Module title	MScNano ISS Research Internship Surface Science
Module type	Required elective module
Educational outcomes, competencies, qualification objectives	Students ... have experienced practical training in advanced methods that are typical for surface science ... gained insight into the operation of ultra-high vacuum systems ... gained insight into possible research topics in surface science ... have an idea of scientific approaches and methodology in surface science **Integrated key competencies:** Communication competency: Students have developed communication skills in scientific expert discussions and have trained to work in a research team
Types of courses, contact hours	P i 10 SWS
Contents	Participation in a research project in surface science. Topics depend on current research projects. Practical training in one or more of the following experimental and theoretical methods: - sample preparation - Low energy electron diffraction (LEED) - Angle-resolved photoemission (ARPES) - Scanning tunneling microscopy and spectroscopy (STM, STS) - data analysis
Course titles	Research Internship Surface Science
Teaching methods	Laboratory work
Applicability	M.Sc. Nanoscience
Duration	4 weeks
Frequency	upon arrangement
Language	English and/or German
Recommended Skills	Fundamental knowledge in physics on Bachelor level
Prerequisites for participation	none
Students workload	Contact time: 150 h, independent studies 30 h
Nongraded learning assignments (Studienleistungen)	(implied) Participation in a research project
Prerequisites for admission to examination	none
Examination	Presentation of about 30 minutes plus discussion in the group seminar.
Number of credits	6 C (including 2 C for integrated key competencies)
Responsible coordinator	Matzdorf
Lecturer(s)	Matzdorf and coworkers
Media	Laboratory equipment
Literature	Scientific publications and textbooks on the respective topic