



WPI

STEM
Education
Center

ANNUAL REPORT FY2026



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INTRODUCTION

We are pleased to share the purpose-driven and impactful work of the STEM Education Center at WPI. We invite you to explore our accomplishments and collaborate with us in a shared effort to transform STEM education for all.



We envision a thriving ecosystem where every learner and educator is equipped and inspired to co-create knowledge and solutions to solve meaningful problems and build a caring and sustainable world.

Highlights of 2025-26

- New Masters in Integrated STEM Education (MISE) program starting off strong after 1st year, exceeding student enrollment projections
- New Graduate Certificate in STEM Education approved (to help fulfill teachers' need to advance to "professional licensure" status)
- Began recruiting prospective students for Undergraduate Teacher Preparation Program (4 years for BS + teacher license)
- Started exploring additional pathways to teacher licensure through graduate learning: Accelerated Postbaccalaureate program (APB), graduate certificate in STEM Teaching (for "initial licensure"), and Masters of Arts in Teaching (MAT)
- Discounted graduate tuition for educators to increase step-wise in 2026 and 2027
- Center webpages revised to reflect efforts to recruit prospective undergraduate students with TPP and full-time PK-12 educators as graduate students, additional Center website revisions underway for more personal approach
- Hosted or co-sponsored several events at WPI with outside partners that brought positive visibility of WPI to pre-college students, PK-12 teachers, and community members

KEY ACHIEVEMENTS OF FY26

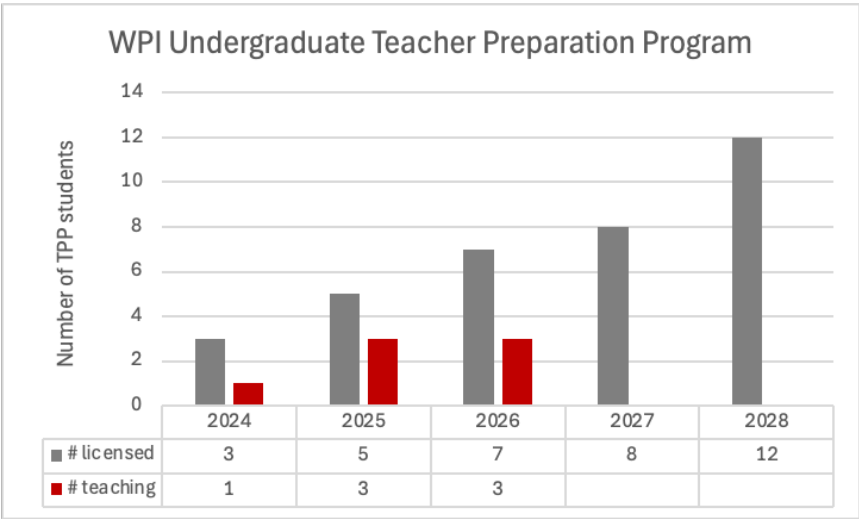
WPI Community Impact

Teacher Education academic programs connected across undergraduate Teacher Preparation licensure with a STEM Education minor to graduate level Master’s degree and certificate (for current PK-12 classroom teachers).

WPI Undergraduate Students Impact

Unique [Teacher Preparation Program \(TPP\)](#) adds MA state teaching licensure (in high need STEM areas) to WPI bachelor’s degrees earned within four years, while TPP students gain tremendous communication skills for added value.

