

Become a 21st Century STEM Teacher

Apply for a scholarship today!



21st Century STEM Teachers Scholarship Program

The 21st Century STEM Teachers Scholarship Program at Purdue University aims to strengthen Indiana's future by expanding the number and diversity of students who pursue a degree and career in K-12 STEM teaching and who develop enhanced knowledge and skills for integrating engineering design into science, mathematics, and technology instruction.



To apply for a 21st Century STEM Teachers Scholarship, you must meet the following requirements:

- Admitted to or currently enrolled in a Purdue University degree program with the intention of completing:
 1. A Baccalaureate degree in secondary (grade 7-12) science teaching, secondary mathematics teaching, or elementary education **AND**
 2. The integrated STEM education degree certificate.
- Have a GPA of 3.0/4.0 or greater at the time of application and maintain a minimum GPA of 3.0/4.0 during degree program.
- Commit to teaching for a minimum of one year for each year of scholarship support in a high needs or rural school.
- Attend full-time and work to complete your Bachelor's degree on time.
- Agree to provide tracking data and participate in a research study on teacher development.
- Be a U.S. Citizen or Permanent Resident Alien.



21ST CENTURY STEM TEACHERS SCHOLARSHIP PROGRAM

PURDUE
COLLEGE OF EDUCATION

FAQS

1. How much is the scholarship?

The current scholarship is up to \$5,000 per semester (\$10,000 per year) for the 2018-2019 academic year. However, the scholarship may be renewed for subsequent semesters for up to four years total. The recipient's scholarship will be renewed based on the following conditions: *(1) the continuation of grant funding for the scholarship, (2) the recipient continues to meet the eligibility requirements, and (3) the recipient desires to continue receiving the scholarship.* The scholarships are made possible by a grant from the Indiana Commission for Higher Education.

2. If this is a scholarship, then why do I have to pay back the scholarship money if I do not fulfill the commitments?

The scholarship is structured as a forgivable loan. For each year that you fulfill your STEM teaching obligation in an Indiana high need school or district, one year of scholarship will be forgiven (i.e., the loan balance will be reduced by an amount equivalent to one year of scholarship). The purpose of the 21st Century STEM Teachers Scholarship Program is to prepare, support, and retain highly qualified STEM teachers in Indiana.

3. Who may apply?

High school seniors through college-level juniors may apply. The scholarship is intended for the following majors:

- Elementary Education
- Special Education/Elementary Education Dual
- Secondary Science (Biology, Chemistry, Earth Science and Physics) Teaching
- Secondary Mathematics Teaching

Applicants must be admitted to or currently enrolled in a Purdue University degree program with the intention of completing a Baccalaureate degree in one of the majors listed above **AND** the integrated STEM education degree concentration.

4. How will recipients be chosen?

Applications will be reviewed by a panel of faculty and recruitment specialists including at least one STEM faculty from the disciplinary field of the candidate's interest. Recipients will be selected based on academic record, statement of teaching goals, letters of recommendation. We will seek a balance of content disciplines and student diversity including ethnicity, gender, and socioeconomic background.

5. When is the deadline?

There is no deadline. We will review as they are submitted.

6. How many scholarships are available?

We have 6-8 scholarships currently available.

7. Where do I have to teach after I graduate? How do I know which schools are high needs or rural?

Purdue Integrated STEM faculty will assist you with determining whether or not the schools you are considering for your teaching position are high needs or rural. A high needs school is defined by the No Child Left Behind Act of 2001 as: "Within the top quartile of elementary and secondary schools statewide, as ranked by the number of unfilled, available teacher positions; or is located in an area where at least 30 percent of students come from families with incomes below the poverty line; or an area with a high percentage of out-of-field-teachers, high teacher turnover rate, or a high percentage of teachers who are not certified or licensed." Purdue has a number of rural school partners in their Purdue University Rural School

Network. School corporations in this network are listed on the following website: <http://www.purdue.edu/stemgoesrural/Partnerships.html>. While there are many more rural schools and school districts in Indiana that are not on this list, this is a good starting point for searching rural schools that have a relationship with Purdue University's education programs.

