

# Tentative Schedule

## Advanced Semiconductor Devices

### February 03 to 08, 2025 (Hybrid Mode)

Date	Day	9:30-11.30 AM	11:30 AM-1:30 PM		2:30 PM-6:30 PM	
February 03, 2025	Monday	<b>9.30-10.00 AM Inauguration</b>	<b>PM, Lecture (L) 1:</b> "Quantum dot heterostructures for optoelectronic devices" <b>Dr. Jhuma Saha, IIT Gandhinagar</b>	<b>Lunch</b>	<b>Tutorial (T) 1:</b> "Theoretical simulation of optoelectronic Devices using nextnano software" <b>Dr. Jhuma Saha, IIT Gandhinagar</b>	<b>Tutorial (T) 1:</b> "Theoretical simulation of optoelectronic Devices using nextnano software" <b>Dr. Jhuma Saha, IIT Gandhinagar</b>
February 04, 2025	Tuesday	<b>L-2:</b> "2-D materials for Nano-electronics and Energy storage devices" <b>Dr. Neeraj Jaiswal, PDPM IIITDM Jabalpur</b>	<b>T-2:</b> "DFT Computation using Quantum Espresso" <b>Dr. Indranil Mal, IIT Delhi</b>		<b>T-2:</b> "DFT Computation using Quantum Espresso" <b>Dr. Indranil Mal, IIT Delhi</b>	<b>T-2:</b> "DFT Computation using Quantum Espresso" <b>Dr. Indranil Mal, IIT Delhi</b>
February 05, 2025	Wednesday	<b>L-3:</b> "Modeling and Design of Semiconductor devices" <b>Dr. Avirup Dasgupta, IIT Roorkee</b>	<b>L-4:</b> "New- Generation Solar Cells" <b>Dr. D.P. Samajdar, PDPM IIITDM Jabalpur</b>		<b>T-3:</b> "Simulation and Modelling of VLSI-Nanoscale Devices" <b>Dr. Vibhuti Chauhan, MANIT Bhopal</b>	<b>T-3:</b> "Simulation and Modelling of VLSI-Nanoscale Devices" <b>Dr. Vibhuti Chauhan, MANIT Bhopal</b>
February 06, 2025	Thursday	<b>L-4:</b> "Nanoscale FinFETs for Low Power Applications" <b>Dr. D.P. Samajdar, PDPM IIITDM Jabalpur</b>	<b>T-4:</b> "Simulation of Solar Cells using SCAPS-1D" <b>Dr. Rahul Pandey, Chitkara University</b>		<b>T-4:</b> "Simulation of Solar Cells using SCAPS-1D" <b>Dr. Rahul Pandey, Chitkara University</b>	<b>T-3:</b> "Simulation and Modelling of VLSI-Nanoscale Devices" <b>Dr. Vibhuti Chauhan, MANIT Bhopal</b>
February 07, 2025	Friday	<b>L-5:</b> "Micro and Nano device fabrications" <b>Prof. Mahesh Kumar, IIT Jodhpur</b>	<b>L-6:</b> " Novel Memory Circuit & IP Design" <b>Dr. Vishal Sharma, Intel</b>		<b>L- 7, "Power Modelling and Efficiency and Reliability in next-gen products"</b> <b>Mr. Pooja Kumawat, NVIDIA</b>	
February 08, 2025	Saturday	<b>9:30 AM-12:30 AM, L-8:</b> "MEMS/NEMS based sensor for various applications" <b>Dr. Aviru Kumar Basu, INST Mohali</b>			<b>2:30 PM- 3:30 PM (Quiz)</b>	<b>Valedictory</b>