

SCHOOL OF ENGINEERING			
Degree: ASSOCIATE Credits: 57		CURRICULUM	
Program: ELECTRICAL TECHNOLOGY AND RENEWABLE ENERGY			
Description: Prepare the graduates professionally in electrical technology and renewable energy areas. Photovoltaic and wind power systems will be used in this program. Graduates will also have the necessary educational background to continue studies toward a Bachelor's Degree in Science of Electrical Engineering.			
Course Code	Course Title	Credits	Requisites
General Education Courses			
ENGL 152	Communicative English II	3	Placement Exam
ENGL 153	Advanced Communicative English	3	ENGL 152
SPAN 152	Fundamentals of reading and writing	3	Placement Exam
SPAN 250	Writing Techniques	3	SPAN 152
MATH 120	Elementary Algebra	3	Placement exam
MATH 121	Intermediate Algebra	3	MATH 120
SOSC 111	Individual, Community, Government, and Social Responsibility I	3	
HUMA 111	Civilizations and Universal Culture I	3	
		24	
Core Courses			
FSEN 100	Introduction to Engineering Technology	3	
		3	
Concentration Courses			
ETRE 160	Principles of Electrical Circuits and Power	3	Co-req. MATH 120☐
ETRE 160L	Lab. of Principles of Electrical Circuits and Power	1	Co-req. ETRE 160☐
ETRE 165	Fundamentals of Renewable Energy	3	
ETRE 170	Introduction to Electrical Installations and NEC	3	ETRE 160, ETRE 160L☐
ETRE 170L	Lab. of Int. to Elect. Installations and NEC	1	Co-req. ETRE 170☐
ETRE 175	Electrical Machinery	3	ETRE 160, ETRE 160L☐
ETRE 175L	Lab. of Electrical Machinery	1	Co-req. ETRE 175☐
ETRE 180	Fund of Photovoltaic and Wind Power System	3	ETRE 160, ETRE 165
ETRE 180L	Lab. of Fund of Photovoltaic and Wind Power Syst.	1	Co-req. ETRE 180
ETRE 181L	Lab. of Photovoltaic and Wind Power Systems Inst.	1	ETRE 180, ETRE 180L
ETRE 260	Electrical Installations	3	ETRE 170, ETRE 170L
ETRE 265	Principles of Electrical Controls and PLC	3	ETRE 175, ETRE 175L
ETRE 265L	Lab. of Principles of Electrical Controls and PLC	1	Co-req. ETRE 265☐
ETRE 280	Review for License Examination of Electrician	3	All courses ETRE Approved☐
		30	

Minimum grade required: All course of the program must be approved with a minimum grade of C.

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Degree: ASSOCIATE Credits: 57		PLAN OF STUDY	
Program: ELECTRICAL TECHNOLOGY AND RENEWABLE ENERGY			
Course Code	Course Title	Credits	Requisites
FIRST YEAR - FIRST SEMESTER			
ETRE 160	Principles of Electrical Circuits and Power	3	Co-req. MATH 120☐
ETRE 160L	Lab. of Principles of Electrical Circuits and Power	1	Co-req. ETRE 160☐
ETRE 165	Fundamentals of Renewable Energy	3	
MATH 120	Elementary Algebra	3	Placement exam
SOSC 111	Individual, Community, Government, and Social Responsibility I	3	
		13	
FIRST YEAR - SECOND SEMESTER			
ETRE 170	Introduction to Electrical Installations and NEC	3	ETRE 160, ETRE 160L☐
ETRE 170L	Lab. of Int. to Elect. Installations and NEC	1	Co-req. ETRE 170☐
ETRE 175	Electrical Machinery	3	ETRE 160, ETRE 160L☐
ETRE 175L	Lab. of Electrical Machinery	1	Co-req. ETRE 175☐
ETRE 180	Fund of Photovoltaic and Wind Power System	3	ETRE 160, ETRE 165
ETRE 180L	Lab. of Fund of Photovoltaic and Wind Power Syst.	1	Co-req. ETRE 180
MATH 121	Intermediate Algebra	3	MATH 120
		15	
SECOND YEAR - FIRST SEMESTER			
ETRE 260	Electrical Installations	3	ETRE 170, ETRE 170L
ETRE 265	Principles of Electrical Controls and PLC	3	ETRE 175, ETRE 175L
ETRE 265L	Lab. of Principles of Electrical Controls and PLC	1	Co-req. ETRE 265☐
ETRE 181L	Lab. of Photovoltaic and Wind Power Systems Inst.	1	ETRE 180, ETRE 180L
ENGL 152	Communicative English II	3	Placement Exam
SPAN 152	Fundamentals of reading and writing	3	Placement Exam
		14	
SECOND YEAR - SECOND SEMESTER			
ETRE 280	Review for License Examination of Electrician	3	All courses ETRE Approved☐
FSEN 100	Introduction to Engineering Technology	3	
HUMA 111	Civilizations and Universal Culture I	3	
ENGL 153	Advanced Communicative English	3	ENGL 152
SPAN 250	Writing Techniques	3	SPAN 152
		15	