#### **UNIVERSITY OF SAN CARLOS**

# BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BS ECE) EFFECTIVE YEAR 2018

			YEAR LEVEL: 1 1ST SEMEST		
#	COURSE CODE	COURSE DESCRIPTION	UNITS PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS
1	CHEM 1103	CHEMISTRY FOR ENGINEERS	3.0	CHEM 1103L	
2	CHEM 1103L	CHEMISTRY FOR ENGINEERS LABORATORY	1.0	CHEM 1103	
3	ECE 1100L	ELECTRONICS TECHNOLOGY	1.0		
4	ECEA 1101L	COMPUTER PROGRAMMING 1	1.0		
5	EM 1101	CALCULUS 1	3.0		
6	GE-MMW	MATHEMATICS IN THE MODERN WORLD	3.0		
7	GE-PC	PURPOSIVE COMMUNICATION	3.0		
8	GE-TCW	CONTEMPORARY WORLD	3.0		
9	GE-UTS	UNDERSTANDING THE SELF	3.0		
10	NSTP 1	NATIONAL SERVICE TRAINING PROGRAM 1	3.0		
11	TPE 1101	PATH-FIT 1 - MOVEMENT ENHANCEMENT	2.0		

Total Units: 26.0

			YEAR LEVEL: 1 2ND SEMES	TER	
#	COURSE CODE	COURSE DESCRIPTION	UNITS PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS

1	ECEA 1202L	COMPUTER PROGRAMMING 2	1.0	ECEA 1101L	
2	EDM 1	THE CAROLINIAN MISSIONARY	3.0		
3	EM 1202	CALCULUS 2	3.0	EM 1101	
4	EM 1203	ENGINEERING DATA ANALYSIS	3.0	EM 1101	
5	GE-ETHICS	ETHICS	3.0		
6	GE-STS	SCIENCE, TECHNOLOGY AND SOCIETY	3.0		
7	NSTP 2	NATIONAL SERVICE TRAINING PROGRAM 2	3.0	NSTP 1	
8	PHYS 1235	PHYSICS FOR ENGINEERS	3.0	EM 1101	PHYS 1235L, EM 1202
9	PHYS 1235L	PHYSICS FOR ENGINEERS LABORATORY	1.0		PHYS 1235
10	PHYS 1236	PHYSICS 2	3.0	EM 1101	PHYS 1235, PHYS 1236L
11	PHYS 1236L	PHYSICS 2 LABORATORY	1.0		PHYS 1236
12	TPE 1202	PATH-FIT II - FITNESS EXERCISES	2.0	TPE 1101	

