

School of Natural Resources Engineering and Management Energy Engineering Department

> 2014 Study Plan Updates January 2020



Online registration.

Required Course (متطلب)	(تعوضي بسبب تغير الخطة) Compensatory Course	
ECE312 Analog Communication Systems [4CH]	CE331 Signals and Systems [3CH]	
Required Course (متطلب)	(مکافئ) Equivalent Course	
ENE322 Thermal Science Lab [1CH]	TME520 Applied Thermal Systems Lab [1CH]	
CME331 Electromagnetics I [3CH]	ECE331 Electromagnetics I [3CH]	
CME343 Digital Electronics [4CH]	ECE343 Digital Electronics [3CH]	
TME212 Statics [3CH]	WEE251 (or CEE201) Statics [3CH]	



Students must attempt and pass these

courses before they can apply to

German Year.

ENE311 Electrical Machines

ENE312 Power Electronics

ENE321 Heat Transfer

ENE331 Energy Conversion

This update is effective 1st Semester 2020/2021



Students must attempt and pass these

courses before they can graduate.

WEE251 (or CEE201) Statics

TME213 Mechanics of Materials

TME214 Dynamics and Vibrations

TME221 Thermodynamics

TME222 Fluid Mechanics

ME344 Control Systems I

ENE211 Electrical Circuits I

ENE212 Electrical Circuits II

ENE214 Electronics

ENE311 Electrical Machines

ENE312 Power Electronics

ENE321 Heat Transfer

ENE331 Energy Conversion

ENE437 Energy Engineering Economics

ENE515 Electrical Power Generation, Transmission &

Distribution



Prerequisite for Renewable Energy Engineering and Power

Engineering track electives is

BSC001 (German Year)

The only exception to this update is for Power Engineering track students who wish to take an elective as a compensatory course to **ENE411 Electric Drives** & **ENE541 Real Time Computer Control Systems** since they are normally not offered by the Department (تعويضي بسبب تغير الخطة)



The ONLY courses students are

permitted to take in Germany.

* TME515 Mechanical Vibrations	ENE595-A Special Topics	ENE595-B Special Topics	ENE595-C Special Topics	
Power Engineering Track				
* ECE312 Analog Communication Systems	* CME343 Digital Electronics	* ENE411 Electric Drives	* ENE415 Power Systems	
* ENE516 Smart-Grid Power Systems	* ENE541 Real Time Computer Control Systems	ECE331 Electromagnetics I	ENE 511 Special Electrical Machines	
ENE513 Power Systems Operation and Control	ENE517 Power Systems Protection	ENE518 High Voltage Engineering	ME554 Programmable Logic Controllers	
Renewable Energy Engineering Track				
* ENE433 Solar Energy I	* ENE434 PV Technology	* ENE435 Wind Energy Technology	* ENE436 Renewable Energy Lab	
* ENE532 Energy Lab	* ENE537 Energy Efficiency, management and laws	* ENE571 Modeling and Simulation Techniques of Energy Systems	ENE462 Applied Refrigeration	
ENE524 Geothermal and Hydropower Systems	ENE525 Fuel Cell & Hydrogen Production Tech.	ENE526 Bio-Energy Technology	ENE527 Techno-Economics of Energy Systems	
ENE528 Energy Storage	ENE531 Environmental and Energy Engineering	ENE533 Solar Energy II	ENE534 Low Carbon Buildings	
ENE544 Thermal and Hydrodynamic Equipment	TME522 Heating Ventilation and Air Conditioning	TME529 Renewable Energy	* Compulsory Course	



Students must successfully and officially complete 120 credit hours

before they can register for ENE598 Graduation Project I.

ENE598 Graduation Project I and ENE599 Graduation Project II

must be taken during two consecutive semesters.



ENE598 Graduation Project I and ENE599 Graduation Project II will not be offered during <u>Summer</u> semesters.