Scroll down to see 2025 Summer STEM Professional Development offerings.

* Note that stipend amounts have been increased as of 04/08/25. This information reflects the new amounts.



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Creating Powerful Problem Solvers With Computational Thinking A Fun and Friendly Introduction

June 10-12, 2025

Ramkota Hotel and Conference Center

Pierre, SD

Audience: K-8 teachers in South Dakota who have not previously taken this workshop

This workshop is designed to help educators understand the computational thinking (CT) pillars in the context of math problem solving and science exploration. Participants will notice and name CT as it is highlighted in math and science lessons. They will begin to see and plan for highlighting the CT in the lessons they already teach in the classroom.

Application Link: https://forms.gle/M1wSrY17ueNh3BvD9

Participants will receive

- Stipend of \$450 for full participation in the workshop
- Mileage and hotel reimbursement
- The option to apply for one graduate credit from BHSU at \$40



Learning Unboxed

Integrating SURF Science into K-2 Classrooms

June 16-18, 2025 @Black Hills State University Spearfish, SD

During this 3-day workshop participants will actively participate in science investigations from the Sanford Underground Research Facility (SURF) curriculum unit "Move It!". Together we will explore strategies that support students as they follow their natural curiosity, drive their own learning process, and build the critical thinking skills needed for academic achievement.

Join us to LEARN, NETWORK & HAVE FUN!

https://sanfordlab.org/events/unboxed25

**Preference will be given to K-2 educators

Participants will receive

- Stipend for full participation in the workshop
- If needed, lodging at BHSU
- The option to apply for one graduate credit from BHSU at \$40

Empowering Students Through Deeper Learning

June 23-27, 2025 @Black Hills State University Spearfish, SD

Help students to think critically and make meaningful connections across disciplines as you dive into the exciting frontiers of science using a 3-dimensional instructional approach that blends Disciplinary Core Ideas (DCIs), Science and Engineering Practices (SEPs), and Crosscutting Concepts (CCCs).

This 5-day workshop is designed for K-12 educators seeking to ignite curiosity, inspire critical thinking, and cultivate cross-curricular learning in every learner. Whether exploring cutting-edge scientific concepts or designing lessons that engage students in deeper learning, participants will discover innovative and practical strategies to bring both abstract and complex ideas to life in the classroom.

Empowering Students Through Deeper Learning

https://sanfordlab.org/events/empower25

**Preference will be given to applicants who have previously attended an in-depth three-dimensional science workshop

Participants will receive

- Stipend for full participation in the workshop
- If needed, lodging at BHSU
- The option to apply for two graduate credits from BHSU at \$80

Al-Powered Materials Discovery at Great Plains

Workshop

June 23-25, 2025 @University of South Dakota Vermillion, SD

South Dakota Grade 6-12 teachers and preservice teachers are invited to learn about Artificial Intelligence (AI) applications in material science alongside industry and research scientists.



Education Branch Featuring:

- **Keynote Speaker Dr. Kate Moore (MIT)** uncovering ways in which AI concepts can enhance your computer science and science curricula.
- Local and Global Laboratories sharing how Al supports and advances the field of materials science and leads to groundbreaking research.
- Networking Opportunities with scientists and teachers to form partnerships where together we prepare students for careers integrated with AI technology.
- Al "Mini-School" covering the basics of Al and how to leverage it to improve workplace efficiencies.

Learn more and register on this workshop website: Registration is now closed. https://aimaterialsworkshop.org/event/1/registrations/1/

Participants will receive:

- Stipend of \$450 for full participation
- Room, board, and travel reimbursement

• One graduate credit at a reduced tuition rate of \$40 (optional)

Please refer questions to:

Hannah Caffee

E-mail: hannah.caffee@bhsu.edu

Center for the Advancement of Math and Science Education (CAMSE)

CIRCLES Place and Community-Based Teaching Practices with Connections to Indigenous STEM

July 8-10, 2025

@Drifters Grille Conference room Pierre, SD

This three-day professional learning workshop provides K-12 educators an opportunity to learn, discuss, and reflect on creating open, supportive and brave classroom communities that promote a sense of belonging, foster collaboration and encourage the development of STEM identity for all students. Educators will deepen their understanding of experiential and place-based practices, incorporating Indigenous practices. These practices will enrich STEM learning experiences for all learners, helping students see themselves as contributors to STEM fields and their local communities.

