Advanced Workshop on Semiconductor Manufacturing

21st May to 3rd June 2026

Centre for Nano Science and Engineering
Indian Institute of Science, Bangalore-560012
Tel: 080-2293 3542 Email: workshop.cense@iisc.ac.in

Program Schedule

21st May 2026, Thursday (Online mode – Microsoft Teams)

Morning Session Link

Time	Event
10:00 AM – 10:30 AM	**Introductory Session** – Prof. Sushobhan Avasthi & Ms. Sabiha Sultana
10:30 AM – 11:30 AM	**NNfC Safety Protocol** – Ms. Shruti Hegde
11:30 AM – 12:15 PM	**Introduction to Wet Etch Bay** – Dr. Rekha M
12:15 PM – 1:00 PM	**Introduction to Furnaces –** Mr. Saleem Ahmed B

1:00 PM – 2.00 PM: Lunch Break

Afternoon Session Link

Time	Event
2:00 PM – 3:00 PM	**Introduction to Thin Films** – Mr. Chandan H B
3:00 PM – 4:00 PM	**Introduction to Lithography** – Mr. Ajeya Shettar
4:00 PM – 4:45 PM	**Introduction to Dry Etch** – Ms. Vidyashree K h
4:45 PM – 5:30 PM	**Introduction to MOSFET Module** – Ms. Sabiha Sultana

22nd May 2026, Friday (Online mode – Microsoft Teams)

Morning Session Link

Time	Event
9:30 AM – 10:15 AM	**Introduction to Electrical Characterization** – Mr. Kumar M P
10:15 AM – 11:00 AM	**Introduction to AFM** – Mr. Vishnuteerth
11:00 AM – 12.00 PM	**Introduction to SEM** – Dr. Rashmitha Keshava Devadiga
12:00 PM – 1.00 PM	**Introduction to FTIR / UV Vis Spectroscopy** – Ms. Sinchana R & Ms. Bindhu V

1:00 PM – 2.00 PM: Lunch Break

Afternoon Session Link

Time	Event
2:00 PM – 3:00 PM	**Introduction to FIB** – Dr. Nagabhushan J Choudhari
3:00 PM – 4:00 PM	**Introduction to TEM** – Mr. Ambresh M

Holiday – 23rd May 2026, Saturday

Holiday – 24th May 2026, Sunday

25th May 2026, Monday

Time	Event
8:30 AM – 9:00 AM	**Registration for the Workshop** (Ground Floor CeNSE Seminar Hall)
9:00 AM – 9:30 AM	**Briefing & Introductory Session**

MOSFET – Batch 1 09:30 AM – 1:00 PM	MOSFET - Batch 2 9:30 AM – 1:00 PM	MOSFET - Batch 3 9:30 AM – 1:00 PM	MOSFET - Batch 4 9:30 AM – 1:00 PM
Fabrication Session - 1 **RCA** **Oxidation** **Ellipsometer** (NNFC)	**Characterization Session - 1** **SEM / FIB** (MNCF)	**Characterization Session - 1** **AFM / FTIR / UV-Vis spectroscopy** (MNCF)	**Lab Visit:** **Gas Sensor Lab** (Second Floor SF-31)

1:00 PM – 2.00 PM: Lunch Break (Ground Floor Parking Area)

MOSFET - Batch 1 2:00 PM – 5:00 PM	MOSFET - Batch 2 2:00 PM – 5:00 PM	MOSFET - Batch 3 2:00 PM – 5:00 PM	MOSFET - Batch 4 2:00 PM – 5:00 PM
Characterization Session - 1 **SEM / FIB** (MNCF)	**Fabrication Session - 1** **RCA** **Oxidation** **Ellipso** (NNFC)	**Lab Visit:** **Gas Sensor Lab** (Second Floor SF-31)	**Characterization Session - 1** **Probe Station 2** (MNCF)

26th May 2026, Tuesday

MOSFET - Batch 1 9:30 AM – 1:00 PM	MOSFET - Batch 2 9:30 AM – 1:00 PM	MOSFET - Batch 3 9:30 AM – 1:00 PM	MOSFET - Batch 4 9:30 AM – 1:00 PM
Fabrication Session - 2 **Litho 1** **SiO2 wet etch** **Diffusion** (NNFC)	**Characterization Session - 2** **AFM / FTIR / UV-Vis spectroscopy** (MNCF)	**Fabrication Session - 1** **RCA** **Oxidation** **Ellipso** (NNFC)	**Characterization Session - 2** **SEM / FIB** (MNCF)

1:00 PM – 2.00 PM: Lunch Break (Ground Floor Parking Area)

MOSFET - Batch 1 2:00 PM – 5:00 PM	MOSFET - Batch 2 2:00 PM – 5:00 PM	MOSFET - Batch 3 2:00 PM – 5:00 PM	MOSFET - Batch 4 2:00 PM – 5:00 PM
Characterization Session - 2 **AFM / FTIR / UV-Vis spectroscopy** (MNCF)	**Fabrication Session - 2** **Litho 1** **SiO2 wet etch** **Diffusion** (NNFC)	**Characterization Session - 2** **SEM / FIB** (MNCF)	**Fabrication Session - 1** **RCA** **Oxidation** **Ellipso** (NNFC)

Holiday – 27th May 2026, Wednesday

28th May 2026, Thursday

MOSFET - Batch 1 9:30 AM – 1:00 PM	MOSFET - Batch 2 9:30 AM – 1:00 PM	MOSFET - Batch 3 9:30 AM – 1:00 PM	MOSFET - Batch 4 9:30 AM – 1:00 PM
Fabrication Session - 3 **PSG etch+4pp** **ALD Al2O3** **Litho 2** **SiO2 wet etch** (NNFC)	**Characterization Session - 3** **Probe Station 2** (MNCF)	**Fabrication Session - 2** **Litho 1** **SiO2 wet etch** **Diffusion** (NNFC)	**Characterization Session - 3** **TEM** (MNCF)

