

Short-term Course on “Renewable Energy Systems Modelling”

July 17 – 18, 2026

Venue: Outreach Auditorium, IITK Outreach Center, Noida Sec. 62



DAY 1 (17 July 2026, Friday)

Time	Activity	
09:00-09:30	Registration	
09:30-10:00	Welcome and Inauguration	
Session 1:	Topic	Speaker(s)
10:00-10:45	Introduction: Energy Systems Modelling	Prof. Ashish Garg (IIT Kanpur)
10:45-11:15	Tea Break	
11:15-13:00	Concentrated solar thermal technologies: hydrogen generation and integration with PV-TES system	Prof. Laltu Chandra (IIT Kanpur), Dr Savan Kumar Patel (RMIT, Melbourne), Dr Samatha P Wijewardane (Sri Lanka)
13:00-14:00	Lunch Break	
Session 2:	Topic	Speaker(s)
14:00-15:00	Demand management strategies: Case studies for academic campus and Data center	Prof. Naran Pindoriya (IIT Gandhinagar)
15:00-16:00	TERI Residential Model and TIMES/MARKAL based energy system modelling	Dr. Saswata Chaudhury, Dr. Satish K Yawale, Dr. Ritu Mathur, Dr. Sanchit S Agarwal, & Dr. Nitish Srivastava (TERI)
16:00-16:15	Tea Break	
16:15-17:15	Decarbonization pathways for India through Integrated Energy System Modelling	Prof. Prabodh Bajpai, Prof. Ankush Sharma, Dr. Sachin Gangwar & Mr. Nishant (IIT Kanpur)
17:15-17:30	Open Discussion	
19:30 Onwards	Dinner	

DAY 2 (18 July 2026, Saturday)		
Time	Activity	
Session 3:	Topic	Speaker(s)
09:30-11:30	Introduction to Mathematical Programming for Energy Systems Modeling	Prof. Ishan Bajaj (IIT Kanpur)
11:30-11:45	<i>Tea Break</i>	
11:45–12:45	Renewable Energy Integration in Smart Grid Environment	Prof. R.C. Bansal (University of Sharjah, UAE)
12:45–13:30	Physics based modeling and parameterization of electrolyzers	Prof. Lalit Pant (IIT Kanpur)
13:30–14:30	<i>Lunch Break</i>	
Session 4:		
14:30–15:30	Panel discussion with Q & A (with all the presenters)	All concerned
15:30–16:00	Concluding Session & Valedictory Session	All concerned
16:00–16:30	<i>High Tea</i>	
	End of the Short Course	
19:30 Onwards	<i>Dinner</i>	