Total Units: 29.0

## BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BS ECE) EFFECTIVE YEAR 2018

#	COLIDSE CODE	COLIDSE DESCRIPTION		EVEL: 2 1ST SEMEST		EQUIVALENTS
#	COURSE CODE	COURSE DESCRIPTION	ONIIS	PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS
1	ECE 2101	ELECTRONIC DEVICES AND CIRCUITS	3.0	EM 1202, ECE 1100L, PHYS 1236	EE 2101, ECE 2101L	
2	ECE 2101L	ELECTRONIC DEVICES AND CIRCUITS LABORATORY	1.0	EM 1202, ECE 1100L, PHYS 1236	EE 2101, ECE 2101	EEA 2206L
3	EDM 2	THE MISSION OF PROPHETIC DIALOGUE	3.0	EDM 1		
4	EE 2101	CIRCUITS 1	3.0	EM 1202, ECE 1100L, PHYS 1236	EE 2101L	
5	EE 2101L	CIRCUITS 1 LABORATORY	1.0	EM 1202, ECE 1100L, PHYS 1236	EE 2101	
6	EM-DEEE	DIFFERENTIAL EQUATIONS WITH EEE APPLICATIONS	3.0	EM 1202		
7	ES-CAD	COMPUTER-AIDED DRAFTING	1.0			
8	ES-ECON	ENGINEERING ECONOMICS	3.0	EM 1203		
9	GE-FREELEC 1	GENERAL EDUCATION FREE ELECTIVES 1	3.0			FEL OMDL, GE-FEL ISE, GE-FEL LSC, GE-FEL CCC, GE-FEL EO, GE-FEL HLT, GE-FEL EC, GE-FEL WW, GE-FEL TIMI3DP, GE-FEL RME, GE-FEL SISJPS, GE-FEL KSD, GE-FEL EOT, GE-FEL TIL, GE-FEL MDW, GE-FEL CCT, GE-FEL TIL, GE-FEL MDW, GE-FEL IMW, GE-FEL LTAR, GE-FEL CCW, GE-FEL IMW, GE-FEL ED, GE-FEL TIL, GE-FEL EW-AYG, GE-FEL BOIT, GE-FEL ET, GE-FEL HAFH, GE-FEL ET, GE-FEL BEMF, GE-FEL INVEST101, GE-FEL HPPE, GE-FEL BNBCBW, GE-FEL ACE, GE-FEL DP101, GE-FEL AMSR, GE-FEL DWIADS, GE-FEL SP, GE-FEL MDKWST, GE-FEL TP, GE-FEL TPDD, GE-FEL SM, GE-FEL PAWC, GE-FEL TPD, GE-FEL SA, GE-FEL HR101, GE-FEL ULP, GE-FEL SA, GE-FEL HR101, GE-FEL NC, GE-FEL HWB, GE-FEL FP, GE-FEL ESUR, GE-FEL HWB, GE-FEL FP, GE-FEL ESUR, GE-FEL HWB, GE-FEL FP, GE-FEL ESUR, GE-FEL WCB101, GE-FEL TCDP, GE-FEL TAPOD, GE-FEL RSAPE, GE-FEL WPWRFTP, GE-FEL HCAT, GE-FEL PH, GE-FEL CUEAFP, GE-FEL PWL
10	GE-FREELEC 2	GENERAL EDUCATION FREE ELECTIVES 2	3.0			GE-FEL US, GE-FEL ITCCD, GE-FEL EL, GE-FEL OMDL, GE-FEL ISE, GE-FEL LSC, GE-FEL CCC, GE-FEL EO, GE-FEL HLT, GE-FEL EC, GE-FEL WW, GE-FEL TIMI3DP, GE-FEL RME, GE-FEL SISJPS, GE-FEL LKSD, GE-FEL EOT, GE-FEL SISJPS, GE-FEL LKSD, GE-FEL EOT, GE-FEL TFL, GE-FEL MDW, GE-FEL LTAR, GE-FEL CCW, GE-FEL IMW, GE-FEL LTAR, GE-FEL TIL, GE-FEL EW-AYG, GE-FEL EIOT, GE-FEL TIL, GE-FEL EW-AYG, GE-FEL HAFH, GE-FEL EEL, GE-FEL BEMF, GE-FEL INVEST101, GE-FEL HPPE, GE-FEL BNBCBW, GE-FEL ACE, GE-FEL DP101, GE-FEL AMSR, GE-FEL DWIADS, GE-FEL SP, GE-FEL MDKWST, GE-FEL TP, GE-FEL TPDD, GE-FEL JSM, GE-FEL TP, GE-FEL TPDD, GE-FEL SA, GE-FEL PAWC, GE-FEL TPD, GE-FEL SA, GE-FEL PAWC, GE-FEL NLP, GE-FEL MH-TBCY, GE-FEL AFVC, GE-FEL HWB, GE-FEL P, GE-FEL ESUR, GE-FEL HWB, GE-FEL LFBBB101, GE-FEL TCDP, GE-FEL TAPOD, GE-FEL RSAPE, GE-FEL WPWRFTP, GE-FEL HCAT, GE-FEL PH, GE-FEL HE, GE-FEL CTPT
11	GE-RPH	READINGS IN PHILIPPINE HISTORY	3.0			, ,
	TPE 2103	PATH-FIT III - MOVEMENT EDUCATION	2.0	TPE 1202		
		1 Total Units:				

Total Units: 29.0

#### BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BS ECE) EFFECTIVE YEAR 2018

			YEAR LE	VEL: 2 2ND SEMEST	ER	
#	COURSE CODE	COURSE DESCRIPTION	UNITS	PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS
1	ECE 2202	ADVANCED ENGINEERING MATHEMATICS FOR ECE	3.0	EM-DEEE	ECE 2202L	
2	ECE 2202L	ADVANCED ENGINEERING MATHEMATICS FOR ECE LABORATORY	1.0	EM-DEEE	ECE 2202	
3	ECE 2203	ELECTRONIC CIRCUIT ANALYSIS AND DESIGN 1	3.0	EE 2101, ECE 2101, EE 2101L, ECE 2101L	ECE 2203L	
4	ECE 2203L	ELECTRONIC CIRCUIT ANALYSIS AND DESIGN 1 LABORATORY	1.0	EE 2101, ECE 2101, EE 2101L, ECE 2101L	ECE 2203	
5	ECE 2204	PRINCIPLES OF COMMUNICATIONS SYSTEMS	3.0	EE 2101, ECE 2101, EE 2101L, ECE 2101L	ECE 2204L	
6	ECE 2204L	PRINCIPLES OF COMMUNICATIONS SYSTEMS LABORATORY	1.0	EE 2101, ECE 2101, EE 2101L, ECE 2101L	ECE 2204	
7	ECE 2205	ELECTROMAGNETICS	4.0	EM-DEEE		
8	ECEA 2203	ENVIRONMENTAL SCIENCE AND ENGINEERING	3.0	CHEM 1103		
9	EE 2202A	CIRCUITS 2 FOR ECE	3.0	EE 2101, EE 2101L	EE 2202AL	
10	EE 2202AL	CIRCUITS 2 FOR ECE LABORATORY	1.0	EE 2101, EE 2101L	EE 2202A	
11	TPE 2204	PATH-FIT IV - MOVEMENT EDUCATION 2	2.0	TPE 1202		

