



University of Science and Technology of Southern Philippines
College of Information Technology and Computing
 Department of Information Technology and Computing

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
 EFFECTIVE S.Y. 2018-2019

FIRST YEAR								
First Semester								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
Eng	102	Art Appreciation	3	0	3	3	None	None
SS	103	The Contemporary World	3	0	3	3	None	None
Math	101	Mathematics in Modern World	3	0	3	3	None	None
EE	111	Introduction to Electrical Engineering 1	1	3	4	2	None	None
Chem	111	Chemistry for Engineers	3	3	6	4	None	None
Math	111	Calculus 1	3	0	3	3	None	Math 101
ES	105	Computer – Aided Drafting	0	3	3	1	None	None
PE	101	Physical Education 1	2	0	2	2	None	None
NSTP	101	ROTC/CWTS/LTS 1	3	0	3	3	None	None
Total			21	9	30	24		

FIRST YEAR								
Second Semester								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
Eng	101	Purposive Communication	3	0	3	3	None	None
SS	104	Ethics	3	0	3	3	None	None
ES	101	Science, Technology and Society	3	0	3	3	None	None
EE	122	Introduction to Electrical Engineering 2	1	3	4	2	EE111	None
Math	112	Calculus 2	3	0	3	3	Math111	None
Phys	120	Physics for Engineers	3	3	6	4	Math111	None
ES	107	Computer Programming for EE	0	3	3	1	None	None
PE	102	Physical Education 2	2	0	2	2	PE101	None
NSTP	201	ROTC/CWTS/LTS 2	3	0	3	3	NSTP101	None
Total			21	9	30	24		



University of Science and Technology of Southern Philippines
College of Information Technology and Computing
 Department of Information Technology and Computing

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
 EFFECTIVE S.Y. 2018-2019

SECOND YEAR								
<i>First Semester</i>								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
Math	102	Mathematics of Measurements	3	0	3	3	None	None
ES	209	Engineering Data Analysis	3	0	3	3	None	None
ES	208	Differential Equations	3	0	3	3	Math112	None
EE	211	Electrical Circuits 1	3	3	6	4	Math112, Phys120, EE122	ES208
ES	204	Engineering Mechanics	3	0	3	3	Math112, Phys120	None
ME	210	Basic Thermodynamics	2	0	2	2	Phys120, Math112	None
Fil	101	Panitikan	3	0	3	3	None	None
PE	103	Physical Education 3	2	0	2	2	PE101	None
Total			22	3	25	23		

SECOND YEAR								
<i>Second Semester</i>								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
ES	206	Fundamentals of Deformable Bodies	3	0	3	3	Phys10	None
EE	222	Electrical Circuits 2	3	3	6	4	EE211	EE221
EE	220	Electromagnetics for EE	2	0	2	2	ES208, Phys120	None
ECE	220	Electronic Circuits: Devices and Analysis	3	3	6	4	EE211	None
EE	221	Engineering Mathematics for EE	3	0	3	3	ES208	None
EE	223	EE Law, Codes, and Professional Ethics	2	0	2	2	SS40	None
Fil	102	Retorika	3	0	3	3	None	None
PE	104	Physical Education 4	2	0	2	2	PE101	None
Total			21	6	27	23		



University of Science and Technology of Southern Philippines
College of Information Technology and Computing
 Department of Information Technology and Computing

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
 EFFECTIVE S.Y. 2018-2019

THIRD YEAR								
First Semester								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
SS	105	Life and Works of Rizal	3	0	3	3	None	None
SS	101	Understanding the Self	3	0	3	3	None	None
ES	301	Engineering Economics	3	0	3	3	ES209	None
EC E	316	Logic Circuits and Switching Theory	2	3	5	3	ECE220'	None
EE	312	Numerical Methods and Analysis for EE	2	3	5	3	EE221	None
EE	313	Electrical Apparatus and Devices	2	3	5	3	EE222	None
EE	314	Electrical Machines 1	2	3	5	3	EE222, EE220	None
EE	315	Electrical Standards and Practices	0	3	3	1	EE223, ES105	None
Total			17	15	32	22		

THIRD YEAR								
Second Semester								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
SS	102	Reading in Philippine History	3	0	3	3	None	None
ES	303	Management of Engineering Projects	2	0	2	2	ES301	None
ES	302	Technopreneurship	2	3	5	3	ES301	ES303
EC E	320	Microprocessor Systems	2	3	5	3	ECE316	None
EE	325	Electrical Machines 2	3	3	6	4	EE314	None
EE	326	Power Systems Analysis 1	3	3	6	4	EE315, EE313	EE325
EE	322	Feedback Control Systems for EE	2	0	2	2	EE221, ECE220	None
ES	404	Material Science and Engineering	3	0	3	3	Chem10, ES206	None
Total			20	12	32	24		

THIRD YEAR								
Summer								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
EE	330	On the Job Training	3	260 hrs	3	3	3rd year standing (Completed Major Subjects up to 3rd Year)	None
Total			3	260 hrs	3	3		



University of Science and Technology of Southern Philippines
College of Information Technology and Computing
 Department of Information Technology and Computing

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
 EFFECTIVE S.Y. 2018-2019

FOURTH YEAR								
<i>First Semester</i>								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
ECE	410	Fundamentals of Electronic Communications	3	0	3	3	ECE220	None
EE	416	Electrical Systems & Illumination Engineering Design	3	6	9	5	EE325, EE315	EE417
EE	417	Power Systems Analysis 2	2	3	5	3	EE326	None
EE	413	Research Methods for EE	0	3	3	1	ES209	None
ECE	411	Industrial Electronics	3	3	6	4	ECE220	None
EE	418	Fundamentals of Power Plant and Engineering Design	0	3	3	1	EE326	None
ES	401	Environmental Science and Engineering	3	0	3	3	None	None
Total			14	18	32	20		

FOURTH YEAR								
<i>Second Semester</i>								
Course Code		Description	No. of Hours			Units	Pre-requisites	Co-requisites
			Lec	Lab	Total			
ME	420	Fluid Mechanics	2	0	2	2	Phys10	None
ES	403	Basic Occupational Safety and Health	3	0	3	3	SS40	None
EE	424	EE Thesis/ Research Project or Capstone Design Project	0	6	6	2	EE413	None
EE	423	Electrical Engineering Instrumentation and Control	2	3	5	3	EE322	None
EE	421	Seminars/Colloquia	0	3	3	1	4th Year Standing	None
TE	411	EE Technical Elective 1	3	0	5	3	4th Year Standing	None
TE	422	EE Technical Elective 2	2	3	5	3	4th Year Standing	None
TE	423	EE Technical Elective 3	2	3	5	3	4th Year Standing	None
Total			14	18	34	20		