

Learning Design and Technology Online MSEd Program Guide

For students who started program Spring 2023 or later

PURDUE UNIVERSITY COLLEGE OF EDUCATION



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II. Introduction to the LDT Program

Purpose of this Guide

The purpose of this guide is to assist you, a master's student in Learning Design and Technology, in understanding and managing your graduate program of study. This guide includes key information about the M.S.Ed program, requirements, and timelines. You should become familiar with the information in this guide as it is relevant to your degree program.

Mission of the Learning Design and Technology Graduate Program at Purdue University

Graduate programs in Learning Design and Technology at Purdue University prepare students to design effective learning experiences and environments that incorporate technology with a special emphasis on inquiry-based, authentic practices in traditional and distributed learning settings.

Learning Design and Technology Career Options

Learning Design and Technology is an interdisciplinary field of study. The aim of this field of study is to promote learning through the application of systematic principles of instructional design and appropriate uses of educational technologies including computers and media. Learning Design and Technology, although often associated with computers and other hardware, goes beyond any particular medium or device. It is a systematic way of designing, developing, implementing, and evaluating the total process of teaching and learning to bring about more effective learning. Computers and technologies play a key role in support of teaching and learning and so are important aspects of LDT in today's world. Specialists in this field design and develop instruction, often computer or web-based, and implement and evaluate technology-enhanced learning in a variety of settings including K-12 schools, universities, business/industry training, and the military.

How to Succeed in Your Graduate Studies

To succeed in your graduate studies you must become an active participant in the process. Although the faculty will endeavor to assist you and provide guidance, ultimately it is your responsibility to ensure that you are adhering to all requirements and timelines and getting what you need/want out of the program. It is important that you thoroughly familiarize yourself with the information in this guide as well as graduate policies and procedures. If you are uncertain about rules and requirements consult with your Student Services Coordinator.

Part of completing a graduate degree involves enculturation into the field of instructional design and technology. This cannot occur in isolation. Get to know other graduate students and collaborate with them. The most successful students are often those who belong to a mutual support group. It is especially important that you establish connections with other graduate students so that you can become a part of the Learning Design and Technology community. For instance, LDT maintains a Facebook page that you are welcome to join.

You will be assigned a faculty chair who will serve as your major professor. Throughout your graduate studies, if you maintain good communication with your professors, your problems are likely to be minimized.

Note: You may be asked to hire a professional editor to review your work. This should be completed in consultation with your faculty advisor. Refer to section VIII for information about resources at the Purdue Libraries and the Purdue University Online Writing Lab (OWL).

III. Degree Requirements

Course Requirements for Students who Started Program Spring 2023 or Later (32 credits)

Core Online M.S. Learning Design and Technology Requirements (total of 26 credits)

- EDCI 51300, Foundations of Educational Technology (3 credit hours)
- EDCI 52800, Human Performance Technology (3 credit hours)
- EDCI 53100, Learning Theories and Instructional Design (3 credit hours)
- EDCI 56900, Introduction to E-Learning (3 credit hours)
- EDCI 57200, Introduction to Learning Systems Design (3 credit hours)
- EDCI 57300, Instructional Development Practicum (3 credit hours)
- EDCI 57700, Strategic Assessment and Evaluation (3 credit hours)
- EDCI 60001, Introduction to Demonstrating Professional Competencies in LDT (1 credit hour)
- EDCI 60003, LDT Professional Competencies Portfolio (1 credit hour)
- EDCI 67200, Advanced Practices in Learning Systems Design (3 credit hours)

Elective & Technology Selective (total of 6 credit hours)—Select 2 courses, at least 1 course must be a technology selective:

Technology Selectives

- EDCI 55600, Educational Video Game Design (3 credit hours)
- EDCI 56000, Educational Technology for Teaching and Learning (3 credit hours)
- EDCI 56400 Integration and Management of Technology for Learning (3 credit hours)
- EDCI 56600, Educational Applications of Multimedia (3 credit hours)

General Electives

- EDCI 57500, Foundations of Distance Learning (3 credit hours)
- EDCI 58800, Motivation and Instructional Design (3 credit hours)
- EDCI 63300, Instructional Design Project Management (3 credit hours)
- EDPS 53300 Introduction To Educational Research I: Methodology (3 credit hours)

Learning Design and Technology Prerequisite Requirements

- EDCI 56900: Requires that EDCI 57200 be completed.
- EDCI 57300: Requires that EDCI 56900, EDCI 57200, and EDCI 67200 be completed.
- EDCI 60003: Requires that all core courses except EDCI 52800 be completed.
- EDCI 67200: Requires that EDCI 57200 be completed.

