Compulsory and elective courses in DSEE and other relevant courses for UG & PG students.

The courses are distributed over Semester I (odd) and II (even)	Credits
A. SCHEME basket course (for UG students)	**L-T-P-C**
SEE-211: Energy, Climate Change and Sustainability [*Semester II*]	3-0-0-9
B. PG Core Basket (minimum 2 for M.Tech., M.S.(R), and Ph.D. students)	
SEE-601: Thermo-Fluid Engineering [*Semester I*]	3-0-0-9
SEE-602: Physics of Energy Materials [*Semester I*]	3-0-0-9
SEE-603: Electrical Power Engineering [*Semester I*]	3-0-0-9
SEE-609: Mathematical and Computational Tools for Engineering* [*Semester I*]	3-0-0-9
SEE-627: Electric Mobility [Semester I]	3-0-0-9
SEE-612: Manufacturing of Energy Systems [*Semester I*]	3-0-0-9
SEE-604: Thermodynamics of Energy Systems [*Semester II*]	3-0-0-9
SEE-617: Introduction to Sustainable Energy Policy [Semester II]	3-0-0-9
C. Compulsory (for all M.Tech., M.S.(R), and Ph.D. students)	
SEE-605: An Introduction to Sustainable Energy Technologies (with Laboratory) [*Semester II*]	2-0-3-9
SEE-801: Seminar Course I [both semesters]	0-0-0-0
SEE-802: Seminar Course II [both semesters]	0-0-0-0
D. Compulsory (only for Ph.D. students)	
SEE-888: Introduction to Profession and Communication [Semester I]	1-0-0-3
E. Department Electives	
SEE-606: Electrochemical Energy Systems	3-0-0-9
SEE-607: Hydrogen Energy: Production, Storage and Utilization	3-0-0-9
SEE-608: Introduction to Bioenergy and Biofuels	3-0-0-9
SEE-610: Introduction to Materials Modelling and Simulations$	3-0-0-9
SEE-611: Energy Systems: Modelling and Analysis	3-0-0-9
SEE 613: Solar Photovoltaics	3-0-0-9
SEE-614: Wind Energy	3-0-0-9
SEE-615: Solar Thermal Engineering	3-0-0-9
SEE-616: Renewables Integrated Smart Power Systems	3-0-0-9
SEE-619: Finite Volume Methods for Engineers	3-0-0-9
SEE-620: Heat Driven Cooling Systems	3-0-0-9
SEE-621: Biomass Conversion and Biorefineries	3-0-0-9
SEE-622A: Sustainable Energy- Enabling Net Zero Emissions	3-0-0-9
SEE-623: Fuel Cell Electrical Energy Systems	3-0-0-9
SEE-624A: Design Strategies for Net-Zero Energy Buildings	3-0-0-9
SEE-625: Structural, Microstructural and Spectroscopic Characterization of Materials	3-0-0-9
SEE-626M: Ecological Principles and Biodiversity for Sustainability	3-0-0-5
SEE-628: Policy Processes and Analytical Methods: Application to Climate Policies	3-0-0-9
SEE-629M: Ecology, Equity and the Economy	3-0-0-5
SEE-631 Sustainable Forest Management	3-0-0-5
SEE-632: Heating, Ventilation, and Air-Conditioning of Buildings	3-0-0-9
SEE-633: Power Electronics for Electric Vehicles	3-0-0-9
SEE-634: Critical Material Resources for Clean Energy Transition	3-0-0-9
SEE-635: Carbon Capture Utilization and Storage (CCUS)	3-0-0-9
SEE-636: Catalysis for Clean Energy	3-0-0-9
SEE-637: Recycling Energy Materials	3-0-0-9

F. Open Electives	
EE698D: Smart Grid Technology	3-0-0-9
EE630A: Simulations of Power Systems	3-0-0-9
EE660A: Basics of Power Electronic Converters	3-0-0-9
EE631A: Advanced Power System Stability	3-0-0-9
MSE673: Fundamentals and Applications of Electrochemistry	3-0-0-9
ME743: Fuel Cells	3-0-0-9
ME685A: Applied Numerical Methods*	3-0-0-9
AE603: Introduction to Scientific Computing*	3-0-0-9
CHE622A: Molecular Simulations[$]	3-0-0-9
CHE626A: Practical Introduction to Quantum Mechanical Methods for Scientists and Engineers[$]	3-0-0-9
CHE642A: Numerical Methods in Chemical Engineering*	3-0-0-9
MBA681A: Energy and Carbon Markets: Economics, Policy and Regulation	3-0-0-10
MBA782A: Renewable Energy - Economics, Policy and Regulation	3-0-0-5
MBA683A: Power Sector Reform and Regulation	3-0-0-10
Any other suitable elective in the Institute	3-0-0-9