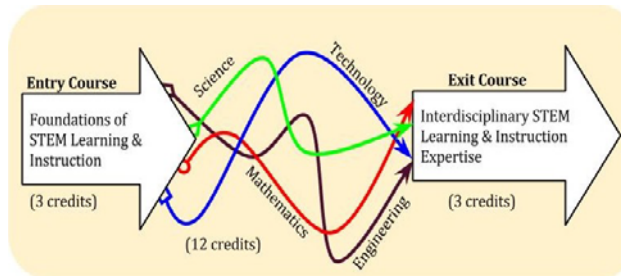


## Interdisciplinary STEM Education Graduate Certificate (18 Credits)

Students build interdisciplinary academic skills in context with an emphasis on real world problem solving, critical thinking, and career readiness.



### Individualized Pathways

**Case 1:** For those who have 12 science, math, technology, or engineering graduate credits.

Year 1	
Summer/Fall	iSTEM Education Entry (3 credits)
Spring	iSTEM Education Exit (3 credits)

**Case 2:** For those who have less than 12 science, math, technology, or engineering graduate credits.

Year 1	
Summer/Fall	iSTEM Education Entry (3 credits)
Fall/Spring	STEM Electives (1 – 12 credits)
Spring	iSTEM Education Exit (3 credits)

**Case 3:** For those who have no STEM credits and/or no time to be a full-time student.

	Year 1	Year 2
Summer	iSTEM Entry (3)	Electives (3)
Fall	Electives (3)	Electives (3)
Spring	Electives (3)	iSTEM Exit (3)

## Join Us! Work with iSTEM Educators!



### Contact Us

**iSTEM Education Initiative**

[www.wichita.edu/iSTEM](http://www.wichita.edu/iSTEM)

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# iSTEM @ Wichita State University

## Interdisciplinary STEM Education

### Graduate Certificate Program



**WICHITA STATE  
UNIVERSITY**  
COLLEGE OF EDUCATION



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Corbin Education Center at Wichita State University  
1845 Fairmount St., Box 28, Wichita, KS 67260-0028



# ENVISION

integrated &  
innovative  
**STEM EDUCATION!**

# VISION

The nationally recognized  
model for applied learning and  
research for STEM educators

\*Roof of Corbin Education Center at WSU

## Entry Course (3 credits):

### CI764 Interdisciplinary STEM Education Entry

Hybrid offered in Summer (July) & Fall semesters

The course is comprised of a comprehensive overview of the theories of and instructional strategies for integrated STEM education.

#### Activities include:

- 5E Inquiry-Based STEM Instruction.
- STEM Challenges and Practices i.e., Building windmill, lemon Battery, rocket car, submarine, or airplane.
- Online STEM Interactive Simulations
- Simple Robotics & iPad/Tablet apps for STEM
- Sample Engineering Practices e.g., Project Lead The Way (PLTW), Model Eliciting Activity (MEA), or Teach Engineering.
- Trending Technologies for iSTEM education e.g., Augmented Reality (AR), Virtual Reality (VR), or Things of Internet.

## Exit Course (3 credits):

### CI867 Interdisciplinary STEM Education Exit

Hybrid + Field Exp. offered in Spring semesters

Upon completion of this course, students will be able to successfully design and implement an integrated STEM curriculum with a roadmap of project-based learning to enable students to transfer their knowledge and skills to real-world problems, to be motivated to learn, and to improve their math and science learning.

#### Activities include:

- Working at formal or informal STEM education settings (e.g., Schools or Science Museums).
- A capstone project to develop an iSTEM curriculum for targeted grade level.
- A depth analysis and evaluation of existing iSTEM curriculum with suggestions to improve.
- A video recording of iSTEM lesson implementation.

## Sample STEM Electives:

- CI 750A:** Physical Science for Elementary Classrooms (3)
- CI 780S:** Technology in the Classroom (2)
- CI 712:** Environmental Science (3)
- CI 725:** Improvement of Instruction in Science (3)
- CI 505:** Science, Technology, and Society (1)
- CI 772:** Integrating Technology into the Curriculum (3)
- CI 750AL:** Instructional Multimedia Development (2)
- CI 800:** Special Problems (3)
- CI 519:** Mathematical Investigations (3)
- CI 750AM:** Interactive Online Teaching (2)

Other graduate level STEM courses at WSU.

## Admission

Graduate School, Wichita State University,  
107 Jardine Hall, 1845 Fairmount  
Wichita KS 67260-0004  
Tel No. (316) 978-3095  
E-mail: [wsugradschool@wichita.edu](mailto:wsugradschool@wichita.edu)  
Website: [www.wichita.edu/gradschool](http://www.wichita.edu/gradschool)

## Admission Requirements:

Students seeking this graduate certificate program must be Wichita State University Education graduate students in good standing either in a degree bound program or in Non-Degree, Category A status. Students should contact the Graduate School to determine if they need to apply for admission to this status, or need to reactivate their enrollment file.

## iSTEM @ Wichita State University



\*Scan this picture using Aurasma app on your cellphone or tablet.