MASTER OF SCIENCE
EDUCATION

Instructional Design in E-Learning

NORTHERN STATE UNIVERSITY
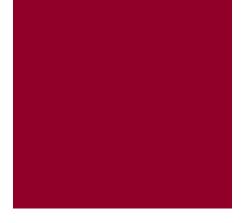
NORTHERN

GRADUATE STUDIES

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Note: The information contained in this handbook is subject to change; students are responsible for communicating with their Graduate Advisor/Graduate Office to remain current in the program policies and procedures.

INSTRUCTIONAL DESIGN IN E-LEARNING HANDBOOK

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MASTER OF SCIENCE IN EDUCATION: **INSTRUCTIONAL DESIGN IN E-LEARNING**

I. PROGRAM OVERVIEW

Over the past several decades, technology has become an increasingly prominent aspect of the American education system. Despite increased availability within most school districts, the use of educational technology has not always lived up to its promises. Meanwhile, interest in distance education has accelerated the need for research-based instruction. Therefore, Northern State University has created the Master of Science in Education (MSEd) in Instructional Design in E-Learning to provide teachers with training in the efficient and effective implementation of educational technology.

The MSEd in Instructional Design in E-Learning provides hands-on preparation in fulfilling the International Society for Technology in Education (ISTE)'s Standards for Educators. ISTE's standards aim to empower teachers and educational specialists to implement high-leverage technology-based instructional design as Learners, Citizens, Leaders, Collaborators, Designers, Facilitators, and Analysts.

The MSEd in Instructional Design in E-Learning is available entirely online, and courses are designed to not only meet rigorous standards, but to offer meaningful, practical application of the critical skills needed to teach face-to-face and virtually.

In addition to the traditional MSEd in Instructional Design in E-Learning, Northern State University also offers an accelerated option for undergraduate students. Students who have taken ELRN 510, ELRN 535, ELRN 540, and ELRN 585 can complete the Instructional Design in E-Learning (MSEd) degree program in one additional year (Fall, Spring, and Summer semesters).

II. PROFESSIONAL PREPARATION

Northern's MSEd in Instructional Design in E-Learning prepares students for a variety of career paths: Online Instruction, Technology Integration, E-Learning Development, Curriculum Development, Corporate Training, and Instructional Design.*

* This degree does not lead to initial certification as a teacher in the state of South Dakota. However, the program does support the "Technology Integrationist" certificate endorsement.

III. PROGRAM LEARNING OUTCOMES

Graduate students will...

- utilize and apply contemporary learning theories to develop remote learning experiences. (ISTE 2.3b, 2.4c, 2.5c, 2.6b)
- investigate factors influencing access to education and design instructional and training interventions to provide equitable access to education. (ISTE 2.3a, 2.5a, 2.6a)
- select, evaluate, or design digital media to support learning. (ISTE 2.6d, 2.2b, 2.2c, 2.2d)
- identify, evaluate, and integrate emerging technologies to support remote learning. (ISTE 2.2a, 2.5b, 2.5c, 2.6c)
- apply data analysis techniques to the design and evaluation of learning experiences. (ISTE 2.7a, 2.7b, 2.7c)
- employ effective and ethical communication strategies in instructional design. (ISTE 2.4a, 2.4b, 2.4d)
- apply current research and theory to the practice of instructional design and learning technology integration. (ISTE 2.1a, 2.1b, 2.1c, 2.3c)

IV. APPLICATION

Candidates must have undergraduate preparation in one of the following areas: Early Childhood, Elementary Education, Secondary Education, Special Education, Career Technical Education, or K-12 Education.

Admission to the MSEd in Instructional Design in E-learning requires individuals to have:

- Undergraduate GPA of 2.75
- Completed Graduate Application^
- Two Letters of Recommendation
- An Official Transcript*
- $35 Application Fee

^ Those seeking the accelerated option must have completed 90 credits in their undergraduate program to be accepted.

* Not required for application to the accelerated master's degree program.

V. PROGRAM REQUIREMENTS

Course Name and Number	Credits
I. FOUNDATION COURSES (6 credits)	
EDER 761 – Graduate Research and Design	3
Offered face-to-face Fall; online Spring and Summer semesters	
EPSY 742 – Psychology of Learning	3
Offered online Fall, Spring, & Summer semesters	
II. CORE COURSES (21 Credits)	
ELRN 510 – Digital Learning and Communication*	3
Offered online every other Spring semester	
ELRN 535 – Principles of Instructional Design*	3
Offered online Fall and Spring semesters	
ELRN 540 – Multimedia Design & Development*	3
Offered online Summer semester	
ELRN 585 – Classroom Technology*	3
Offered face-to-face Fall and Spring	
OR	
ELRN 550 – Digital Learning Tools & Resources*	3
Offered online every other Fall semester	
EDFN 765 – Differentiated Inst. and Classroom Engagement	3
Offered online Summer or Fall semesters	
ELRN 750 – Teaching and Learning with Digital Technologies	3
Offered online Summer semesters	
ELRN 772 – Applications of Learning Theory	3
Offered online Summer semesters	
III. INTERNSHIP (3 credits)	
ELRN 794 – Internship	3
Offered Fall or Spring semesters, as needed	
TOTAL CREDITS	**30**

Available upon completing 90 credits during undergraduate study for those seeking the accelerated master's degree.