8. In addition to the scholarship money, what are the benefits of this program?

There are many benefits to being a 21st Century STEM Teacher-Scholar, too many to be listed here! However, below is a sampling of some of the benefits and opportunities of the program

- You will earn an **Integrated STEM Education Degree Concentration**. The Integrated STEM Education Program consists of a series of courses that prepare you for STEM teaching above and beyond the regular degree program. Teachers who earn an Integrated STEM Degree Concentration will demonstrate deep, flexible subject-matter knowledge and pedagogical-content knowledge in at least one STEM field; well-developed knowledge and skills to integrate cross-cutting content, processes, and practices beyond their discipline of expertise; and well-developed knowledge and skills for teaching diverse student populations. Teachers will understand the nature of STEM through the study of the practices of scientists, technologists, engineers, and mathematicians—that is, the specific knowledge and skills that form distinct practices of these respective disciplines. In addition, many schools in Indiana are working toward being named a STEM Implementation School by the Indiana Department of Education and will be seeking to hire new teachers like you to lead their school in becoming a STEM school.
- Purdue has an extensive network of relationships with schools and school corporations, including numerous STEM-oriented partnerships. This extensive network will enhance our ability to ensure that **new 21st Century STEM Teachers will be placed in grades K-12 classrooms** in underserved Indiana school corporations as well as school corporations experiencing a shortage of qualified teachers in K-12 STEM disciplines.
- 21st Century STEM Teacher-Scholars will be a part of a **professional learning community with faculty mentors**. Faculty mentors include representatives from the Colleges of Education, Science, Technology, Engineering, and Mathematics, with many of the faculty involved in the Integrated STEM Degree Concentration Program. Mentoring meetings will provide a forum for 21st Century STEM Teacher-Scholars to seek advice, share experiences, and reflect on learning through program activities. In addition, the professional learning community meetings will provide a venue for timely seminars on topics that are relevant to preservice/beginning teachers (e.g., navigating edTPA requirements; strategies for a successful job search; engaging the hard-to-engage student).
- High school recipients of the 21st Century STEM Teachers scholarship from racially, ethnically, linguistically, and socioeconomically non-dominant population may be eligible to participate in **Purdue's Minority Engineering Program's (MEP) retention program, Academic Boot Camp (ABC)**. In 2005, MEP launched this signature retention program, which is a 5-week intensive course designed to prepare incoming freshmen for the rigorous challenges of academic competition in a world-class institution.
- 21st Century STEM Teacher-Scholars will have opportunities to **engage in service learning experiences as well as undergraduate STEM or STEM education research**. For example, all Scholars will take at least one semester of Engineering Projects in Community Service (EPICS). EPICS is a program in which teams of undergraduates from a variety of disciplines design, build, and deploy real systems to solve engineering-based problems for local community service and education organizations. EPICS uses a service-learning model where students learn about design while meeting needs within their communities. In addition, although not required, 21st Century STEM Teacher-Scholars will have opportunities to participate in the Undergraduate Research Training Program (URT) in the College of Education. The COE URT program provides research experiences for qualified undergraduate students at the sophomore, junior or senior level in any academic discipline who are interested in research on teaching and learning. Also, scholars may be interested in the Discovery Park Undergraduate Research Internship (DURI) program which is designed to involve Purdue undergraduates in the interdisciplinary research environment of Discovery Park. The program provides opportunities for students to work with faculty affiliated with Discovery Park on cutting edge research projects that involve combining two or more disciplinary strengths.

More questions? Please contact:

Professor Lynn Bryan

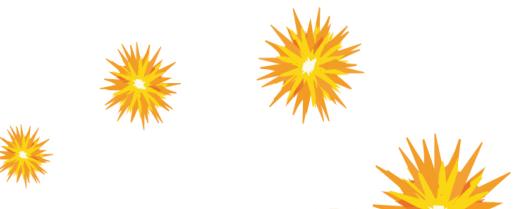
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UNDERGRADUATE K-12 INTEGRATED STEM EDUCATION DEGREE CONCENTRATION

WHO?

**ANY PURDUE
UNDERGRADUATE WHO
LOVES TEACHING STEM
AND IS IN A TEACHER
EDUCATION PROGRAM**

CATALYST

A series of five yellow starburst icons of varying sizes, arranged in a curved arc above the word 'CATALYST'.

Center for Advancing the Teaching and Learning of STEM

COURSES WHEN?

**EDCI 53900 (3 cr):
*Introduction to K-12
Integrated STEM
Education***

**SPRING SEMESTERS
SUMMER SEMESTER**

**EPCS 10100, EPCS
20100, EPCS 30100,
OR EPCS 40100 (1 cr):
*Participation In EPICS***

**FALL SEMESTERS
SPRING SEMESTERS**

**EDCI 36500 (3 CR):
*Science in The
Elementary School—
STEM Section***

**FALL SEMESTERS
SPRING SEMESTERS**

-OR-

**EDCI 55800 (3 cr):
*Integrated STEM
Education Methods-
Secondary***

FALL SEMESTERS

**EDCI 49000 (1 cr):
*Integrated STEM
Teaching Internship***

**FALL SEMESTERS
SPRING SEMESTERS**