K-12 educators will:

- Engage in rich place-based STEM learning activities that celebrate joy and beauty of STEM
- Reflect on and build classroom practices that foster a community of learning, and
- Collaborate with colleagues from across South Dakota through purposeful discussion.

Upon successful completion, participants will receive

- \$450 stipend for full participation in the workshop
- Travel reimbursement to include lodging, mileage and meals not provided during workshop
- The option to apply for one graduate credit from Black Hills State University at a reduced cost of \$40

To register for the CIRCLES Place and Community-Based Teaching Practices with Connections to Indigenous STEM workshop please complete the Google form: https://bit.lv/CIRCLES2025PlaceBased

To learn more about other upcoming CIRCLES events please add your information to the CIRCLES interest Google Form: bit.ly/CIRCLESinterest

Please refer questions to:
Stephanie Higdon
CIRCLES Curriculum Development Facilitator
Stephanie.higdon@bhsu.edu

Expanding Pathways into Computer Science:

A comprehensive Introduction to CS for High School Students

July 14-18, 2025 Mitchell, SD

OPPORTUNITY

South Dakota high school teachers are invited to join a statewide computer science network. Teacher training is available this summer, the curriculum is free, and participating teachers are eligible for follow-up support through the 2025-26 academic year.

CURRICULUM

The course, called *Exploring Computer Science (ECS)*, is available to review online at www.exploringcs.org. National teacher leaders recently revised the ECS curriculum. It is appropriate for all high school grade levels and qualifies for Career and Technical Education credit with the South Dakota Department of Education.

SUMMER INSTITUTE 2025

Dates: July 14 – 18, 2025 in person

Location: Mitchell, SD at Dakota Wesleyan University

Intended audience: Ideal for high school math, science, and technology teachers

interested in teaching *Exploring Computer Science* during the 2025-26 academic year and for any teacher who has taught ECS

in the past.

Participant Support: \$750 stipend per teacher, lodging, lunch, per diem for other meals

Graduate Credit: 2 graduate credits will be available from BHSU for \$40/credit

Application Link:

https://forms.office.com/r/wj5stL3mrz

Teachers are encouraged to apply as soon as possible. Our hope is for teachers to consider adding *Exploring Computer Science* as a curriculum or incorporating ECS content within an existing course during the 2025-26 academic year. Space is limited!

ADDITIONAL DETAILS

Follow up sessions each offer additional stipends and support.

Follow-up sessions Virtual follow-up for the data unit in Fall 2025

planned: In-person robotics day for the final unit in March 2026

CONTACTS

Deann Kertzman, BHSU Deann.Kertzman@bhsu.edu
Tina Belden, Estelline School District Tina.Belden@k12.sd.us

CIRCLES Effective Teaching Practices with Connections to Indigenous STEM

July 15-17, 2025

@Sisseton Wahpeton College Sisseton, SD

This three-day professional learning workshop provides K-12 Educators an opportunity to learn, discuss and reflect on strategies for cultivating student belonging and creating open, supportive and brave learning environments where all students develop their STEM identity. Educators will deepen their understanding of Indigenous STEM, spend time reflecting and planning for classroom implementation enhancing the relevance of STEM learning for students.

K-12 educators will:

- Engage in rich activities with connections to Indigenous STEM,
- Develop practices to create a collaborative classroom where all students can learn, and
- Have discussion to allow for deeper learning and reflection.