Online M.S.Ed students will complete all core courses in order based on when they started their program, as shown on the next page (exceptions may be made on a case-by-case basis depending on previous graduate coursework). This will provide you with a cohesive set of sequenced experiences.

- Note: Individuals may need to take additional courses as determined by their graduate committee. This might be necessary if additional prerequisites need to be acquired, for example.
- Note: Up to 9 credits may be transferred from courses taken during previous programs; however, you must request these transfers and each request must be approved by your faculty committee.
- Note: Not all courses will be available during every session

Tentative Master's Program Course Sequence for Students Starting Spring 2023 or Later

Course sequence for students starting in the FALL

Fall			
Term 1	Term 2		
EDCI 51300	EDCI 57200		
EDCI 60001			
Spring			
Term 1	Term 2		
EDCI 53100	Tech Selective/Elective		
Summer			
Term 1	Term 2		
EDCI 56900	EDCI 52800		
Fall			
Term 1	Term 2		
EDCI 57700	EDCI 67200		
Spring			
Term 1	Term 2		
EDCI 57300	Tech Selective/Elective		
EDCI 60003			

Course sequence for students starting in SPRING

Spring			
Term 1	Term 2		
EDCI 53100	Tech Selective/Elective		
EDCI 60001			
Summer			
Term 1	Term 2		
EDCI 51300	EDCI 57200		
Fall			
Term 1	Term 2		
EDCI 57700	EDCI 67200		
Spring			
Term 1	Term 2		
EDCI 56900	Tech Selective/Elective		
Summer			
Term 1	Term 2		
EDCI 57300	EDCI 52800		
EDCI 60003			

Course sequence for students starting in SUMMER

Summer			
Term 1	Term 2		
EDCI 51300	EDCI 57200		
EDCI 60001			
Fall			
Term 1	Term 2		
EDCI 57700	67200		
Spring			
Term 1	Term 2		
EDCI 53100	Tech Selective/Elective		
Summer			
Term 1	Term 2		
EDCI 56900	EDCI 52800		
Fall			
Term 1	Term 2		
EDCI 57300	Tech Selective/Elective		
EDCI 60003			

Course Notes:

- Course sequences listed above assume continuous enrollment.
- At least one technology selective course is required. In addition to taking a technology selective, students are required to take an additional course from the list of general electives or may take a second course from the list of technology selectives.

IV. Online MSEd Program Course Descriptions

Core Courses (total of 26 credit hours)

- **EDCI 51300, Foundations of Educational Technology (3 credit hours):** This course provides a historical overview of the field and delineates the foundational knowledge, skills, and attitudes needed by professionals in the field of educational technology and instructional design. Students explore the field by engaging in collaborative projects along with thinking and writing about various aspects of educational technology and the underlying instructional design theories.
- EDCI 52800, Human Performance Technology (3 credit hours): This course provides an introduction to the field of human performance technology (HPT). It examines basic concepts and principles of human performance, the theoretical underpinnings of the field, research and application literature, and various approaches to solving human performance problems. A systematic approach to the analysis, design, development, implementation and evaluation of performance improvement interventions within organizations is emphasized.
- EDCI 53100, Learning Theories and Instructional Design (3 credit hours): This course helps students learn how theories of human learning and motivation can be applied to the instructional process in order to make the process more effective, efficient, and/or appealing. The focus of the course is on two areas: 1) the theoretical principles that have contributed to the field of Instructional Design (ID), and 2) how those principles can be applied within practical settings.
- EDCI 56900, Introduction to E-Learning (3 credit hours): This course examines how the design and development of instruction are impacted by the use of the computer as delivery system. A primary focus is on effective learning design strategies for e-learning. Learners will identify and apply effective design practices with emphasis on project management, planning, and implementation. Education or training materials will be developed using appropriate authoring tools as determined by the instructional context. Learners will design an E-Learning module with end-to-end documentation of the design process (Project Plan, Design Document, Storyboard). Opportunities for collaborative feedback and evaluation will also be featured elements of the course experience.
- EDCI 57200, Introduction to Learning Systems Design (3 credit hours): This course examines the processes of instructional design within a project-based context. A primary focus is on the design of effective learning strategies that are motivating, efficient, and effective. Practical aspects of designing instructional learning systems in the classroom and workplace are addressed while completing project work.
- EDCI 57300, Instructional Development Practicum (3 credit hours): Supervised field experience in
 programs involving instructional development activities. Students participate in ongoing projects in the
 design and development of instructional materials and training programs in business and industry,
 medical facilities, or other settings deemed appropriate. Students will develop skills in their fields of
 interest as well as learn about the job demands of that field. The purpose of the practicum is to
 provide students with the opportunity to apply knowledge gained in EDCI 57200 and other
 instructional development courses with practical field experiences.
- EDCI 57700, Strategic Assessment and Evaluation (3 credit hours): This course explores principles and techniques that can be used to carry out evaluations within an organization. The course also examines several aspects of conducting evaluations, including planning and designing an evaluation, developing appropriate instruments, using various methods to collect information, analyzing information obtained from those methods, and communicating results and recommendations. This course is designed to help learners understand the multiple ways that evaluation is used in instructional systems and provides opportunities to design various types of evaluation instruments. A portion of the course will

