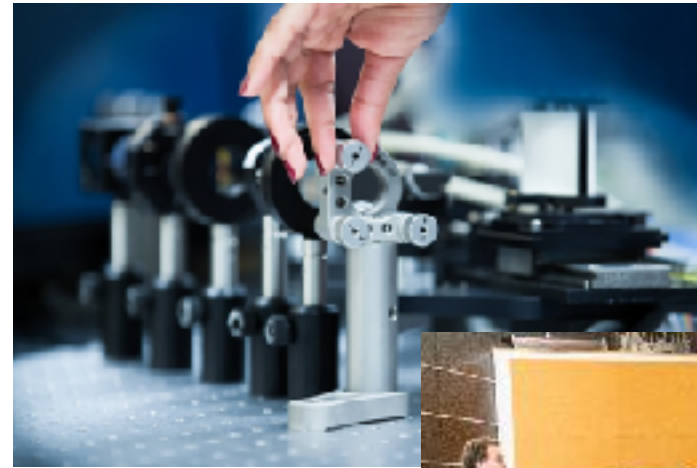


INFO WEBINAR: NANOSCIENCE AND NANOTECHNOLOGY





Master in Nanoscience and Nanotechnology

- The Master in Nanoscience and Nanotechnology of the University of Siegen is a two-year 120 ECTS English language degree program offered to national and international students.
- It focuses on modern aspects of the science and technology of nanoscopic systems, ranging from basic knowledge to applications and devices.
- It consists of a set of lectures, seminars and lab courses followed by a project in a research group, accomplished by a thesis.
- The master is a joint initiative of the Departments of Physics, Chemistry and Electrical Engineering of the School of Sciences and Technology.

Admissions

- Application deadline: April 30, 2022
- Admission requirements:
 - B.Sc. in Physics, Chemistry or Electrical Engineering with grade 2.7 or better. There is the possibility to qualify on the basis of recommendation letters and/or discussion with academic experts
 - Proficiency in English: TOEFL, CAE, IELTS, CEFR
- Applications must be submitted online
- The application is free of charge
- For further details please visit <https://www.uni-siegen.de/nt/nano/admission/>

1 Semester	2 Semester	3 Semester	4 Semester
General Chemistry (Physics, Engineering)	Nano Chemistry	Nano-Research Lab Course	Master Thesis
Solid-State Physics (Chemistry, Engineering)	Physics of Nanoelectronic Devices	Elective Course	
Quantum Theory (Chemistry, Engineering)	Photonics Devices	Elective Course	
Nanotechnology (Physics, Chemistry)	Lab Course “Micro and Nanotechnology”	Elective Course	
Advanced Solid-State Physics (Physics)	Lab Course “Nanosynthesis, Nanosafety, Nanoanalytics”		
Nano-Research Course (Seminar + Elective Course)			

Research Groups

- Chemistry
 - Inorganic Chemistry
 - Inorganic Materials Chemistry
 - Macromolecular Chemistry
 - Physical Chemistry
- Electrical Engineering
 - High-Frequency Technology and Quantum-Electronics
 - Graphene-based Nanotechnology
- Analogue Circuits and Image Sensors
- Physics
 - Nano Physics
 - Solid State Physics
 - X-Ray-Physics
 - Laboratory of Nano-Optics
 - X-Ray Tomography

Master Thesis 2021 (selected)

- Wideband detection of NMR signals of paramagnetic doped crystals
- Biosensing with a planar optical antenna
- Preparation of 2D group-IV monochalcogenides
- High frequency computing platform for online data analysis of energy-dispersive X-ray Laue diffraction
- Epitaxial growth of 2D ferroelectric thin films on metal substrates
- High quality-factor Fano resonance based sensors in frequency selective surfaces for operation in the mid-infrared bimolecular fingerprint
- Colloidal force probe study of polymer brushes on curved interfaces

Career Paths

- PhD at German Universities & Research Centers or abroad
- Research/Teaching Assistant at Universities of Applied Sciences
- Industry in North-Rhine Westphalia, Germany and abroad
 - Learn German (the University offers language courses free of charge)
 - Clusters on Nano Micro Materials and Photonics:
nmwp.nrw.de/?lang=en



www.uni-siegen.de/nt/nano/