- **Teacher Prep recruitment strong, especially in Physics** (one of the most in- demand teaching positions): 27 currently in TPP and more interested in applying
- Spring 2026 student teaching practicums: 6 in Worcester Public Schools (WPS), 1 practicum in Leominster Public Schools
- Began **recruiting prospective students** for Teacher Preparation Program; Center webpages revised to support new efforts
- New EDU 3300 course taught by a new adjunct faculty instructor, Sarah Davis
- **265.5 undergrad credits delivered** for TPP EDU courses (see Appendix A)
- New EDU 4500 Special Topics course approved and scheduled for D’27
- **Growth in undergraduate Teacher Preparation Program (TPP) in number licensed and teaching immediately after graduation**



- 8 TPP seniors graduated (w licensure and/or STEM Education-Teaching minor)
(3 teaching in the Fall, 3 in grad school at WPI, 1 in industry, 1 undecided)

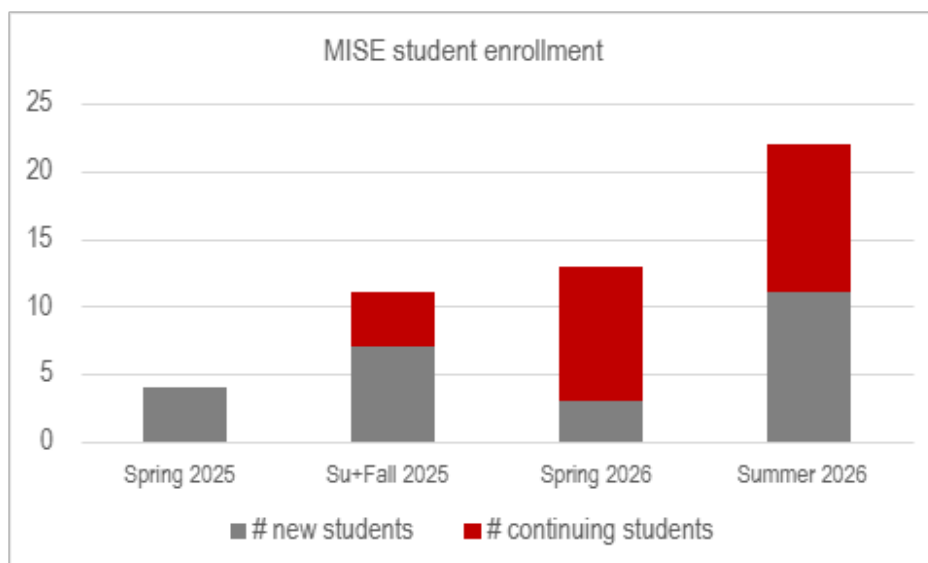


- Largest cohort of 6 Noyce Scholars recruited (TPP students committed to teach in high need school districts after graduation)
- Strong WPI representation at the regional Noyce Northeast conference in Philadelphia with 6 Noyce scholars, Jillian Bonaventura, Noemi Robertson, and a TPP mentor teacher in attendance

WPI Graduate Student Impact

Masters in Integrated STEM Education (MISE) brings in new graduate student population (PK-12 teachers) and revenue stream for WPI and current classroom teachers gain disciplinary knowledge and skills to be effective educators in STEM.

- New Masters in Integrated STEM Education (MISE) degree program starting off strong after 1st year, exceeding student enrollment projections:
22 active MISE graduate students at the end of FY26



- 1st MISE student graduated
- MISE student story highlighted for Center website and newsletter (as a recruitment strategy and to celebrate career changing educators)
- 6 grad EDU courses taught: **153 grad credits delivered** (see Appendix A)
- New **STEM Education Certificate** (that helps teachers attain “professional licensure”) approved and provides multiple options for PreK-12 educators to meet their needs



**Stand Alone Graduate
EDU Courses**



**Graduate Certificate
in STEM Education**



**Masters in Integrated
STEM Education (MISE)**

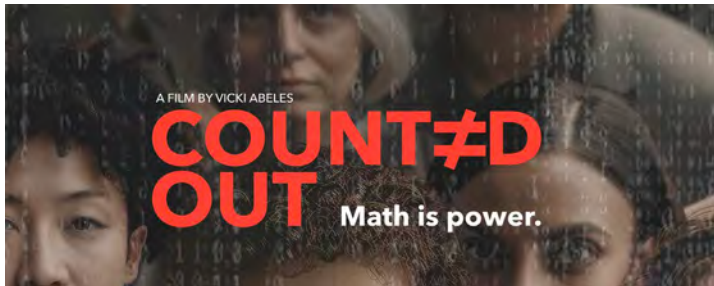
- Discounted graduate tuition for educators to increase step-wise in 2026 and 2027
- **\$77,125 revenue generated** to Grad Studies through MISE
- Started exploring additional pathways to teacher licensure through graduate learning: Accelerated Postbaccalaureate program (APB), graduate certificate in STEM Teaching (to “initial licensure”), and Masters of Arts in Teaching (MAT)

