

Module title	MScNano INA Research Internship Nanoprocessing and -analysis
Module type	Required elective module
Educational outcomes, competencies, qualification objectives	<p>Students</p> <ul style="list-style-type: none"> ... have experienced practical training in advanced topics of nanoprocessing ... gained experience with clean room processes ... gained insight into possible research topics in nanoprocessing ... have an idea of the scientific approach and methodology of nanoprocessing <p>Integrated key competencies:</p> <p><u>Communication competency:</u> Students have developed communication skills in scientific expert discussions and are able to work in a research team</p> <p><u>Organizational competency:</u> Students have learned the basics of project planning and management</p>
Types of courses, contact hours	P i 10 SWS
Contents	<p>Participation in an actual research project conducted in the technological electronics research group</p> <p>Practical training in one or more of the following experimental and theoretical methods:</p> <ul style="list-style-type: none"> - advanced thin-film techniques - clean room work - analysis optical properties and surface structures (e.g. white light interferometry, SEM, AFM) - processing of surface structures - lithography methods (e.g. optical lithography, nanoimprint lithography)
Course titles	Research Internship nanoprocessing and -analysis
Teaching methods	Laboratory work
Applicability	M.Sc. Nanoscience
Duration	4 weeks
Frequency	upon arrangement
Language	English
Recommended Skills	Basis knowledge in physics, chemistry, experimental work in nanotechnology on Bachelor level
Prerequisitesforparticipation	None
Studentsworkload	Contact time: 150 h, independent studies 30 h
Nongradedlearningassignments (Studienleistungen)	(implied) Participation in a research project
Prerequisites for admission to examination	None
Examination	Written report and short presentation (talk or poster) on project, weighted 1:1
Numberofcredits	6 C (including 2 C for integrated key competencies)
Responsiblecoordinator	Hillmer
Lecturer(s)	Hillmer
Media	Laboratory equipment
Literature	Special literature