	2		2		

Second Semester						
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.	
ENM 141	Engineering Calculus 2	3		3	ENM 131	
EPS 141	Physics for Engineers	3	3	4	ENM 131	
COE141	Object Oriented Programming		6	2	ENM 131	
COE 142	Discrete Mathematics	3		3	COE 131	
GE 4	Mathematics in the Modern World	3		3		
GE 5	Purposive Communication	3		3		
GE 6	Art Appreciation	3		3		
PE 2	Recreational Games and Sports	2		2		
NSTP 2	National Training Service Program 2	3		3		
	TOTAL	23	9	26		
*ENM 021	Algebra 2	2		2		
*ENM 022	Analytic Geometry w/ Solid Mensuration	2		2		

# SECOND YEAR

	First Semester				
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENM 231	Differential Equations	3		3	ENM141
ENS 232	Computer-Aided Design	1	3	2	
ENS 233	Environmental Science & Eng'g.	3		3	2nd yr standing
COE 231	Data Structures & Algorithms		6	2	COE 141
EE 231	Fundamentals Electrical Circuits 1	3	3	4	EPS 141
GE 7	Science Technology & Society	3		3	
GE 8	Ethics	3		3	
FIL 1	Akademiko sa Wikang Filipino	3		3	
PE 3	Rhythmic and Social Recreation	2		2	
	TOTAL	21	12	25	

Second Semester						
Subject	Descriptive Title	Lec	Lab	Tota	Pre-req.	
ENM 241	Engineering Data Analysis	3		3	2nd yr standing	
ENS 243	Technopreneurship	3		3	2nd yr standing	
COE 241	Software Design	3	3	4	COE 231	
COE 242	Operating Systems	3		3	COE 231	
ECE 241	Fundamentals Electronic Circuits	3	3	4	EE 231	
FIL 2	Pagbasa at Pagsulat sa Iba't Ibang Disiplina	3		3		
PE 4	Cultural Presentation & Sports Management	2		2		
	TOTAL	20	6	22		

#### THIRD YEAR

First Semester							
Subject	Descriptive Title	Lec	Lab	Tota	Pre-req.		
ENM 331	Numerical Methods & Analysis	3	3	4	ENM 231		
ENS 331	Engineering Economics	3		3	3rd yr standing		
COE 331	Data & Digital Communications	3		3	ECE241		
COE 332	Logic Circuits & Designs	3	3	4	ECE 241, COE 142		
COE 333	Introduction to HDL		3	1	ECE 241,COE 131		
COE 334	Fundamentals of Mixed Signals & Sensors	3		3	ECE 241		
COE 335	Computer Engineering Drafting and Design		3	1	ECE 241, ENS 232		
COE 336	COE Elective 1 (Software Dev. 1)	3		3	3rd yr standing		
	TOTAL	18	12	22			

Second Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENS 343	Engineering Management	3		3	3rd yr standing
COE 342	Computer Network & Security	3	3	4	COE 331
COE 343	Microprocessors	3	3	4	COE 332
COE 344	Feedback Control Systems	3	3	4	EE 211, ENM 311
COE 345	COE Elective 2 (Software Dev. 2)	3		3	3rd yr standing
COE 346	Methods of Research	3		3	ENM 241, GE 5
LIT 2	Management of Engieering Projects	3		3	
	TOTAL	21	9	24	

#### Summer

Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
COE 400	On-the-Job Training 300 hours	3	300	5	Completed all 3rd year Major Subjects

# FOURTH YEAR

First Semester						
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.	
COE 431	COE Project Proposal	1	3	2	COE 400	
COE 432	Embedded Systems	3	3	4	COE 343	
COE 433	Computer Achitecture and Organization	3	3	4	COE 343	
COE 434	Emerging Technologies in COE	3		3	COE 345	
COE 435	Digital Signal Processing	3	3	4	COE 344	
COE 436	COE Elective 3 (System & Network Admin)	3		3	4th yr standing	
GE 9	Life & Works of Rizal	3		3		
	TOTAL	19	12	23		

Second Semester						
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.	
ENS 441	Occupational Safety & Health	3		3	4th yr standing	
COE 441	COE Project Study		6	2	4th yr standing	
COE 442	COE Laws, Contracts, Ethics, Codes & Standards	3		3	EE 431	
COE 443	Seminars & Field Trips		3	1	EE 432	
	TOTAL	6	9	9	4th yr standing	

# Summary:

NON TECHNICAL	50
General Education:	24 7
GE Elective/Mandated:	12
Physical Education:	8
NSTP:	6 ]
TECHNICAL	131
Mathematics	12 <sub>7</sub>
Natural/Physical Sciences	8
Engineering Sciences	8
Allied Courses:	13
Professional Courses	81
Elective Courses	9 ]
Total	181
With Enhancement	8
Total	189

<sup>\*</sup> Enhancement courses for NON-STEM Senior High Graduates