

Semiconductor Devices & Sensors: Applications & Research Perspective FDP Time Table

Date	Day	11 am -1 pm			5 pm -7 pm		Hours
May 2, 2025	Friday	Menka Yadav (Inauguration; Talk on types of materials)			Prof. Anand Bulusu-IITR (Semiconductor physics and current conduction)		4
		9 am- 10 am	10 am -12 noon	12 noon - 1 pm	5 pm -7 pm		
May 3, 2025	Saturday	Menka Yadav (PN Junction diode, IV characteristics)	Prof. Anand Bulusu-IITR (PN junction diode, small signal switching model, avalanche, zener, etc.)	Dr. Sarthak (Diode rectifiers, Clippers, clampers)	Menka- Hands on (Diode and applications - – LT Spice OPENSOURCE/virtual labs Software) -SB		6
May 4, 2025	Sunday	Menka Yadav (MOSFET basics, IV characteristics)	Dr. Gourab Dutta-IITKh (Signal Generators, waveshaping circuits and oscillators)	Menka Yadav (Diode/ MOSFET Numerical Problems)	Menka- Hands on (Oscillators)-SB		6
		11 am -12 noon		3PM-5PM	5 pm- 6 pm	6 pm -7 pm	
May 5, 2025	Monday	Dr. Deepak Bharti (MOSFET DC biasing and small signal analysis)	Menka- Hands on (MOSFET Amplifier Design)		Dr. Deepak Bharti (MOSFET DC biasing and small signal analysis, MOSFET CS, CG configurations, MOSFET amplifier)		4
May 6, 2025	Tuesday	Amit Saini, Cadre Design (Visual TCAD demo)			Menka Yadav (Op amp- basics, integrator, differentiator)		4
May 7, 2025	Wednesday	Dr. Girdhar Gopal-NITP (Multivibrators, timers, nonlinear wave forming circuits)			Menka (Op amp- filter, logarithmic amplifier)	Dr. Sarthak (difference amplifier)	4
May 8, 2025	Thursday	Menka Yadav- Advance node Devices	Dr. Jai Pandey/Santosh--CSIR-CEERI Pilani (Sensors based on Diodes and MOSFETs)				5
May 9, 2025	Friday	Menka Yadav-Hands on (Op amp)	Menka-Hands on- (Amplifier design-Cadence)-AS, (TCAD FET Design, TFET Biosensor)- BD/SC				5
May 10, 2025	Saturday	Menka Yadav (Revision and validatory session) + Feedback			Quiz (6 Pm -7 pm)		2
Total						40	