Upon successful completion, participants will receive

- \$450 stipend for full participation in the workshop
- Travel reimbursement to include lodging, mileage and meals not provided during workshop
- The option to apply for one graduate credit from Black Hills State University at a reduced cost of \$40

To register for the CIRCLES Place and Community-Based Teaching Practices with Connections to Indigenous STEM workshop please complete the Google form: https://bit.ly/CIRCLES2025Effective

To learn more about other upcoming CIRCLES events please add your information to the CIRCLES interest Google Form: bit.ly/CIRCLESinterest

Please refer questions to: Stephanie Higdon CIRCLES Curriculum Development Facilitator Stephanie.higdon@bhsu.edu

E-CORE Teacher Leader Institute

July 21-25, 2025@Drifters Grille Conference room Pierre, SD

SD STEM Leadership is a program by South Dakota E-CORE to create and support a dynamic network of South Dakota K-16 STEM educators. SD STEM Leadership challenges, develops and educates South Dakota STEM educators who have an interest in developing leadership skills related to STEM education. SD STEM Leadership is designed around the following goals:

- Build and broaden community through intentional networking.
- Grow professionally and personally by focusing on problem solving, innovation, leadership, systems thinking, change, and efficacy.
- Create a shared knowledge base for leadership, including advocacy, effective instruction, clarity about STEM, and research-based practices.
- Increase awareness of and connections to current STEM research in South Dakota.
- Appreciate that all the above goals are critical to shaping a vision where all students in South Dakota consistently experience rigorous, relevant, and engaging STEM instruction.

Application Process:

Ideal candidates for the SD STEM Leadership Program aspire to grow professionally, challenge their thinking and practice, and be a leader/advocate for effective STEM education. Applicants must teach or co-teach a STEM discipline. This includes teachers who teach any STEM content area (e.g., science, math, computer science) or an integrated one (e.g., STEM) as part of their day. The application process is designed to ensure a cohort that consists of members from a wide range of experiences and geographical locations. Approximately 30 participants will be chosen annually. A completed application requires submission of 3 components:

- Application Due Friday, April 4, 2025 by 5:00 p.m. https://forms.gle/a4zPi7swgim9Yirp8
- Letter of Recommendation Due Friday, April 4, 2025 by 5:00 p.m. https://forms.gle/jDSe7gSkcGZuaCvRA
- Administrator Support Statement Due Friday, April 4, 2025 by 5:00 p.m. https://forms.gle/TQPyPWcY5nVDJAvx5

Program Meeting Dates

Upon selection, participants will be expected to attend all the following meetings:

- Retreat 1- July 21 25, 2025 in Pierre, SD
- Retreat 2 October 18-19, 2025 in Rapid City, SD
- Retreat 3 February 6-8, 2026 in Huron, SD (optional attendance on Feb. 6 at SD STEM Education Conference)

Costs

The registration cost of SD STEM Leadership = FREE. The SD E-CORE grant is able to cover hotel, mileage, meals and a learning stipend for each of the retreats.

For additional questions about the SD STEM Leadership Program, email Nicol Reiner (NReiner@sanfordlab.org) or Kim Webber (Kim.Webber@bhsu.edu)

Elementary Integrated STEM Workshop

July 28-30, 2025

Ramkota Hotel and Conference Center Pierre, SD

As of 4.12.25, applicants will be notified and placed on a waiting list for Integrated STEM. Thank you for your interest.

Uncover the power of Integrated place-based STEM by experiencing and unpacking lessons and activities for grades 2 through 5. Practice thinking routines for your classroom to encourage engagement from all students. Examine STEM activities for alignment with the SD Science & Engineering Practice, Mathematical Practice, and Integrated STEM Practice Standards. Collaborate with teachers to develop high-quality integrated STEM lessons based on your current curriculum.

Teachers in grades two through five who have not previously taken this workshop are encouraged to apply. Specialists in math, science, or computer science who work with second through fifth grade students are also welcome to apply.

Application link https://forms.office.com/r/mFkQMu9k6t

Participants will receive:

- Room, board, and travel reimbursement
- A stipend of \$450 for full participation
- One graduate credit at a reduced tuition rate of \$40 (optional)