- examine the study of learner assessment as part of the evaluation of instructional programs; however, the course's focus is dedicated to the study of program evaluation.
- EDCI 60001, Introduction to Demonstrating Professional Competencies in LDT (1 credit hour): This course is designed to help you to understand the knowledge and skills necessary for your successful online learning in the Learning Design and Technology program, with a focus on the process of preparing documents and artifacts aligned with professional competencies. In this orientation, you will explore what online learning entails and reflect on how you can best set yourself up to succeed in your studies. You will also learn and apply the process of creating a competency-based portfolio.
- EDCI 60003, LDT Professional Competencies Portfolio (1 credit hour): This course will focus on
 completion of the competency portfolio reflecting on the depth and breadth of your educational
 growth since entering the Master's program. The purpose of the LDT competency portfolio is to
 demonstrate that you have mastered the graduate competencies. The portfolio will contain student
 evidence aligned with LDT competencies and will be reviewed by your committee. The completed
 competency portfolio is a requirement for graduation from the LDT Master's program.
- EDCI 67200, Advanced Practices in Learning Systems Design (3 credit hours): This course focuses on the application of learning systems design to real-world educational situations through the in-depth consideration of key instructional design processes (e.g., analysis, design, development, implementation, evaluation). Additionally, a key focus of the course is on the development of instructional design expertise.

Elective & Technology Selective (total of 6 credit hours)—Select 2 courses, at least 1 course must be a technology selective:

Technology Selectives

- EDCI 55600 Educational Video Game Design (3 credit hours): This course introduces the design of educational video games. The focus of the course throughout the semester will be on two areas: 1) the learning, instructional design, and game design theories which can inform the design of effective and engaging educational computer and video games, and 2) how to apply those theories within practical settings. Key theories will be introduced through course readings and discussion. Students will apply the theories through the design of their own educational video games.
- EDCI 56000 Educational Technology for Teaching and Learning (3 credit hours): This course addresses the fundamentals of educational/learning technologies within both the traditional classroom, as well as the corporate/business training environments. Students will explore and evaluate various tools/technologies and determine how, when, and why such technologies can/should be infused into normal, hybrid, or fully online learning situations. The goal of the course is to help the student plan, implement, and evaluate technology for teaching and learning.
- EDCI 56400, Integration and Management of Technology for Learning (3 credit hours): This course focuses on techniques for and issues related to integrating computers in learning environments. Topics covered stem from literature in the field and include (1) theoretical foundations of technology integration, (2) teaching and learning issues with technology integration, (3) designing the application of learning technologies for use in educational settings, and (4) emerging issues in research and practice with technology integration. Class activities are designed to model applications of learning technology, while class projects allow individuals to develop skills and knowledge in areas of your personal need or interest. The goal of the course is to help you develop an understanding of important issues associated with the integration and management of technology in learning and to effectively plan, design, implement, and evaluate technology-based instruction.

• EDCI 56600, Educational Applications of Multimedia (3 credit hours): This course involves the exploration of educational applications of multimedia. Examination and application of related research is a key component of the course. Projects involve the creation of instructional materials incorporating multimedia (e.g. sound, photographs, video, and/or interactive elements). Usability and usability testing considerations are explored.

