



**College of Engineering**  
 Main, Banilad, Lapu-Lapu Mandaue  
**Bachelor of Science in Computer Engineering (BSCPE)**  
 CMO No. 87, Series of 2017  
 Effective School Year 2024-2025

Name: \_\_\_\_\_  
 ID Number: \_\_\_\_\_

Date Started/First Enrolled: \_\_\_\_\_  
 Expected Date of Graduation: \_\_\_\_\_

**FIRST YEAR**

1st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	ENGL 101	Purposive Communication	3	0	3	
	SOCIO 101	The Contemporary World	3	0	3	
	MATH 100E	College Mathematics	3	0	3	
	MATH 101E	Mathematics in the Modern World	3	0	3	
	BES 101	Engineering Drawing	0	1	1	
	EMATH 111	Calculus 1	3	0	3	EBR 101 (For Non-Stem Only)
	CHEM 111	Chemistry for Engineers	3	1	4	EBR 102 (For Non-Stem Only)
	CPE 111B	Computer Engineering as a Discipline	0	1	1	
	CPE 112B	Programming Logic and Design 1	0	2	2	
	PE 101	Movement Competency Training (PATHFit 1)	2	0	2	
	NSTP 101	National Service Training Program 1	3	0	3	
	<b>Total</b>				<b>28</b>	
2nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	PHILO 101	Ethics	3	0	3	
	SOCIO 102	Gender and Society	3	0	3	SOCIO 101
	STS 101	Science, Technology and Society	3	0	3	
	EMATH 121	Calculus 2	3	0	3	EMATH 111
	PHYS 121	Physics for Engineers	3	1	4	EMATH 111, EBR 103 (For Non-Stem Only)
	BES 102A	Computer-Aided Drafting	0	1	1	BES 101
	CPE 121B	Programming Logic and Design 2	0	2	2	CPE 112B
	PE 102	Exercised-based Fitness Activities (PATHFit 2)	2	0	2	PE 101
	NSTP 102	National Service Training Program 2	3	0	3	NSTP 101
<b>Total</b>				<b>24</b>		

**Engineering Bridging Courses for Non-STEM:**

EBR 101 – Pre-Calculus	3	0	3
EBR 102 – General Chemistry	2	1	3
EBR 103 – General Physics	2	1	3

**SECOND YEAR**

1st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	PSYCH 101	Understanding the Self	3	0	3	
	HUM 101	Art Appreciation	3	0	3	
	HIST 101	Readings in Philippine History	3	0	3	
	ST 101B	Living in the IT Era	2	1	3	CPE 111B
	EMATH 211	Differential Equations	3	0	3	EMATH 121
	BES 104	Engineering Economics	3	0	3	
	EE 211A	Fundamentals of Electrical Circuits	3	1	4	EMATH 121, PHYS 121
	CPE 211	Object Oriented Programming	0	2	2	CPE 121B
	CPE 212A	Cisco Certified Network Associate 1	0	2	2	ST 101B
PE 103	Sports and Dance (PATHFit 3)	2	0	2	PE 101, PE 102	
<b>Total</b>				<b>28</b>		
2nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	RIZAL 101	Life and Works of Dr. Jose Rizal	3	0	3	
	LIT 101	Literature of the World	3	0	3	
	EMATH 122	Engineering Data Analysis	3	0	3	EMATH 111
	EMATH 221A	Numerical Methods	2	1	3	EMATH 211
	ECE 212B	Fundamentals of Electronic Circuits	3	1	4	EE 211A
	CPE 221	Data Structures and Algorithms	0	2	2	CPE 211
	CPE 222A	Cisco Certified Network Associate 2	0	2	2	CPE 212A
PE 104	Sports, Outdoor & Adventure Activities (PATHFit 4)	2	0	2	PE 101, PE 102	
<b>Total</b>				<b>22</b>		

