EXCELLENCE IN STEM EXPERIENTIAL EDUCATION (EXSD)

Courses

EXSD 504. EXSEED STEM Education. 3 Units.
Individually and collaboratively investigate STEM/STREAMS initiatives and programs at all K-12 levels. Includes examination of state and Seventh-day-Adventist education standards, exploring an interdisciplinary approach to STEM/STREAMS education using a project-based learning approach through a mission-focused learning lens. Incorporates a blend of hands-on workshops, readings, and reflective discourse opportunities. Grant proposal writing will be considered a voluntary and enhancing component.

EXSD 505. Design Thinking: STEM Leadership. 3 Units.
Investigates individual and collaborative "Design Thinking" principles, stages, and tools with the goal of applying them to Seventh-day Adventist K-12 educational challenges. Includes theory, activities, and case studies designed to cultivate an experimental culture, embrace failure, and adopt a human-centered approach. Incorporates a blend of hands-on workshops, readings, and reflective discourse opportunities.

EXSD 506. STEM Vision and Strategy: Leading and Managing Change. 3 Units.
Enables participants to craft a compelling STEM vision for Seventh-day Adventist K-12 education, encouraging them to develop, lead change, and manage innovation with a focus on leadership, partnerships, budgets, and grants. Provides hands-on projects and reflective discussions to enhance learning.

EXSD 507. Capstone: STEM Innovation Plan and Portfolio. 1 Unit.
Showcase proficiency in applied knowledge and skills to plan and implement a STEM innovation event for a school, conference, or community. Build a digital portfolio to chronicle the STEM innovation journey, acknowledge achievements, and refine teaching methodologies. Incorporates a diverse range of experiential workshops, readings, reflective discourse, and practical problem-solving exercises.