General Electives

- EDCI 57500: Foundations of Distance Learning (3 credit hours): An introduction to the field of distance learning/education. Examination of basic concepts and principles of distance learning, the theoretical underpinnings of the field, research and application literature, and distance education delivery technologies. A systematic approach to the design, development, delivery, and evaluation of instruction for learners at a distance is emphasized. Special attention is given to course management systems.
- EDCI 58800, Motivation and Instructional Design (3 credit hours): This course has been designed to provide an in-depth study of motivation as one of the fundamental variables underlying human learning, behavior, and instructional design. The focus of the course is on two areas: 1) theories of motivation and the general principles that have contributed to the field of instructional design, and 2) how those principles are selected and applied within practical design settings.
- EDCI 63300 Instructional Design Project Management (3 credit hours): This course focuses on the
 application of project management ideas, concepts, and strategies in instructional design settings.
 Students will be asked to consider the relationship between instructional design and project
 management, tools that can assist with managing instructional design projects, and factors influencing
 the instructional design project management process. Students will explore these topics by creating
 deliverables for instructional design cases and other interactive assignments.
- EDPS 53300, Introduction to Educational Research I: Methodology (3 credit hours): This is an introductory course in educational research and evaluation methodology which considers the various methods of educational research, the formulation of research hypotheses, and the preparation of research reports.

V. Major MSED Reviews and Evaluations

Below is a timetable that should be used as a guide to accomplishing needed tasks for the master's degree in Learning Design and Technology. It includes dates for major reviews and evaluations by the faculty, the exit exam, and recommendations for submitting the Plan of Study. If you have any questions about the items below, reach out to your Student Services Coordinator.

Review	Description		
Progress Review	A progress review will be conducted by the Student Service Coordinator and, if necessary, LDT faculty, during each session.		
Plan of Study	Work with your Student Service Coordinator to submit your Plan of Study for committee approval. As stated previously, up to 9 transfer credits are allowed but need to be approved by your committee.		
LDT Professional Competencies Portfolio	Continuously develop a portfolio which will be reviewed as part of a gate in your third semester and also by your committee when it is completed at the conclusion of EDCI 60003 LDT Professional Competencies Portfolio. See detailed portfolio information in section VII.		

Typical Review and Evaluation Timeline

Semester	Checklist		
Session 1	 Review course schedule provided by Student Services Coordinator (SSC). Take courses based on your Plan of Study. Confirm you know your faculty advisor who also serves as your graduate committee chair. Begin development of LDT professional competencies portfolio 		
Session 2-9	 Take courses based on your Plan of Study Continue development of LDT professional competencies portfolio. A portfolio gate requiring formal submission and review of your portfolio will occur after session 5. Work with SSC to formally submit Plan of Study in Graduate School database before the start of session 8. Must be fully signed before Session 9 begins. 		
Session 10	 Take courses based on your Plan of Study Finalize LDT professional competencies portfolio and submit to committee Graduate 		

VI. Faculty Reviews and Evaluations

In each session, the Student Service Coordinator and your committee members will review your progress including:

- Overall program progress
- Achievement of Learning Design and Technology Graduate Competencies
- Plan of Study
- LDT Professional Competencies Portfolio Ongoing development during sessions 1-9 and submission at the conclusion of EDCI 60003

LDT faculty will review your accumulated session progress reports. This review is intended to verify and validate your competencies as well as provide programmatic feedback and guidance. Additionally, this review is intended to comprehensively assess student performance. Based on the review, the chair of the committee will determine if your progress is satisfactory or not.

VII. Learning Design and Technology Professional Competencies Portfolio

The Importance of the Competencies for the Learning Design and Technology Graduate Degree

Specific competencies, listed below, must be demonstrated by all graduate students in the Learning Design and Technology program. The faculty of the Learning Design and Technology program require a web-based LDT portfolio as the primary vehicle for demonstrating student attainment of the graduate competencies. The Competency-Based Digital Badges program allows you to work on your portfolio – revisiting, reflecting, and preparing your work throughout your entire master's program. The aim of the competency-based digital badges is to help you develop your ability to create and develop specific skills in the following instructional design categories: Professional Foundations in LDT, Planning and Analysis, Design and Development, and Evaluation and Implementation. The Learning Design and Technology Program developed its list of professional competencies based on the industry standards developed by International Board of Standards for Training, Performance, and Instruction (ibstpi).

Professional Foundations in LDT

• ID Professional Communicator

- Write and edit messages that are clear, concise, and grammatically correct.
- Solicit, accept, and provide constructive feedback.
- Deliver presentations that effectively engage audiences and communicate clear messages.

