



Course Organiser

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Lecturer

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Virtual Manufacturing Based Power Electronics Design and Manufacturing Training Courses

Third Test Modules Delivery

17th and 18th September 2024, Wolfson Medical School,
The Gannochy Room

Background

In the framework of the Innovate UK funded project “Virtual Manufacturing Based Power Electronics Design and Manufacturing Training Courses,” in collaboration with NMI and Synopsys, Semiwise is developing training courses for the UK power electronics industry. The Innovate UK project includes funding for one free of charge ‘test’ delivery of the training modules to UK participants. In exchange of the free module delivery, we will ask you for a feedback to help us to improve the course materials and the delivery. You will be required to fill in a pre- and a post course questioner as a requirement for your participation

Modules

We will test-deliver *Module 5* and *Module 6* of the course:

Module 5: Semiconductor fabrication processes including photolithography, ion implantation, diffusion, oxidation, etching, epitaxy, metallization. If you are interested in the fabrication process of semiconductor technology, you should attend this module.

Module 6: Process integration includes full flows of the fabrication process of Si planar, vertical and super-junction MOSFETs, SiC MOSFETs, Si and SiC conventional and Schottky Power Diodes, Si IGBTs, Si Thyristors, Si BJT, GaN HEMT. The full fabrication sequences are explained in details in this module.

Registration

In order to express interest and to register for the test delivery please send an e-mail to the course organizer Ismail Topaloglu ismail.topaloglu@semiwise.uk,

Please hurry: the registration is on first come – first served basis.

Further Information

The course is free for UK and non-UK participants. The delivery is mixed mode: in person or via zoom. The course will require knowledge from the first four modules of the course:

- Module 1: Semiconductors and their Properties;
- Module 2: Building Blocks of Semiconductor devices;
- Module 3: Power Electronic Devices;
- Module 4: TCAD based design and optimization of PED

It will be very useful for the participants before attending the test delivery of Module 5 and Module 5 to follow on the Semiwise web the first 4 modules. For the UK participant we will provide free of charge access to these modules.