

The National Certificate for STEM Education (NCSE) recognizes individual school campuses for their commitment to—and growth in—teachers' implementation of 21st-century and STEM strategies. Evolving from STEM professional development and curriculum created at Rice University, the National Institute for STEM Education STEM certificates integrate the most recent research and best practices in STEM, 21st-century learning, and professional development.

The National Institute for STEM Education is more than a certifying body. NISE is a support system for campuses seeking to improve their implementation of STEM practices. With the support of an experienced STEM leadership coach, campuses craft and implement a STEM Action Plan to become an even stronger 21st-century STEM campus. The National Certificate of STEM Excellence includes up to five enrollments in the National Certificate for STEM Teaching.

Campus Support throughout the Process

- Initial on-site planning and PD
- Ongoing virtual support and PD
- Customized support
- Proprietary STEM protocol

- Inter-rater reliability tools
- Templates and research across all phases
- Professional development resources
- Online portfolio provides pathway to certification

STEM Campus Certification Requirements

- Science teachers must complete the NISE STEM teacher certificate. Teachers in other content areas are welcome to earn STEM teacher certificates.
- 2 Successful completion of goals within the campus STEM Action Plan.
- 3 Acceptance of all submissions and evidence submitted to the STEM Campus Portfolio.



PHASE 1: PLAN

- Create a data snapshot of STEM operations and instruction.
- Learn about STEM operations through a self-assessment survey.
- Develop a shared understanding of "quality" STEM instruction.
- Gather data about STEM classroom instruction using a STEM protocol.
- Create an inspiring STEM vision and realistic goals.
- Prioritize STEM needs.
- Personalize and communicate STEM vision and goals.
- Finalize STEM vision and goals.
- Create a STEM Action Plan.
- Prioritize STEM strategies.
- Encourage teacher initiated professional development.
- Share Action Plan with stakeholders.

PHASE 2: IMPLEMENT

- Integrate STEM into accountability measures.
- Link STEM instruction and high-stakes assessments.
- Link STEM instruction and campus assessments.
- Share accountability for achieving STEM goals.
- Integrate STEM into curriculum.
- Prioritize STEM curriculum needs.
- Maximize time for STEM.
- Develop STEM plans and resources.
- Integrate STEM into instruction.
- Integrate the 15 Teacher Actions into overall instructional planning.
- Integrate STEM instruction across content areas and grade levels.
- Observe and learn from STEM classroom instruction.

PHASE 3: SUSTAIN

- Use the STEM Protocol to guide instructional decisions.
- Monitor for new or persistent instructional needs.
- Provide differentiated STEM support for faculty.
- Adjust schedules and resources.
- Implement comprehensive STEM professional development.
- Support professional learning beyond district dedicated days.
- Monitor and adjust professional development.
- Encourage teacher initiated professional development.
- Monitor and adjust the STEM Action
- Measure progress toward goals and adjust as needed.
- Maximize community partners and external resources.
- Continually share and celebrate!

Most campuses complete their National Certificate for STEM Excellence in eight to twelve months. Time to completion can vary depending upon campus needs. Teacher certification (National Certificate for STEM Teaching) can run concurrently with campus certification.



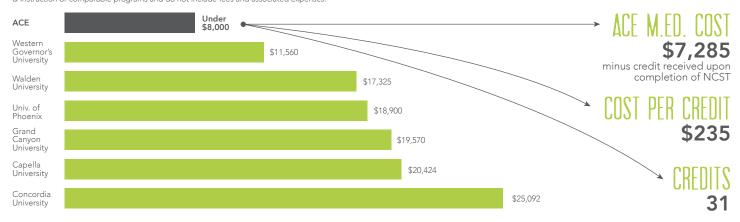


With a Master of Education in STEM Leadership, you will be able to take your place at the table as a STEM educational leader and advocate. Learn how to empower your teachers and students to think like scientists.

As educators, we know the best teaching provides relevant application. Now more than ever, students must master the critical thinking skills necessary to thrive in a global, digital society. For students to master STEM and prepare for careers in STEM fields, they must explore ideas and concepts through project-based learning and working within an environment that fosters hands-on scientific inquiry. Become a leader in facilitating teachers' effective use of STEM strategies in their classrooms and across the school.

American College of Education Tuition Comparison*

Based on information provided on each institution's website as of November 2015. Totals include tuition only for M.Ed. in Curriculum & Instruction or comparable programs and do not include fees and associated expenses.



Credit Earned with National Certificate for STEM Teaching

SCI5243 Creating an Environment for STEM Learning
SCI5263 Applied Science and Engineering Practices
Credit can also be applied to the ACE Destarate in Leadership with a STEM

Credit can also be applied to the ACE Doctorate in Leadership with a STEM Leadership Focus.

