STEM Research for Preservice Teachers

INDUSTRIES OF THE FUTURE

The University of Houston Research Experience for Preservice Teachers (RE-PST) program is sponsored by National Science Foundation Noyce grant DUE-2220683. The goal is to provide summer research opportunities for high school preservice STEM teachers to engage in Industries of the Future (IotF) research: Artificial Intelligence (AI), quantum science, manufacturing, communications, and biotechnology.

National Science Foundation
WHERE DISCOVERIES BEGIN

OUR TEAM

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For more information:
https://coss.egr.uh.edu/re-pst/

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UNIVERSITY OF HOUSTON

Industries of the Future

Research Experience for Preservice Teachers

(RE-PST Program)

Research Topics

For teachHOUSTON students

University of Houston will host ten high school preservice teachers of science, technology, engineering, and math (STEM) subjects for six weeks, during three consecutive summers, from 2023-2025. The preservice teachers will work with mentors to explore Industries of the Future (IotF) research topics, which may include:

Advanced manufacturing
Biotechnology
Advanced communications
Quantum information science
Artificial intelligence

Activities

Besides lab research, activities will include workshops, curriculum development, seminars, and field trips to local companies. The research experience will be incorporated into high school curricula to meet Texas Essential Knowledge and Skills (TEKS) requirements and align with Next Generation Science Standards.

Benefits!

Each participant will:

1. Receive a stipend of $5,400 for participation in six-week summer research program.
2. Receive $1,000 upon completion of the implementation activities during the academic year.
3. Receive and assemble a free 3D printer for use at the future high school.
4. Each year, the top 3 course modules will be selected to receive $500, $300, and $200 bonuses, respectively.

How to Apply?

Forms available at:
coss.egr.uh.edu/re-pst/

Sign up Today

Applicants must submit:

1. Application form
2. Reference form
3. A curriculum vitae
4. An essay that addresses the following topics:

a. What are your main reasons for participating in RE-PST?
b. What do you hope to gain from your RE-PST experience?
c. What is your research interest area and why?
d. Describe how this experience may impact your future career.