



Republic of the Philippines
MINDANAO UNIVERSITY OF SCIENCE AND TECHNOLOGY
 Lapanan, Cagayan De Oro City

COLLEGE OF ENGINEERING & ARCHITECTURE

B.S. in Electrical Engineering
 Effective June 2015-2016

SUBJECT CODE	DESCRIPTIVE TITLE	H O U R		U N I T		PRE-REQUISITE	CO-REQUISITE
		LAB	LEC	LAB	LEC		
1ST YEAR - 1ST SEMESTER							
MATH13	College Algebra	0.0	3.0	0.0	3.0	3.0	
MATH17a	Plane & Spherical Trigonometry	0.0	3.0	0.0	3.0	3.0	
CHEM10a	General Chemistry 1	3.0	3.0	1.0	3.0	4.0	
ENGL11	Study and Thinking Skills	0.0	3.0	0.0	3.0	3.0	
SS10a	New Constitution	0.0	3.0	0.0	3.0	3.0	
SS20a	Rizal's Life, Works & Writings	0.0	3.0	0.0	3.0	3.0	
DRWG20	Engineering Drawing 1	3.0	0.0	1.0	0.0	1.0	
PD10	Essence of Personality	0.0	1.0	0.0	1.0	1.0	
NSTP10	ROTC/CWTS/LTS 1	0.0	3.0	0.0	3.0	3.0	
		<u>6.0</u>	<u>22.0</u>	<u>2.0</u>	<u>22.0</u>	<u>24.0</u>	
1ST YEAR - 2ND SEMESTER							
MATH14	Advanced Algebra	0.0	2.0	0.0	2.0	2.0	MATH13
MATH19	Solid Mensuration	0.0	2.0	0.0	2.0	2.0	MATH13, MATH17a
MATH30	Analytic Geometry	0.0	2.0	0.0	2.0	2.0	MATH13, MATH17a
ENGL20	Writing Across Disciplines	0.0	3.0	0.0	3.0	3.0	ENGL11
HUM11b	Logic & Ethics	0.0	3.0	0.0	3.0	3.0	
CADD10	Basic CADD	3.0	0.0	1.0	0.0	1.0	DRWG20
EE11a	Introduction to Electrical Engineering	3.0	0.0	1.0	0.0	1.0	MATH13
PD20	Social Graces & Social Relations	0.0	1.0	0.0	1.0	1.0	PD10
NSTP20	ROTC/CWTS/LTS 2	0.0	3.0	0.0	3.0	3.0	NSTP10
		<u>6.0</u>	<u>16.0</u>	<u>2.0</u>	<u>16.0</u>	<u>18.0</u>	
2ND YEAR - 1ST SEMESTER							
COE10	C Programming	3.0	2.0	1.0	2.0	3.0	MATH13
EE12	AC/DC Motors	3.0	1.0	1.0	1.0	2.0	MATH13, EE11a
MATH20	Elementary Statistics	0.0	3.0	0.0	3.0	3.0	
MATH32	Differential Calculus	0.0	5.0	0.0	5.0	5.0	MATH14, MATH19, MATH30
PHYS10a	General Physics 1 - Mechanics and Heat	3.0	3.0	1.0	3.0	4.0	MATH13, MATH17a
ENGL30	Speech & Oral Communication	0.0	3.0	0.0	3.0	3.0	
SS30	General Economics, Taxation & Agrarian Reform	0.0	3.0	0.0	3.0	3.0	
		<u>9.0</u>	<u>20.0</u>	<u>3.0</u>	<u>20.0</u>	<u>23.0</u>	
2ND YEAR - 2ND SEMESTER							
COE11	Object Oriented Programming	3.0	2.0	1.0	2.0	3.0	COE10
MATH34a	Integral Calculus	0.0	5.0	0.0	5.0	5.0	MATH32
PHYS11a	General Physics 2 - Electricity and Magnetism	3.0	3.0	1.0	3.0	4.0	PHYS10a
EE13	Motors & Controls	3.0	1.0	1.0	1.0	2.0	EE12
ENGL54	Culture, Arts & Literature	0.0	3.0	0.0	3.0	3.0	
ENGL40	Technical Writing & Reporting	0.0	3.0	0.0	3.0	3.0	ENGL20
PSYC20	Applied Psychology	0.0	3.0	0.0	3.0	3.0	
		<u>9.0</u>	<u>20.0</u>	<u>3.0</u>	<u>20.0</u>	<u>23.0</u>	

