

INDUSTRIES

OF THE

FUTURE

The University of Houston Research Experience for Teachers (RET) program is sponsored by National Science Foundation Noyce grant DUE-2501700. The goal is to provide summer research opportunities for high school STEM teachers to engage in Industries of the Future (lotF) research: Artificial Intelligence (AI), quantum science, manufacturing, communications, and biotechnology.

OUR TEAM



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Research Experience for Teachers

(RET Program)





Research Topics

For High School Teachers

University of Houston will host nine high school teachers of science, technology, engineering, and math (STEM) subjects for six weeks, during three consecutive summers, from 2026-2028. The teachers will work with research mentors to explore Industries of the Future (lotF) 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 \$8,400 for participation in six-week summer research program.
- 2. Receive \$1,500 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. Receive support from mentors throughout the academic year in course development and implementation.



Applicants must submit:

- 1. Online entry form
- 2. Application form
- 3. Reference form
- 4. A curriculum vitae
- 5. One sample syllabus
- 6. An essay that addresses the following topics:
- a. What are your main reasons for participating in RET?
- b. What do you hope to gain from your RET experience?
- c. What is your research interest area and why?
- d. Describe how this experience may impact your future career.