1:00 PM – 2.00 PM: Lunch Break (Ground Floor Parking Area)

MOSFET - Batch 1 **2:00 PM – 5:00 PM**	**MOSFET - Batch 2** **2:00 PM – 5:00 PM**	**MOSFET - Batch 3** **2:00 PM – 5:00 PM**	**MOSFET - Batch 4** **2:00 PM – 5:00 PM**
Packaging Lab Session 1 (Third Floor TF-32)	**Fabrication Session - 3** **PSG etch+4pp** **ALD Al2O3** **Litho 2** **SiO2 wet etch** (NNFC)	**Characterization Session - 3** **TEM** (MNCF)	**Fabrication Session - 2** **Litho 1** **SiO2 wet etch** **Diffusion** (NNFC)

29th May 2026, Friday

MOSFET - Batch 1 **9:30 AM – 1:00 PM**	**MOSFET - Batch 2** **9:30 AM – 1:00 PM**	**MOSFET - Batch 3** **9:30 AM – 1:00 PM**	**MOSFET - Batch 4** **9:30 AM – 1:00 PM**
Fabrication Session - 4 **Metal dep** **Litho 3 (background)** **Metal dry etch** **Anneal (background)** (MNCF)	**Characterization Session - 4** **TEM** (MNCF)	**Fabrication Session - 3** **PSG etch+4pp** **ALD Al2O3** **Litho 2** **SiO2 wet etch** (NNFC)	**Packaging Lab Session 1** (Third Floor TF-32)

1:00 PM – 2:00 PM: Lunch Break (Ground Floor Parking Area)

MOSFET - Batch 1 **2:00 PM – 5:00 PM**	**MOSFET - Batch 2** **2:00 PM – 5:00 PM**	**MOSFET - Batch 3** **2:00 PM – 5:00 PM**	**MOSFET - Batch 4** **2:00 PM – 5:00 PM**
Characterization Session - 3 **Probe Station 2** (MNCF)	**Fabrication Session - 4** **Metal dep** **Litho 3 (background)** **Metal dry etch** **Anneal (background)** (NNFC)	**Characterization Session - 4** **Probe Station 2** (MNCF)	**Characterization Session - 4** **AFM / FTIR / UV-Vis spectroscopy** (MNCF)

Holiday – 30th May 2026, Saturday

Holiday – 31st May 2026, Sunday

1st June 2026, Monday

MOSFET - Batch 1 9:30 AM – 1:00 PM	MOSFET - Batch 2 9:30 AM – 1:00 PM	MOSFET - Batch 3 9:30 AM – 1:00 PM	MOSFET - Batch 4 9:30 AM – 1:00 PM
Lab Visit: **Gas Sensor Lab** (Second Floor SF-31)	**Packaging Lab Session 1** (Third Floor TF-32)	**Fabrication Session - 4** **Metal dep** **Litho 3 (background)** **Metal dry etch** **Anneal (background)** (NNFC)	**Fabrication Session - 3** **PSG etch+4pp** **ALD Al2O3** **Litho 2** **SiO2 wet etch** (NNFC)

1:00 PM – 2:00 PM: Lunch Break (Ground Floor Parking Area)

MOSFET - Batch 1 2:00 PM – 5:00 PM	MOSFET - Batch 2 2:00 PM – 5:00 PM	MOSFET - Batch 3 2:00 PM – 5:00 PM	MOSFET - Batch 4 2:00 PM – 5:00 PM
Packaging Lab Session 2 (Third Floor TF-32)	**Lab Visit:** **Gas Sensor Lab** (Second Floor SF-31)	**Packaging Lab Session 1** (Third Floor TF-32)	**Fabrication Session - 4** **Metal dep** **Litho 3 (background)** **Metal dry etch** **Anneal (background)** (NNFC)

2nd June 2026, Tuesday

MOSFET - Batch 1 9:30 AM – 1:00 PM	MOSFET - Batch 2 9:30 AM – 1:00 PM	MOSFET - Batch 3 9:30 AM – 1:00 PM	MOSFET - Batch 4 9:30 AM – 1:00 PM
Characterization Session - 4 TEM (MNCF)	**Packaging Lab Session 2** (Third Floor TF-32)	**Presentation by participants** (CeNSE Seminar Hall)	**Presentation by participants** (CeNSE Seminar Hall)

1:00 PM – 2:00 PM: Lunch Break (Ground Floor Parking Area)

MOSFET - Batch 1 2:00 PM – 5:00 PM	MOSFET - Batch 2 2:00 PM – 5:00 PM	MOSFET - Batch 3 2:00 PM – 5:00 PM	MOSFET - Batch 4 2:00 PM – 5:00 PM
Presentation by participants (CeNSE Seminar Hall)	**Presentation by participants** (CeNSE Seminar Hall)	**Packaging Lab Session 2** (Third Floor TF-32)	**Packaging Lab Session 2** (Third Floor TF-32)

3rd June 2026, Wednesday

Time	Event
10:00 AM – 11:00 AM	**Fabrication & Characterization Quiz Session** (CeNSE Seminar Hall)
11:00 AM – 12:00 PM	**Interaction with Candidates + Next Steps**
12:00 PM – 1.00 PM	**Feedback, Valedictory & Concluding Session**
1:00 PM – 2:00 PM	**Lunch Break**