



Washington University in St. Louis

Nearly 60 of WashU's graduate and undergraduate programs rank in the top 25 by *U.S. News & World Report*, including the School of Medicine at No. 11, Brown School of Social Work at No. 2 and Biomedical Engineering at No. 14. Through innovative research, the university is committed to creating the new knowledge necessary to achieve a bright and sustainable future.

WashU has more than **3,000 research projects** underway each year and **\$613 million in research support**

McKelvey School of Engineering

We promote independent inquiry and education with an emphasis on scientific excellence, innovation and collaboration without boundaries. McKelvey Engineering has top-ranked research and graduate programs across departments, particularly in biomedical engineering, environmental engineering and computing, and has one of the most selective undergraduate programs in the country. With 140 full-time faculty, 1,421 undergraduate students, 1,530 graduate students and 21,000 living alumni, we are working to solve some of society's greatest challenges; to prepare students to become leaders and innovate throughout their careers; and to be a catalyst of economic development for the St. Louis region and beyond.



"The Thermal Management REU allowed me to gain valuable research experience while exploring life and activities in St. Louis and at WashU. The program offered a glimpse of graduate student life and gave me insight into what types of graduate programs I should be looking for to best fit my needs and interests."

— *Jon Powles, mechanical engineering major at Vanderbilt University, Class of 2020*

More info and questions:

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#WashUengineers

thermalmanagementreu.wustl.edu

 Washington University in St. Louis
JAMES MCKELVEY SCHOOL OF ENGINEERING

Thermal Management on Multiple Scales REU Site

May 31–Aug. 5, 2022

Learn more & apply:
thermalmanagementreu.wustl.edu



Stipend, transportation, housing
and food costs included



Program dates:
May 31–Aug. 5, 2022

Apply by: February 15, 2022

Thermal Management on Multiple Scales REU Site

The Thermal Management REU program at WashU aims to expand student participation in research as well as attract a diverse pool of curious and motivated students to engineering careers. Students will be immersed in projects tied to emerging technologies such as metal-air batteries and nanofluidic and micro-/ nanostructural thermal transport enhancement, while also learning the role of thermal-fluids engineers in the micro-/power electronics, chemical/material processing, transportation, and energy industries.

Program materials are interdisciplinary, approaching topics in thermal management from mechanical and chemical engineering perspectives. Participants will have multiple one-on-one advising sessions with faculty to define and develop a plan for achieving personal goals. The summer will culminate with students preparing a technical report, conference proceeding or journal article, as well as presenting their research results through a poster and oral presentation at a final research symposium.

How to apply:

Apply online: thermalmanagementreu.wustl.edu

In addition, the following documents are required:

- Personal statement
- Resume
- Unofficial transcript
- Two references (at least one of these must be from a faculty member at student's current institution)

Eligibility:

Applications are welcome from students meeting the following criteria:

- Sophomore, junior or senior continuing undergraduate studies in Fall 2021
- Students who attend universities with limited research opportunities in STEM and/or are from backgrounds underrepresented in the STEM fields, including underrepresented minority students, students from economically disadvantaged and underserved backgrounds and students with disabilities are encouraged to apply
- Pursuing a major in engineering, mathematics or physical and life science (physics, chemistry or biology)
- Strong quantitative skills and interest in research
- Students must be a citizen or noncitizen national of the United States or an individual who has been lawfully admitted for permanent residence in the United States.



What makes this REU site unique?

- Once admitted, fellows choose a research project in any discipline and department within the McKelvey School of Engineering.
- Weekly social activities and lunches with faculty members, completely funded by the program.
- Tours of local companies of interest, such as Boeing and Bayer.
- Fellows live on the Delmar Loop, named one of the top 10 streets in the U.S. by the American Planning Association.

Events, industry tours and social activities might be limited due to the impact of COVID-19.



Other benefits

- Preparation for graduate school admissions tests
- \$5,000 stipend with free campus housing and travel to and from St. Louis; \$120 per week food stipend
- Public transportation passes for travel in St. Louis