Course Outline of M.Sc Renewable Energy System Engineering

Two options, each with total credit hours of 30, will be offered:

(A) Thesis Option: 8 Subjects (24 credit hours) + Research Thesis (6 credit hours)
(B) Non-thesis option: 10 Subjects (30 credit hours)

Course Code	Course Title
GROUP-A	**Compulsory Subjects**
RES-501	Photovoltaic Systems
RES -502	Solar Thermal Systems
RES -503	Wind Energy Systems
RES -504	Micro & Mini Hydro Energy Systems
GROUP-B	**Elective Subjects {(Any four for option (A); any six for option (B)}**
RES-505	Renewable Energy Resource Assessment
RES-506	Bio Energy Engineering
RES-507	Energy Systems Modelling and Simulation
RES-508	Hybrid Energy Systems
RES-509	Conventional Hydro Power Plants
RES-510	Energy Audit and Management
RES-511	Concentrated Solar Power System
RES-512	Renewable Energy Integration and Applications
RES-513	Energy Transmission and Distribution
RES-514	Energy and Environment
RES-515	Sustainable Energy systems
RES-516	Smart Grids Systems
RES-517	Manufacturing and Materials for Renewable Energy Application
RES-518	Energy Efficient Buildings
RES-519	Renewable Energy Policy, Regulations and Standards
RES-520	Waste to Energy Systems & Management
RES-521	Energy Analytics, Economics and Planning
RES-522	Energy Storage Technologies
RES-523	Renewable Energy Projects Management
RES-524	Computational Fluid Dynamics
RES-525	Wave and Tidal Energy Systems
RES-526	OTEC and Geothermal Energy Systems
RES-527	Special/Advanced Topics in Renewable Energy
Group-C	**Research Project**
RES-698	Research Thesis in the Relevant Area and Oral Examination {Compulsory for Option (A)}