SUBJECT CODE	DESCRIPTIVE TITLE	HOUR		U N I T			PRE-REQUISITE	CO-REQUISITE
		LAB	LEC	LAB	LEC	CREDIT		
3RD YEAR - 1ST SEMESTER								
ECE20	Electronics 1	3.0	3.0	1.0	3.0	4.0	MATH34a, PHYS11a	EE20
EE20	Circuit Theory 1	3.0	3.0	1.0	3.0	4.0	MATH34a, PHYS11a	MATH38
MATH36	Probability & Statistics	0.0	3.0	0.0	3.0	3.0	MATH34a	
MATH38	Differential Equations	0.0	3.0	0.0	3.0	3.0	MATH34a	
ES10b	Statics of Rigid Bodies	0.0	3.0	0.0	3.0	3.0	PHYS10a, MATH34a	
ES20	Engineering Materials	0.0	3.0	0.0	3.0	3.0	CHEM10a	
MATH41	Numerical Methods & Analysis	0.0	2.0	0.0	2.0	2.0	COE10, MATH34a	MATH38
		<u>6.0</u>	<u>20.0</u>	<u>2.0</u>	<u>20.0</u>	<u>22.0</u>		
3RD YEAR - 2ND SEMESTER								
ECE21	Electronics 2	3.0	3.0	1.0	3.0	4.0	ECE20	
ECE30	Logic Circuits & Switching Theory	3.0	3.0	1.0	3.0	4.0	ECE20, EE20	ECE21
EE21	Circuit Theory 2	3.0	3.0	1.0	3.0	4.0	EE20, MATH38	
EE30	Electromagnetics	0.0	3.0	0.0	3.0	3.0	MATH34a, PHYS11a	
ES11	Dynamics of Rigid Bodies	0.0	2.0	0.0	2.0	2.0	ES10b	
MATH60	Advanced Engineering Mathematics	0.0	3.0	0.0	3.0	3.0	MATH38	
ES12	Strength of Materials	0.0	3.0	0.0	3.0	3.0	ES10b	
ME25	Thermodynamics 1	0.0	3.0	0.0	3.0	3.0	PHYS10a, MATH34a	
		<u>9.0</u>	<u>23.0</u>	<u>3.0</u>	<u>23.0</u>	<u>26.0</u>		
4TH YEAR - 1ST SEMESTER								
EE22	Circuit Theory 3	0.0	3.0	0.0	3.0	3.0	EE21	
TE10	Technical Elective 1	0.0	3.0	0.0	3.0	3.0		
EE31	Energy Conversion	3.0	3.0	1.0	3.0	4.0	EE21, EE30	
ECE40	Principles of Communications	0.0	3.0	0.0	3.0	3.0	ECE21, MATH60	
EE40	Control Systems	0.0	3.0	0.0	3.0	3.0	EE21, MATH60	
ES40	Engineering Economy	0.0	3.0	0.0	3.0	3.0		
ES50	Safety Management	0.0	1.0	0.0	1.0	1.0		
COE42	Computer Systems	0.0	3.0	0.0	3.0	3.0		
		<u>3.0</u>	<u>22.0</u>	<u>1.0</u>	<u>22.0</u>	<u>23.0</u>		
4TH YEAR - 2ND SEMESTER								
EE32	Electrical Machines 1	3.0	3.0	1.0	3.0	4.0	EE31	
EE41	Instrumentation & Measurements	0.0	3.0	0.0	3.0	3.0	EE31, EE40	
EE70	Power Systems 1	0.0	3.0	0.0	3.0	3.0	EE31	
ECE35a	Industrial Electronics	3.0	3.0	1.0	3.0	4.0	ECE21, EE31	
ME45	Fluid Mechanics	0.0	3.0	0.0	3.0	3.0	ES12, ME25	
ES60	Engineering Research Methods	0.0	3.0	0.0	3.0	3.0	ENGL40, MATH36	
ES80	Technopreneurship	3.0	2.0	1.0	2.0	3.0		
		<u>9.0</u>	<u>20.0</u>	<u>3.0</u>	<u>20.0</u>	<u>23.0</u>		
4TH YEAR - SUMMER								
OJT10	On the Job Training	24.0	0.0	0.0	4.0	4.0		
		<u>24.0</u>	<u>0.0</u>	<u>0.0</u>	<u>4.0</u>	<u>4.0</u>		
5TH YEAR - 1ST SEMESTER								
EE33	Electrical Machines 2	3.0	3.0	1.0	3.0	4.0	EE32	
EE 50	Field Trips & Seminars	3.0	0.0	1.0	0.0	1.0		
EE71	Power Systems 2	0.0	3.0	0.0	3.0	3.0	EE70	
EE80	Electrical Systems Design 1	3.0	3.0	1.0	3.0	4.0		
EE90	Special Problems in EE (Research 1)	6.0	1.0	2.0	1.0	3.0	ES60, ES80	
ES30	Environmental Engineering	0.0	2.0	0.0	2.0	2.0	CHEM10a	
TE20	Technical Elective 2	0.0	3.0	0.0	3.0	3.0		
		<u>15.0</u>	<u>15.0</u>	<u>5.0</u>	<u>15.0</u>	<u>20.0</u>		
5TH YEAR - 2ND SEMESTER								
EE60	EE Laws, Contracts & Ethics	0.0	2.0	0.0	2.0	2.0		
EE81	Electrical System Design 2	3.0	3.0	1.0	3.0	4.0	EE80	
EE91	Special Problems in EE (Research 2)	6.0	1.0	2.0	1.0	3.0	EE90	
EE92	Illumination & Power Plant Engineering	3.0	3.0	1.0	3.0	4.0	EE71, EE80	
ES70	Engineering Management	0.0	3.0	0.0	3.0	3.0		
TE30	Technical Elective 3	0.0	3.0	0.0	3.0	3.0		
TE40	Technical Elective 4	0.0	3.0	0.0	3.0	3.0		
		<u>12.0</u>	<u>18.0</u>	<u>4.0</u>	<u>18.0</u>	<u>22.0</u>		