

STEM - CERTIFICATE

Program Description

The STEM certificate consists of 12 credits. Students must participate in a face-to-face meeting on the St. Paul campus of St. Catherine University prior to starting the certificate.

Curriculum

Code	Title	Credits
Required course		
EDUC 6420	Technology Integration Fundamentals	3
Select three courses from three different focus areas		9
STEM Integration		
EDUC 6827	SySTEMic Integration - Transforming K-6 Education through STEM Instruction	
EDUC 6825	Citizen Science as Service Learning in the Natural World	
EDUC 6225	Literacy through STEM: Using Reading, Writing, Listening and Speaking as Tools in STEM	
Science focus		
EDUC 6805	The Outdoor Classroom	
EDUC 6812	Foundations of Environmental Chemistry	
EDUC 6860	Elementary Earth Science - Understanding the Ground Upon Which We Stand	
Technology focus		
EDUC 6710	Introduction to Computational Thinking and Coding	
EDUC 6730	Physical Computing: Introduction to Arduinos	
EDUC 7690	Hands on STEM: Maker Space in the K-8 Setting	
Engineering or Math focus		
EDUC 6123	Making Data Meaningful	
EDUC 6820	Engineering Basics	
EDUC 6835	Engineering and Mathematics	
EDUC 6855	Hands on STEM: Basic Engineering and Alternative Energy	
Total Credits		12