RESEARCH IMMERSION

RIMSE SUMMER SCHOOLS

Training opportunities for graduate, undergraduate, high school, and post-graduate students

The RIMSE are immersive, hands-on eight-week programs designed to prepare trainees to work in MRSEC-affiliated research labs. RIMSE engage a wide range of participants–from high school students to post-doctoral researchers and industry partners.

SILICON NANOTECHNOLOGY

The focus of this RIMSE Summer School is to prepare, characterize, and exploit the properties of photonic crystals, thin films, nanoparticles, and quantum dots prepared from mesoporous silicon. Led by Professor Michael Sailor, the course provides training on synthesis and characterization of these materials.

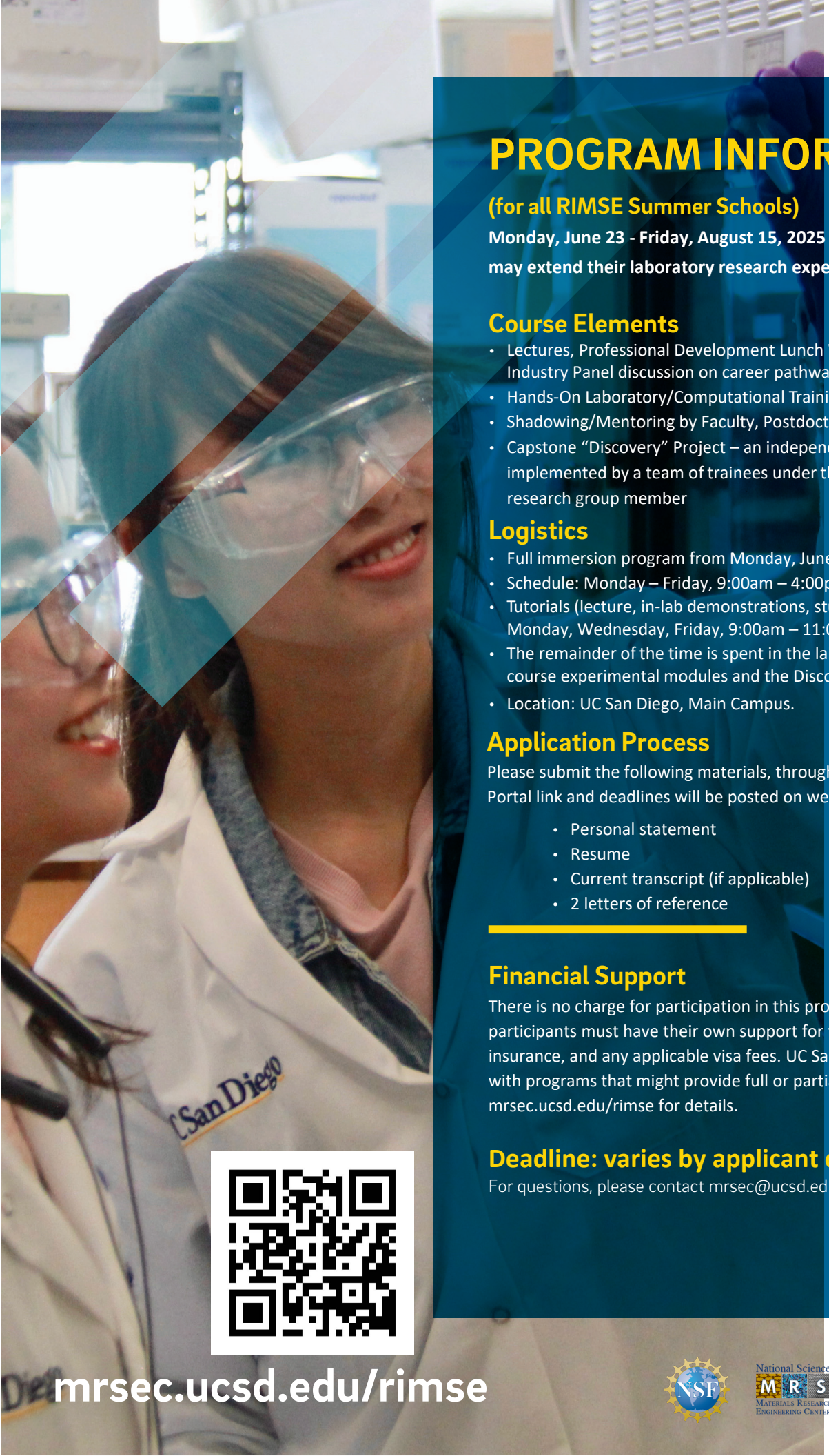
ENGINEERED LIVING MATERIALS

This RIMSE Summer School aims to engineer living sytems to generate new polymeric materials. Led by Professor Jonathan Pokorski, the course offers an introduction to skills relevant to synthesis, fabrication, and genetic modification of engineered living materials.

PREDICTIVE ASSEMBLY

This RIMSE Summer School focuses on understanding how nanoscale building blocks can be assembled into functional, tunable materials that operate at the meso- to macroscales. Led by Professor Tod Pascal, the course provides training on the computational aspects of the self-assembly problem.

Application deadlines vary, please visit mrsec.ucsd.edu/rimse



PROGRAM INFORMATION

(for all RIMSE Summer Schools)

Monday, June 23 - Friday, August 15, 2025 (8 weeks). Participants may extend their laboratory research experience time period.

Course Elements

- Lectures, Professional Development Lunch Workshops, including an Industry Panel discussion on career pathways
- Hands-On Laboratory/Computational Training
- Shadowing/Mentoring by Faculty, Postdoctoral, and Graduate Students
- Capstone "Discovery" Project – an independent research project implemented by a team of trainees under the mentorship of a current research group member

Logistics

- Full immersion program from Monday, June 23 to Friday, August 15
- Schedule: Monday – Friday, 9:00am – 4:00pm
- Tutorials (lecture, in-lab demonstrations, student presentations), Monday, Wednesday, Friday, 9:00am – 11:00am
- The remainder of the time is spent in the laboratory working on the course experimental modules and the Discovery Projects.
- Location: UC San Diego, Main Campus.

Application Process

Please submit the following materials, through the NSF ETAP portal. Portal link and deadlines will be posted on website by the end of Fall.

- Personal statement
- Resume
- Current transcript (if applicable)
- 2 letters of reference

Financial Support

There is no charge for participation in this program. However, all participants must have their own support for travel, living expenses, health insurance, and any applicable visa fees. UC San Diego MRSEC coordinates with programs that might provide full or partial support. Visit mrsec.ucsd.edu/rimse for details.

Deadline: varies by applicant category

For questions, please contact mrsec@ucsd.edu

mrsec.ucsd.edu/rimse

National Science Foundation MRSEC Materials Research Science and Engineering Centers

UC San Diego