

## Raith Lithography Training Course: EBL Basics and Software Training

The course consists of 6 half day sessions. In the first session the theoretical background about Scanning Electron Microscopy, Electron Beam Lithography and Raith’s systems and software is given. The first session is followed by 4 training sessions, which are 2 offline sessions for software training and 2 sessions at EBL systems for exposure training. In order to make these sessions most effective, the practical sessions will be given in small groups with respect to the participants’ systems and software versions. For this reason, the final schedule is set after all participants are known. Thus, the following table shows a tentative schedule.

		Group 1	Group 2	Group 3	Group 4
1 <sup>st</sup> day <i>(Lunch included)</i>	9.15-12.30 <i>a.m.</i>	Theory	Theory	Theory	Theory
	1.30-5.30 <i>p.m.</i>	Software	Software	EBL practice	EBL practice
2 <sup>nd</sup> day <i>(Lunch and dinner included)</i>	9.15-12.30 <i>a.m.</i>	EBL practice	EBL practice	Software	Software
	1.30-5.30 <i>p.m.</i>	Software	Software	EBL practice	EBL practice
3 <sup>rd</sup> day <i>(Lunch included)</i>	9.15-12.30 <i>a.m.</i>	EBL practice	EBL practice	Software	Software
	1.30-5.30 <i>p.m.</i>	Exposure of participant's applications, additional offline training, or additional theory			

The last session is open for answering final questions, covering topics that came up during the course, working on applications of the participants, or an additional exposure training session. In general, the following topics will be covered during the course:

### Software training:

- General software introduction and practice
- Raith's GDSII editor
- Offline preparation of exposure

Note: One offline-PC is available for each participant during this session.

### Exposure training (based on Raith's demo pattern):

- Focussing and general SEM handling
- Adjusting UV coordinate systems
- Writefield alignment
- Setting exposure parameters
- Positionlist exposure
- Mix-and-match exposure (overlay)
- Advacend topics overview: Leveling, metrology, automation, proximity effect

Note: One EBL system is available for each group during the session. To keep the training effective, the number of participants is restricted to 3 participants per group.

Raith takes care of the informal get-together of participants and your culinary needs during this event.