WPI Student/Faculty/Staff Impact

Center is a resource and partner for WPI projects and programs that involve PK-12 STEM and/or engages with the greater community.

- **Broader Impacts support** & STEM education consultations for WPI faculty/staff/students: **19 faculty grant consults**, **11 letters of support** for grant proposals; 7 project consultations
- Partnered with Pre-Collegiate Outreach Programs (POP) for “Celebrating Women in STEM Day”
- Asked to **provide training and guest lectures**: Mentor training for REU/RET/EREE; RSI workshop on Broader Impacts; guest lectures for ID527 Fundamentals of Scientific Teaching and Pedagogy course for graduate students
- Morgan Center Food for Thought: 3–part workshop series and Canvas site of resources as part of the PLC “New Approaches to Neurodiverse Teaching” (Jillian DiBonaventura)
- Coordinated **Family STEM Night** outreach event for **10 WPI exhibit tables** representing WPI labs, departments, and clubs

- Hosted the free screening and discussion of the “Counted Out” documentary for WPI and the community



Scholarly Impact

Disciplinary contributions to the field of STEM education and Teacher Education, enhancing WPI's research portfolio.

- 2 NSF grants, 2 state grants, and 1 Worcester City contract (as PI or co-PI): total **expenditure of \$479,643** and externally recovered **indirect costs of \$67,352**
- WPI faculty added STEM Education Center to grant proposals for our capability and expertise in PreK-12 teacher education
 - 2 grants submitted totaling ~\$175k to support work and new initiatives
- Jillian recognized with Insight Advisor and MQP Advisor awards
- As a team, we read the book “Elevating Educational Design with AI” by Katie Novak and Catlin Tucker for our own professional development
- All 5 team members attended at least 1 conference among 5 conferences:
2 presentations, 2 posters, 1 travel award

Greater Community Impact

The STEM Education Center is known outside of WPI as leaders in PK-12 STEM education and as collaborative partners for teacher education and for accessible STEM opportunities in the local community.

PK-12 Teacher Impact

Teachers and school administrators grow in their ability to facilitate and support high-quality STEM learning for all of their students through our [professional learning](#).

- **348 teachers** reached through 76 Professional Development (PD) sessions, representing 317 hours of instruction; **164 schools represented**



- 10 schools hired the STEM Ed Center for PD (for a total of 109 hours of instruction)
- 4 WPS educators participated in Curriculum & PBL EDU graduate course to incorporate City of Worcester data to develop place-based lessons; funded through City of Worcester, Office of Sustainability & Resilience



- Hosted several trainings and events at WPI with **Worcester Public Schools (WPS)**: Amplify elementary science curriculum trainings; district leadership AI workshop, “Leading in the Age of AI”; and Biotech Day

- 8 high school teachers (+ 1 mentor teacher) participated in Research Experiences for Teachers (RET) Summer 2026 and formed lasting relationships with WPI



- Annual STEM Education Showcase '26 event brought in 101 participants with 13 K-12 teachers presenting and 12 WPI faculty participating



Community Partnerships Impact

WPI (& STEM Education Center) recognized as a community partner invested in the Worcester community with over 20 community-engaged activities that include PK-12 students, PK-12 teachers & mentors, and family members in the Worcester area.

