



# President Ramon Magsaysay State University

Iba, Zambales

## COLLEGE OF ENGINEERING

### BACHELOR OF SCIENCE IN COMPUTER ENGINEERING (BSCpE)

#### 2018 Curriculum

Reference: CMO No. 87 series 2017, PSG for the Bachelor of Science in Computer Engineering



FIRST YEAR - 1 <sup>ST</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
GEC1	Understanding the Self	3	0	3	None	None
GEC4	Mathematics in the Modern World	3	0	3	None	None
GEE4	Living in the IT Era	3	0	3	None	None
RLN1	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	None	None
MIN1	Calculus I	3	0	3	None	None
Chem1	Chemistry for Engineers	3	3	4	None	None
QpE111	Computer Engineering as a Discipline	1	0	1	None	None
PEN1	Fitness and Recreational Outdoor Activities	2	0	2	None	None
NSIP1	National Service Training Program	3	0	3	None	None
<b>TOTAL</b>				<b>25</b>		

FIRST YEAR - 2 <sup>ND</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
GEC3	The Contemporary World	3	0	3	None	None
GEC5	Purposive Communication	3	0	3	None	None
RLN2	Sosyedad at Literatura/Panitikang Panlipunan	3	0	3	RLN1	None
MIN2	Calculus II	3	0	3	MIN1	None
QpE121	Discrete Mathematics	3	0	3	MIN1	None
Phys1	Physics for Engineers	3	3	4	None	None
QpE122	Programming Logic and Design	0	6	2	None	None
PEN2	Philippine Folkdances	2	0	2	PEN1	None
NSIP2	National Service Training Program	3	0	3	NSIP1	None
<b>TOTAL</b>				<b>26</b>		

FIRST YEAR - MID-YEAR CLASS (for BRIDGING only)						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
Bridging 101	Fundamentals of Comp. Prog/g Using C/C++ and VB	2	3	3	None	None
Bridging 102	PC Hardware Servicing	2	3	3	None	None
<b>TOTAL</b>				<b>6</b>		

SECOND YEAR - 1 <sup>ST</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
EN1	Scientific and Technical Writing	3	0	3	None	None
GEC6	Art Appreciation	3	0	3	None	None
MIN4	Differential Equations	3	0	3	MIN2	None
MIN5	Engineering Data Analysis	3	0	3	MIN1	None
ES211	Engineering Economics	3	0	3	2nd Year Standing	None
ES212	Computer Aided Drafting	0	3	1	2nd Year Standing	None
EE211	Fundamentals of Electrical Circuits	3	3	4	Phys1	None
QpE211	Object Oriented Programming	0	6	2	QpE122	None
PEN3	Individual and Dual Sports	2	0	2	PEN1	None
<b>TOTAL</b>				<b>24</b>		

SECOND YEAR - 2 <sup>ND</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
EN2	Critical Thinking and Composition	3	0	3	EN1	None
GEC2	Readings in Philippine History	3	0	3	None	None
GEC7	Science, Technology and Society	3	0	3	None	None
GEC8	Ethics	3	0	3	None	None
ES221	Engineering Management	3	0	3	2nd Year Standing	None
EE221	Fundamentals of Electronic Circuits	3	3	4	EE211	None
QpE221	Numerical Methods	3	0	3	MIN4	None
QpE222	Data Structure and Algorithm	0	6	2	QpE211	None
PEN4	Team Sports	2	0	2	PEN1	None
<b>TOTAL</b>				<b>26</b>		

THIRD YEAR - 1 <sup>ST</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
QpE311	Software Design	3	3	4	QpE222	None
QpE312	Logic Circuit and Design	3	3	4	EE221	None
QpE313	Data and Digital Communications	3	0	3	EE221	None
QpE314	Introduction to HDL	0	3	1	QpE122, EE221	None
QpE315	Feedback and Control Systems	3	0	3	QpE221, EE211	None
QpE316	Fundamental of Mixed Signals and Sensors	3	0	3	EE221	None
QpE317	Computer Engineering Drafting and Design	0	3	1	EE221	None
Elec1	Technical Elective I			3	3rd Year Standing	None
<b>TOTAL</b>				<b>22</b>		

THIRD YEAR - 2 <sup>ND</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
GEE7	Gender and Society	3	0	3	None	None
GEE10	Philippine Popular Culture	3	0	3	None	None
ES321	Technopreneurship	3	0	3	3rd Year Standing	None
QpE321	Method of Research	2	0	2	GEC4, MIN5, QpE312	None
QpE322	Computer Networks and Security	3	3	4	QpE313	None
QpE323	Microprocessor Systems	3	3	4	QpE312	None
QpE324	QpE Laws and Professional Practices	2	0	2	3rd Year Standing	None
Elec2	Technical Elective II			3	3rd Year Standing	None
<b>TOTAL</b>				<b>24</b>		

THIRD YEAR - MID YEAR CLASS						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
OUT-QpE	On-the-Job Training	240 hrs		3	3rd Year Standing	None
<b>TOTAL</b>				<b>3</b>		

FOURTH YEAR - 1 <sup>ST</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
GEM	The Life and Works of Rizal	3	0	3	None	None
QpE411	QpE Practice and Design I	0	3	1	QpE321, QpE323	None
QpE412	Embedded System	3	3	4	QpE323	None
QpE413	Computer Architecture and Organization	3	3	4	QpE323	None
QpE414	Digital Signal Processing	3	3	4	QpE315	None
QpE415	Operating System	3	0	3	QpE222	None
Elec3	Technical Elective III			3	4th Year Standing	None
<b>TOTAL</b>				<b>22</b>		

FOURTH YEAR - 2 <sup>ND</sup> SEMESTER						
Course Code	Course Description	Hours		Units	Pre-requisites	Co-requisites
		Lec	Lab			
QpE421	QpE Practice and Design II	0	6	2	QpE411	None
QpE422	Seminars and Field Trips	0	3	1	4th Year Standing	None
QpE423	Basic Occupational Health and Safety	3	0	3	4th Year Standing	None
QpE424	Emerging Technologies in QpE	3	0	3	4th Year Standing	None
<b>TOTAL</b>				<b>9</b>		

\*The nth Year Standing means that the student shall have completed atleast 75% of the load requirements of the previous year level

\*Pre-requisite subjects with a grade of INC must be completed first before taking the succeeding subject

**TOTAL: 187 UNITS**

Suggested Electives

Track 1: Microelectronics

Track 2: Software Development

Track 3: System and Network Administration