

Elementary STEM Endorsement

Requirement Options

4/12/2021

Requirement Area 1: STEM for Teaching K-6 Science

University Course

- 3-credit course: STEM for Teaching K-6 Science

Microcredentials

- Microcredential Stack: STEM for Teaching K-6 Science
 - Demonstrate Integration Models for Science and other STEM Disciplines & Identify Careers in Science ([Competency 1](#))
 - Through the Lens of STEM, Reflect on Science Instruction Highlighting the Three Dimensions of Science Instruction Including the Use of Authentic Phenomena. ([Competency 2](#))
 - Develop Pedagogical Practices to Support Disciplinary Literacy Instruction in Science and the Knowledge and Skills to Integrate Different STEM Disciplines ([Competency 3](#))
 - Through the Lens of STEM, Plan, Implement, and Reflect on Science Instruction Highlighting Integrating the Content Standards with other Content Areas ([Competencies 2, 3, & 4](#))

Requirement Area 2: STEM for Teaching K-6 Technology and Engineering

University Course

- 3-credit course: STEM for Teaching K-6 Technology and Engineering

Microcredentials

- Microcredential Stack: STEM for Teaching K-6 Technology and Engineering
 - Plan, Implement, and Reflect on Engineering Design Instruction Highlighting the Science and Engineering Practices (SEPs) & Identify Careers/Contexts of Engineering ([Competency 2](#))
 - Through the Lens of STEM, Plan, Implement, and Reflect on the Use of Effective Technological Practices and Standards to Support Engineering Design and the Science and Engineering Practices (SEPs)([Competencies 3 & 5](#))
 - Develop Pedagogical Practices to Support Disciplinary Literacy Instruction in Engineering and the Knowledge and Skills to Integrate Different STEM Disciplines ([Competencies 1 & 4](#))
 - Through the Lens of STEM, Plan, Implement, and Reflect on Engineering Instruction Highlighting Integrating the Content Standards with other Content Areas ([Competency 5](#))

Requirement Area 3: STEM for Teaching K-6 Mathematics

University Course

- 3-credit course: STEM for Teaching K-6 Mathematics

Microcredentials

- Microcredential Stack: STEM for Teaching K-6 Mathematics

- Demonstrate Integration Models for Mathematics and other STEM Disciplines & Identify Careers in Mathematics ([Competencies 1 & 2](#))
- Through the Lens of STEM, Plan, Implement, and Reflect on Mathematics Instruction Highlighting the Standards for Mathematical Practice ([Competency 2](#))
- Through the Lens of STEM, Plan, Implement, and Reflect on Mathematics Instruction Highlighting the Effective Teaching Practices ([Competency 3](#))
- Through the Lens of STEM, Plan, Implement, and Reflect on Mathematics Instruction Highlighting Integrating the Content Standards with other Content Areas ([Competencies 2, 3, & 4](#))