

## Contact

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## NanoRING: Nanomaterials Undergraduate Research in Germany

### Summer Research Experience at the Technical University of Munich

for Northwestern University and University of  
Texas, San Antonio

June 12 - August 18, 2017

Experience nanotechnology and research at the Technische Universität München, the leading German university in science and technology.

In this wonderful setting in Munich, you will enjoy a 10-week intensive program providing research experience in materials nanotechnology, on-site orientation with survival German, and cohort visits to science & technology workshops and cultural & social outings.

The NanoRING program is supported by National Science Foundation (NSF) under the International Research Experiences for Students (IRES) program under NSF award number IRES- 1460031.



## NanoRING Research Opportunity

Nanomaterials Undergraduate Research in Germany (NanoRING) provides opportunities to Northwestern University and University of Texas, San Antonio students to conduct 10 weeks of research at the Technical University of Munich (TUM), Germany, with specific focus on nanomaterials including nanoelectronics, nanophotonics, and nanobiomaterials to educate a globally engaged science and engineering workforce in the rapidly developing field of nanotechnology.

### Program Description

- 10-week nanomaterials research experience
- Dedicated mentorship by TUM graduate and/or post-doctoral researchers
- Coverage of international travel expenses, 10-week public transit in Munich, housing costs, and living stipend
- Pre-orientation on U.S. campuses to cover study-abroad logistics, Europe/Germany-specific safety training, and visa requirements
- On-site orientation on TUM campus to include intensive German language training and cultural immersion
- Excursions to cultural sites, museums, networking events, and nanotechnology industry sites
- Eligibility to apply for NanoRING post-program award if the results of summer research are accepted in a peer-reviewed scientific journal or at a conference program as a poster or oral presentation

## About Technische Universität München (TUM)

As one of only three universities distinguished with the German Excellence Award in 2006 and 2012, the Technische Universität München (Technical University of Munich) is a leading university in Germany and Europe, serving as an important global player in the international world of science and technology.

The TUM International Graduate School of Science and Engineering (IGSSE) partners with NanoRING and provides the infrastructure to a dedicated consortium of TUM faculty, postdocs, and graduate students spanning various fields of nanotechnology to foster research opportunities to international students. IGSSE is sponsored by the Excellence Initiative of the German federal and state governments with more than 15 million Euros in funds for the period 2006-2017 and integrates Natural and Engineering Sciences through graduate and postgraduate education strongly rooted in TUM's internationally renowned research environment.

### German Language Training

English is the working language in the laboratory environment, and the language in which the NanoRING program is administered. Note, however, that students will be provided with a short course on survival German as part of the NanoRING program, for no academic credit. The ability to use German language for communicative purposes provides students with a greater immersive experience in both the social and technological aspects during their stay in Germany.

### German Culture and History

Visits to cultural sites and industry labs provide both an introduction to the importance of technology in the development of German society. Social events complement the daily life experience and create opportunities to network with other students.

## Accommodation

TUM-IGSSE maintains an active network of landlords and student union connections, which will work with each program participant to confirm housing arrangements within 30 minutes public transportation of their laboratories. The program also provides a stipend of \$500 per week to cover subsistence.

### Requirements

- Undergraduate U.S. citizens or permanent residents majoring in engineering, physical sciences, or life sciences with relevant foundational coursework
- Students must be enrolled at either Northwestern University or University of Texas, San Antonio as an undergraduate during the academic year prior to participating in this summer program
- This program is intended for students who have completed their junior year, or students who have completed their senior year and are continuing to an MS or PhD program at any US research university
- Cumulative G.P.A. of 3.0 or higher
- Two recommendation letters
- Complete online application
- Final in-person or phone interview with faculty director
- German language course: no prerequisites.

### Passport and Visa Requirement

Please make sure that you have a valid U.S. passport at least 6 months prior to the start date of this program.

### How to Apply

Please visit the program website <<http://nanoring.mrsec.northwestern.edu>> for online application.

For further inquiries, please email [NanoRING@northwestern.edu](mailto:NanoRING@northwestern.edu)

**Application Deadline: February 1, 2017**

### Program Fees

There is no application fee, and from the \$500 weekly stipend provided by the program, program participants will be responsible for covering expenses related to their visas, meals, and other incidentals.