Total Units: 25.0

#	COURSE CODE	COURSE DESCRIPTION	UNITS	PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS
1	ECE 3106	LOGIC CIRCUITS AND SWITCHING THEORY	3.0	ECE 2101, ECE 2101L	ECE 3106L	
2	ECE 3106L	LOGIC CIRCUITS AND SWITCHING THEORY LABORATORY	1.0	ECE 2101, ECE 2101L	ECE 3106	
3	ECE 3107	SIGNAL, SPECTRA AND SIGNAL PROCESSING	3.0	ECE 2202, ECEA 1202L, ECE 2202L, EE 2202A, EE 2202AL	ECE 3107L	
4	ECE 3107L	SIGNAL, SPECTRA AND SIGNAL PROCESSING LABORATORY	1.0	ECE 2202, ECEA 1202L, ECE 2202L, EE 2202A, EE 2202AL	ECE 3107	
5	ECE 3108L	ELECTRONIC CIRCUIT ANALYSIS AND DESIGN 2	1.0	ECE 2203, ECE 2203L		
6	ECE 3109	MODULATION AND CODING TECHNIQUES	3.0	ECE 2204, ECE 2204L	ECE 3109L	
7	ECE 3109L	MODULATION AND CODING TECHNIQUES LABORATORY	1.0	ECE 2204, ECE 2204L	ECE 3109	
8	ECEA 3104	MATERIAL SCIENCE AND ENGINEERING	3.0	CHEM 1103, PHYS 1235		
9	ES-MGMT	ENGINEERING MANAGEMENT	2.0	ES-ECON		
10	ES-TECHPRE	TECHNOPRENEURSHIP	3.0			
						GE-FEL US, GE-FEL ITCCD, GE-FEL EL, GE-

YEAR LEVEL: 3 1ST SEMESTER

11 GE-FREELEC 3 GENERAL EDUCATION FREE ELECTIVES 3.0

FEL OMDL, GE-FEL ISE, GE-FEL LSC, GE-FEL CCC, GE-FEL EO, GE-FEL HLT, GE-FEL EC, GE-FEL WW, GE-FEL TIMI3DP, GE-FEL RME, GE-FEL SISJPS, GE-FEL LKSD, GE-FEL EOT, GE-FEL TFL, GE-FEL MDW, GE-FEL CLCT, GE-FEL LTAR, GE-FEL CCW, GE-FEL IMW, GE-FEL BCIED, GE-FEL TIL, GE-FEL EW-AYG, GE-FEL EIOT, GE-FEL LTSO, GE-FEL TS, GE-FEL HAFH, GE-FEL EEL, GE-FEL BEMF, GE-FEL INVEST101, GE-FEL HPPE, GE-FEL BNBCBW, GE-FEL ACE, GE-FEL DP101, GE-FEL AMSR, GE-FEL DWIADS, GE-FEL SP, GE-FEL MDKWST, GE-FEL TP, GE-FEL TPDD, GE-FEL JSM, GE-FEL CEHDES, GE-FEL PTGMP, GE-FEL PAWC, GE-FEL ULP, GE-FEL SA, GE-FEL HR101, GE-FEL RC, GE-FEL MH-TBCY, GE-FEL AFVC, GE-FEL HWB, GE-FEL EP, GE-FEL ESUR, GE-FEL MCB101, GE-FEL LFBBB101, GE-FEL TCDP, GE-FEL TAPOD, GE-FEL RSAPE, GE-FEL WPWRFTP, GE-FEL HCAT, GE-FEL PH, GE-FEL HE, GE-FEL CTPT

