

List of Compulsory and Elective courses for Minor in SEE

Name of courses	Credits (L-T-P-C)
Compulsory Course(s)	
SEE-605: An Introduction to Sustainable Energy Technologies (with Laboratory)	2-0-3-9
Elective Course(s)	
SEE-601: Thermo-Fluid Engineering	3-0-0-9
SEE-602: Physics of Energy Materials	3-0-0-9
SEE-603: Electrical Power Engineering	3-0-0-9
SEE-604: Thermodynamics of Energy Systems**	3-0-0-9
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-609: Mathematical and Computational Tools for Engineering	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-612: Manufacturing of energy systems	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 System	3-0-0-9
SEE-617: Introduction to sustainable energy policy	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-622: Sustainable Energy- Enabling Net Zero Emissions	3-0-0-9
SEE-623: Fuel Cell Electrical Energy Systems	3-0-0-9
SEE-624: 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-627: Electric Vehicles	3-0-0-9
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	3-0-0-9
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

and any other SEE6XX numbered courses added later

Total Minimum credits requirement: 27

Remark: As per this template, a student must take the compulsory course and minimum 2 courses from remaining list to complete total minimum credit requirement. Students should not take those electives which have more than 50% overlap with courses that they have already completed.

**not allowed as an elective course for those students who have already taken ESO201 (or another similar course on Thermodynamics).