

## Master of Science in Renewable Energy and Environment

### Thesis Option

#### Course Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Institution Requirements				
College Requirements				
Program Requirements	4	4	12	40%
	4	4	12	40%
Thesis/Capstone Course/Project	1	1	6	20%
Field Training/ Internship	NA			
Residency year	NA			
Others				
<b>Total</b>		9	30	100%

\* Add a separated table for each track (if any).

## Course Plan

Level	Course Code	Course Title	Required or Elective	Pre-Requisite	Credit Hours	Theory	Lab	Type of requirements (Institution, College, or Program)
Level 1	7161-ME-3	Renewable Energy Systems	Required	NA	3	3		Program
	7162-ME-3	Environment And Sustainability	Required	NA	3	3		Program
	7163-ME-3	Advanced Heat Transfer	Required	NA	3	3		
Level 2	7164-ME-3	Solar Energy	Required	NA	3	3		Program
	71XX-ME-3	Elective-1 (List-1)	Elective	NA	3	3		Program
	71XX-ME-3	Elective-2 (List-2)	Elective	NA	3	3		Program
Level 3	71XX-ME-3	Elective-3 (List-3)	Elective	NA	3	3		Program
	7167-ME-6	Thesis	Required	NA	3	3	6	Program
Level 4	71XX-ME-3	Elective-4 ( from list 4)	Elective	NA	3	3	3	Program
	7167-ME-6	Thesis	Elective	NA	3	3	6	Program

\* Include additional levels (for three semesters option or if needed).

\*\* Add a table for the courses of each track (if any)

### Elective Courses:

List	Course Code	Course Title	Required/ Elective	Pre-Requisite	Credit Hours
List 1	7166-ME-3	Numerical Methods	Elective	NA	3
	7168-ME-3	Photovoltaic Energy Systems	Elective	NA	3
	7169-ME-3	Geothermal Energy	Elective	NA	3
	7170-ME-3	Advanced Fluid Mechanics	Elective	NA	3
List 2	7171-ME-3	Wind Energy	Elective	NA	3
	7173-ME-3	Energy Conversion	Elective	NA	3
	7174-ME-3	Energy Storage Systems	Elective	NA	3
	7175-ME-3	Electrical Systems Related To Renewable Energy	Elective	NA	3

List	Course Code	Course Title	Required/ Elective	Pre- Requisite	Credit Hours
List 3	7165-ME-3	Energy Efficiency	Elective	NA	3
	7172-ME-3	Finite Elements Method	Elective	NA	3
	7177-ME-3	Computational Fluid Dynamics	Elective	NA	3
	7179-ME-3	Advanced Mathematics	Elective	NA	3
List 4	7180-ME-3	Economic Aspects Of Renewable Energy	Elective	NA	3
	7181-ME-3	Energy Comfort In Buildings	Elective	NA	3
	7182-ME-3	Environmental Pollution	Elective	NA	3
	7183-ME-3	Energy Management	Elective	NA	3
	7184-ME-3	Desalination	Elective	NA	3
	7176-ME-3	Energy Policy, Planning And Sustainable Development	Elective	NA	3