- Deepened **Worcester Public Schools (WPS) partnerships** in multiple ways, including community service:
 - Assembly of STEM kits for all 3rd grade science teachers by WPI students and the EDU 2200 class
 - Tutoring at Worcester Tech HS – 10 WPI students
 - TPP students judge regional VEX Robotics competition at South High School
- Continued **collaborations with local community-based organizations** as experiential components of EDU courses, TPP Noyce internships (i.e., grant funded), and WPI volunteer opportunities:



- African Community Education (ACE): EDU 2200 weekly tutoring and enrichment program support; adult English for Speaker of Other Languages (ESOL); volunteer opportunities set up for WPI students in addition to TPP
- YMCA Greendale: EDU 2200 community service day (C-term), EDU 2300 Healthy Kids Day STEM activities table (D-term)
- Upward Bound college access program at Clark University: weekly tutoring sessions; EDU 2300 weekly STEM afterschool program (D-term); Noyce summer interns as science/engineering instructors
- ENLACE program of Latino Education Institute (LEI) at Worcester State University – TPP Noyce internship of tutoring and mentoring boys in Worcester



- Piloted a **WPI - Forest Grove Middle School (WPS) afterschool program**: supporting an existing club and running a weekly STEM program with coherent lesson plans with specific educational objectives
 - Robotics club support (C-term, TPP Noyce internship)
 - Curiosity Crew: Rescue Shuttles (C-term, ME 595 independent study)
 - Curiosity Crew: Engineering Antivirals (D-term, EDU 2300)



- Partnered with Mass Academy to run the summer Junior Academy for Worcester 7th-9th graders

- Strengthened collaborations with Clark University and the **Upward Bound summer program** to have 3 TPP Noyce interns be the science, engineering, robotics instructors for WPS high school students; WPI students attended a Clark education (MAT) course; supplies funded by a WPI donor



- Community events** led or co-led by the Center: Counted Out public screening & conversation at WPI; CMSN Ecosystem STEM Week Family STEM Night at Worcester Boys & Girls Club; Celebrating Women in STEM Day at WPI for MS/HS students and champions; Blackstone Valley Education Foundation STEAM Unfiltered conference at WPI; STEM activities at the YMCA Healthy Kids Day Event



- Center's annual community service event: volunteered at Friendly House Office of New Americans (WAMS) to assemble care packages for new arrivals to Worcester



- Annual spring event, STEM Education Showcase '26 for PreK-12 educators attracted over 100 attendees:
 - 5 WPI faculty participated (including Rich Lopez as keynote speaker)
 - Worcester Public Schools Office of Family & Community Engagement (FACES) facilitated a workshop



- STEM Education Center and team members being recognized as community supporters as WPI representatives: Noemi selected for the Leadership Worcester program, Kathy recruited for the WPS Future Technologies Parent and Community advisory group, Kathy given the Friend of CTE (career and technical education) award from Worcester Tech HS

APPENDICES

Appendix A: EDU Credits Delivered

Undergraduate (UG) Credits Delivered (FY26)			
Course	# PDPs	# Students	Total Credits Delivered
EDU 2200		18	27
EDU 2300		23	34.5
PQP		7	10.5
ID 2050		8	24
EDU 3200		12	36
EDU/PSY 3300		13	39
EDU 4000		7	10.5
EDU 4100		7	21
IQP/MQP/ISP		7	63
Total UG Credits			265.5

Graduate Credits Delivered (FY26)			
Course	# PDPs	# Students	Total Credits Delivered
EDU 500	0	12	36
EDU 510	5	8	24
EDU 520	6	6	18
EDU 580-AI	6	9	27
EDU 580-Storyline	16	10	42
EDU 597	0	1	6
Total Graduate Credits			153

Undergraduate Credits	265.5
Graduate Credits	153
Total Credits	418.5

Appendix B: WPI Announcements

Seventeen (17) WPI Announcements to share the work of the STEM Education Center with four (4) highlighted below

May 1, 2026

WPI Noyce Scholars and Faculty Attend Northeast Noyce Teacher Conference



Six WPI Teacher Preparation Program (TPP) students, Jesse Drozd, Lucas Dion, Grace Ho, Sarah Roberg...