Total Units: 24.0

## BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BS ECE) EFFECTIVE YEAR 2018

			YEAR LEVEL: 3 2ND SEMESTER				
#	COURSE CODE	COURSE DESCRIPTION	UNITS	PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS	
1	ECE 3210	METHODS OF RESEARCH	3.0	GE-PC			
2	ECE 3211	FEEDBACK AND CONTROL SYSTEMS	3.0	ECE 2202, ECE 3108L, ECE 2202L	ECE 3211L		
3	ECE 3211L	FEEDBACK AND CONTROL SYSTEMS LABORATORY	1.0	ECE 2202, ECE 3108L, ECE 2202L	ECE 3211		
4	ECE 3212	MICROPROCESSOR AND MICROCONTROLLER SYSTEMS AND DESIGN	3.0	ECE 3106, ECE 3106L	ECE 3212L		
5	ECE 3212L	MICROPROCESSOR AND MICROCONTROLLER SYSTEMS AND DESIGN LABORATORY	1.0	ECE 3106, ECE 3106L	ECE 3212		
6	ECE 3213	TRANSMISSION MEDIA, ANTENNA SYSTEM AND DESIGN	3.0	ECE 3109, ECE 3109L	ECE 3213L		
7	ECE 3213L	TRANSMISSION MEDIA, ANTENNA SYSTEM AND DESIGN LABORATORY	1.0	ECE 3109, ECE 3109L	ECE 3213		
8	ECE 3214L	INTRODUCTION TO MICROELECTRONICS	1.0	ECE 3108L			
9	ECE 3215	ELECTRONIC SYSTEMS AND DESIGN	3.0	ECE 3108L	ECE 3215L		
10	ECE 3215L	ELECTRONIC SYSTEMS AND DESIGN LABORATORY	1.0	ECE 3108L	ECE 3215		
11	GE-ART	ART APPRECIATION	3.0				

Total Units: 23.0

			YEAF	R LEVEL: 3 SUMMER		
#	COURSE CODE	COURSE DESCRIPTION	UNITS	PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS
1	ECE 3316L	RESEARCH PROJECT 1	1.0	ES-ECON, ECE 3109, ECE 3212, ECE 3215		
2	ECE ELEC 1	ECE ELECTIVE 1	3.0	4TH YEAR STANDING		ECEL 3311, ECEL 3312, ECEL 3321, ECEL 3322, ECEL 3331, ECEL 3332, ECEL 3333
3	ECE ELEC 1L	ECE ELECTIVE 1 LABORATORY	1.0	4TH YEAR STANDING		ECEL 3311L, ECEL 3312L, ECEL 3321L, ECEL 3322L, ECEL 3331L, ECEL 3332L, ECEL 3333L

YEAR LEVEL: 4 1ST SEMESTER

Total Units: 5.0

#	COURSE CODE	COURSE DESCRIPTION	UNITS	PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS
	ECE 4117	ECE LAWS, CONTRACTS, ETHICS AND	3.0	4TH YEAR STANDING		
		SAFETY				
2	ECE 4118L	RESEARCH PROJECT 2	2.0	ECE 3316L		
3	ECE 4119L	MECHATRONICS	1.0	ECE 3215		
4	ECE 4120L	ECE REVIEW	1.0	4TH YEAR STANDING		
5	ECE 4121L	SEMINARS/COLLOQUIUM	1.0	4TH YEAR STANDING		
6	ECE 4122	DATA COMMUNICATIAONS	3.0	ECE 3109, ECE 3109L	ECE 4122L	
7	ECE 4122L	DATA COMMUNICATIAONS LABORATORY	1.0	ECE 3109, ECE 3109L	ECE 4122	
8	ECE ELEC 2	ECE ELECTIVE 2	3.0	4TH YEAR STANDING		ECEL 4113, ECEL 4114, ECEL 4123, ECEL 4124, ECE 4125, ECEL 4133, ECEL 4134, ECEL 4135, ECEL 4136
9	ECE ELEC 2L	ECE ELECTIVE 2 LABORATORY	1.0	4TH YEAR STANDING		ECEL 4113L, ECEL 4114L, ECEL 4123L, ECEL 4124L, ECEL 4133L, ECEL 4134L, ECEL 4135L, ECEL 4136L
10	GE-LWR	RIZAL, LIFE AND WORKS	3.0			

Total Units: 19.0

1 ECE 4223 ELECTRONICS ENGINEERING 5.0 ECE 3316L, ECE 4117, INDUSTRY INTERNSHIP 5.0 ECE 4121L, ECE 4122	#	COURSE CODE	COURSE DESCRIPTION	UNITS	PRE-REQUISITES	CO-REQUISITES	EQUIVALENTS
	1	ECE 4223		5.0			

YEAR LEVEL: 4 2ND SEMESTER

Total Units: 5.0