**THIRD YEAR**

	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
1 <sup>st</sup> Semester	TECHNO 101	Technopreneurship	3	0	3	
	EMATH 124	Discrete Mathematics	3	0	3	EMATH 111
	CPE 311	Logic Circuits and Design	3	1	4	ECE 212B
	CPE 312A	Operating Systems	2	1	3	CPE 211
	CPE 313A	Cisco Certified Network Associate 3	0	2	2	CPE 222A
	CPE 314	Software Design	3	1	4	CPE 221
	CPE 315	Computer Engineering Drafting and Design	0	1	1	ECE 212B
	CPE 316	Data and Digital Communications	3	0	3	ECE 212B, CPE 212A
	<b>Total</b>					<b>23</b>
2 <sup>nd</sup> Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	BES 105	Basic Occupational Safety and Health	3	0	3	CPE 311, CPE 316
	BES 107B	Engineering Management	3	0	3	
	ECE 323A	Feedback and Control Systems	3	0	3	EMATH 221A, EE 211A
	RES 101	Methods of Research	3	0	3	EMATH 122, ENGL 101, CPE 311
	CPE 320	Introduction to HDL	0	1	1	CPE 121B, ECE 212B
	CPE 321	Fundamentals of Mixed Signals and Sensors	3	0	3	ECE 212B
	CPE 322	Microprocessors	3	1	4	CPE 311
	CPE EL 1	CPE Cognate/Elective 1	2	1	3	CPE 314
<b>Total</b>					<b>23</b>	
Summer	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	CPE 331	On-The-Job Training	3	1	4	CPE 322, BES 105, BES 107B
<b>Total</b>					<b>4</b>	

**FOURTH YEAR**

	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
1 <sup>st</sup> Semester	CPE 411	Embedded Systems	3	1	4	CPE 322
	CPE 412	Computer Architecture and Organization	3	1	4	CPE 322
	CPE 413	CPE Practice and Design 1	0	1	1	CPE 322, RES 101
	CPE 414	Computer Networks and Security	3	1	4	CPE 313A
	CPE 415	Digital Signal Processing	3	1	4	ECE 323A
	CPE EC 1	Enhancement Course 1	0	1	1	CPE EL 1
	CPE EL 2	CPE Cognate/Elective 2	2	1	3	CPE EL 1
	<b>Total</b>					<b>21</b>
2 <sup>nd</sup> Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	CPE 421	CPE Practice and Design 2	0	2	2	CPE 413
	CPE 422	Emerging Technologies in CPE	3	0	3	CPE 331
	CPE 423	Seminars and Fieldtrips	0	1	1	CPE 331
	CPE 424	CPE Laws and Professional Practice	3	0	3	CPE 331, CPE 413
	CPE 425A	Systems Analysis and Design	0	1	1	CPE 211, CPE 221
	CPE EL 3	CPE Cognate/Elective 3	2	1	3	CPE EL 2
<b>Total</b>					<b>14</b>	

**I. TECHNICAL COURSES:**

A. Mathematics	12	units
B. Natural/Physical Sciences	8	units
C. Basic Engineering Sciences	7	units
D. Allied Courses	8	units
E. Professional Courses	77	units
F. Electives	9	units
<b>SUB-TOTAL</b>	<b>121</b>	<b>units</b>

**SUGGESTED ELECTIVE/COGNATE COURSES:**

- A. Microelectronics
- B. Software Development
- C. Systems & Network Administration

**II. NON-TECHNICAL COURSES:**

A. General Education Courses	50	units
<b>SUB-TOTAL</b>	<b>50</b>	<b>units</b>

**III. INSTITUTIONAL, ENGINEERING BRIDGING & OTHER COURSES:**

A. Institutional Course	3	units
B. Engineering Bridging Courses	9	units
C. Other Courses	13	units
<b>SUB-TOTAL</b>	<b>25</b>	<b>units</b>

**GRAND TOTAL: 187 units (STEM Enrollees)**  
**GRAND TOTAL: 196 units (Non-STEM Enrollees)**

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