April 14, 2026

STEM Education Showcase '26 Celebrates Collaboration Across Classrooms and Communities



On Saturday, April 11, the STEM Education Center hosted its annual STEM Education Showcase, welcoming nearly

August 21, 2025

OpenSciEd at WPI: Launching High School Science Forward



The STEM Education Center received funding from the MA Department of Elementary and Secondary Education...

November 04, 2025

Celebrating STEM with Families and Community Partners



As part of Mass STEM Week 2025, the Boys & Girls Club of Worcester, Chase Corporation, and the Central MA STEM...

JUN
18

WPI hosts Worcester Public School biotech teachers to explore academic pathways

In partnership with the Worcester Public Schools (WPS) district, the STEM Education Center organized a...

MAY
18

Teacher Preparation Program Celebrates Graduating Seniors

On May 4, 2026, the Teacher Preparation Program (TPP) celebrated its graduating seniors at the annual bridging...

MAY
1

WPI Noyce Scholars and Faculty Attend Northeast Noyce Teacher Conference

Six WPI Teacher Preparation Program (TPP) students, Jesse Drozd, Lucas Dion, Grace Ho, Sarah Roberg...

APR
14

STEM Education Showcase '26 Celebrates Collaboration Across Classrooms and Communities

On Saturday, April 11, the STEM Education Center hosted its annual STEM Education Showcase, welcoming nearly...

APR
7

WPI Teacher Prep Students Lead Authentic STEM Learning Through Noyce Internships

During the summer of 2025 and throughout the 2025-2026 academic year, five Teacher Prep students participated and...

APR
1

From Marine Science to the MISE Program: A STEM Educator's Journey

A STEAM Teacher, Scientist, and Graduate Student at WPI's MS in Integrated STEM Education It's been a full...

FEB
12

Teacher Preparation Program (TPP) Welcomes our Newest Teacher Candidates

The Teacher Preparation Program (TPP) held our annual induction ceremony on Wednesday, January 28th at...

FEB
12

Teacher Preparation Program (TPP) Students Judge Local VEX Robotics Competition

Teacher Prep Program (TPP) students partnered with local high school Physics teacher Greg Jones at Worcester's...

NOV
13

Counted Out Documentary

The STEM Education Center is pleased to be hosting a free community screening and conversation.....

NOV
12

AI in the science classroom for K-12 teachers presented at conference

Liz Desrosiers, Donna Taylor, and Mia Dubosarsky at the WPI STEM Education Center exhibitor.....

NOV
6

WPI Community Inspires and Empowers the Next Generation in STEM

Participants explore drug resistance. On Saturday, November 1, WPI's campus was buzzing with.....

NOV
4

Celebrating STEM with Families and Community Partners

As part of Mass STEM Week 2025, the Boys & Girls Club of Worcester, Chase Corporation, and the Central MA STEM...

SEP
29

Noemi Robertson Joins Leadership Worcester Class of 2026

The Worcester Regional Chamber of Commerce recently announced the Leadership Worcester Class of 2026, and we are...

AUG
21

OpenSciEd at WPI: Launching High School Science Forward

The STEM Education Center received funding from the Massachusetts Department of Elementary and Secondary Education...

JUL
31

Mass Academy hosts Junior Academy summer program to build STEM pathways for local Middle School Students

This summer, the Junior Academy at Mass Academy welcomed rising 7th, 8th, and 9th grade students in the Worcester...

JUL
30

WPI Noyce Scholars and Faculty Attend National Noyce Summit

Three WPI Teacher Preparation Program (TPP) students, Jesse Drozd, Michael Nixdorf, and Samantha Simmons...

JUL
25

Join Us August 8 as RET Teachers Present UN SDG Research at Poster Symposium

A select group of eight middle and high school teachers have been spending their summer working in WPI faculty...