VI. GRADUATE ADVISOR

Each candidate is assigned a graduate advisor upon admission to the graduate program in Instructional Design in E-Learning. The advisor is a full-time faculty member and is familiar with the area in which the student is interested. The candidate's advisor is responsible for providing direction and advisement during the program and will work with the candidate to schedule submission of the final portfolio.

VII. INTERNSHIP

The purpose of the Internship in E-Learning at Northern State University is to provide candidates with coherent, authentic, and sustained field-based opportunities to apply program knowledge and skills in a real-world environment. The internship will focus on the ability to conceptualize, organize, and facilitate technology-based instructional design on a classroom, school-wide or district-wide basis. The internship is designed to provide candidates opportunities to demonstrate mastery of the knowledge and skills identified in the International Society for Technology in Education (ISTE)'s Standards for Educators. Candidates are encouraged to schedule their internship during their last semester of their program.

VIII. FINAL PORTFOLIO

Final portfolio submission occurs during the candidate's last semester of enrollment. Graduate candidates are responsible for collaborating with your advisor to complete the portfolio. Candidates are required to successfully complete this portfolio prior to program completion. The portfolio will address each of the ISTE standards as outlined in the E-Learning Internship Handbook. Candidates will submit their completed portfolio to your advisor during the scheduled submission dates. The portfolio is evaluated by your advisor and the School of Education's Assessment Office will communicate the results to the candidate.

VII. CONTACT INFORMATION

Office of Graduate Studies
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and Director of Graduate Studies
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APPENDIX A

INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION (ISTE) STANDARDS FOR EDUCATORS:

DOMAIN 2.1: LEARNER

Teachers continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning. Teachers:

2.1.a Set professional learning goals to explore and apply pedagogical approaches made possible by technology and reflect on their effectiveness.

2.1.b Pursue professional interests by creating and actively participating in local and global learning networks.

2.1.c Stay current with research that supports improved student learning outcomes, including findings from the learning sciences.

DOMAIN 2.2: CITIZEN

Teachers inspire students to positively contribute and responsibly participate in the digital world. Teachers:

2.2.a. Create experiences for learners to make positive, socially responsible contributions and exhibit empathetic behavior online that build relationships and community.

2.2.b. Establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.

2.2.c. Mentor students in safe, ethical, and legal practice with digital tools and protection of intellectual rights and property.

2.2.d. Model and promote management of personal data and digital identity and protect student data privacy.

DOMAIN 2.3: LEADER

Teachers seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning. Teachers:

2.3.a. Shape, advance and accelerate a shared vision for empowered learning with technology by engaging with education stakeholders.

2.3.b. Advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students.

2.3.c. Model for colleagues the identification, experimentation, evaluation, curation and adoption of new digital resources and tools for learning.

DOMAIN 2.4: COLLABORATOR

Teachers dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems. Teachers:

2.4.a. Dedicate planning time to collaborate with colleagues to create authentic learning experiences that leverage technology.

2.4.b. Collaborate and co-learn with students to discover and use new digital resources and diagnose and troubleshoot technology issues.

2.4.c. Use collaborative tools to expand students' authentic, real-world learning experiences by engaging virtually with experts, teams, and students, locally and globally.

2.4.d. Demonstrate cultural competency when communicating with students, parents and colleagues and interact with them as co-collaborators in student learning.

DOMAIN 2.5: DESIGNER

Teachers design authentic, learner-driven activities and environments that recognize and accommodate learner variability. Teachers:

2.5.a. Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.

2.5.b. Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.

2.5.c. Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning.

DOMAIN 2.6: FACILITATOR

Teachers facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students. Teachers:

2.6.a. Foster a culture where students take ownership of their learning goals and outcomes in both independent and group settings.

2.6.b. Manage the use of technology and student learning strategies in digital platforms, virtual environments, hands-on makerspaces or in the field.

2.6.c. Create learning opportunities that challenge students to use a design process and/or computational thinking to innovate and solve problems.

2.6.d. Model and nurture creativity and creative expression to communicate ideas, knowledge, or connections.

DOMAIN 2.7: ANALYST

Teachers understand and use data to drive their instruction and support students in achieving their learning goals. Teachers:

2.7.a Provide alternative ways for students to demonstrate competency and reflect on their learning using technology.

2.7.b Use technology to design and implement a variety of formative and summative assessments that accommodate learner needs, provide timely feedback to students, and inform instruction.

2.7.c Use assessment data to guide progress and communicate with students, parents, and education stakeholders to build student self-direction.

Standards retrieved from: International Society for Technology in Education. 2021. ISTE standards. https://www.iste.org/standards/iste-standards-for-teachers

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