Applying ID Research and Theory

- o Explain key concepts and principles related to instructional design.
- Apply systems thinking to instructional design and performance improvement projects.

• ID Knowledge, Skills, and Attitudes

- o Participate in professional development activities.
- o Acquire and apply new technology skills in instructional design practice.

• Ethical, Legal, and Political Implications of Design

- o Recognize, respect, and comply with organizational constraints.
- Comply with organizational and professional code of ethics.

Planning and Analysis

Gap Analysis

Conduct a gap analysis

• Target Population and Environment

 Determine characteristics of a target population and/or environment that may impact the design and delivery of instruction.

• Analysis Techniques for Instruction

- Determine subordinate and prerequisite skills and knowledge.
- Use appropriate techniques to analyze various types and sources to validate content.

Analyze Technologies

Analyze the characteristics of existing and emerging technologies and their potential use.

Design and Development

Instructional Design and Development Process

- Select or create an instructional design process based on the nature of the project.
- o Modify the instructional design process as project parameters change.

• Systematic Design

- o Identify and sequence instructional goals.
- Specify and sequence the anticipated learning and performance outcomes.

• Design Instructional Interventions

- Identify instructional strategies that align with instructional goals and anticipated learning outcomes.
- o Apply appropriate interaction design and interactive learning principles.
- Use appropriate message and visual design principles.
- Apply appropriate motivational design principles.

Select or Modify Existing Instructional Materials

- Identify and select existing materials that support the content analyses proposed technologies, delivery methods, and instructional strategies.
- Integrate existing instructional materials into the design.

• Develop Instructional Materials

- o Produce instructional materials in a variety of delivery formats.
- Develop materials that align with the content analyses, proposed technologies, delivery methods, and instructional strategies.

• Design Learning Assessment

- o Identify the learning processes and outcomes to be measured.
- Ensure that assessment is aligned with instructional goals, anticipated learning outcomes, and instructional strategies.

Evaluation and Implementation

• Evaluate Instructional and Non-instructional Interventions

- Implement formative evaluation plans.
- o Implement summative evaluation plans.

Design a Plan for Dissemination and Diffusion of Instructional and/or Non-Instructional Interventions

- o Create a vision of change that aligns learning and performance goals with organizational goals.
- o Create a plan for the dissemination and/or the diffusion of the interventions.

LDT Competency Portfolio Process

For your reference we have provided information on the LDT Competency Portfolio process below. Please make note of relevant deadlines and ensure you are familiar with what is required.

LDT Portfolio – Deadlines & Progress Thresholds

		Challenges	
Semester	Deadline	Completed	Details
1	Week 8 - Friday	2	Completed as part of EDCI 60001
2	Week 16 - Friday	8	Students complete independently. No formal review.
			Students complete independently.
3	Week 9 – Monday	12	PORTFOLIO GATE - Submit portfolio for review (see below).
4	Week 16 - Friday	16	Students complete independently. No formal review.
5	Week 7 - Friday	20	Completed as part of EDCI 60003

Expectations & Personal Responsibility

Although there are 2 courses dedicated to the competency portfolio (EDCI 60001 and EDCI 60003), students must be diligent about making continuous progress on their portfolios throughout their degree. Progress will be formally checked halfway through the program during Semester 3. Failure to make satisfactory progress may result in removal of courses for the upcoming term (see Portfolio Gate) or a delay in graduation.

Portfolio Gate

A formal gate has been established during semester 3 of your program to confirm satisfactory portfolio progress. By Monday of week 9 students must have completed at least 12 challenges and submit a link to their portfolio for review. You will receive an email from the reviewer prior to the submission deadline with additional information and a link for submission of your portfolio website. It is the sole responsibility of the student to ensure this is complete and submitted by the deadline.

As part of this review, you may receive feedback that requires you to revise your work and resubmit. If you have not received approval of your portfolio by Friday of Week 15 (Semester 3), then you will be removed from your courses for the upcoming term and will be required to work with the reviewer to pass this gate during the following semester.

EDCI 60003

EDCI 60003 will focus on completion of the competency portfolio reflecting on the depth and breadth of your educational growth since entering the Master's program. To best prepare for success, students should have 16 challenges completed prior to the start of this course. Additional time, including a grade of Incomplete, will not be considered due to not entering the course with the expected number of challenges completed. Stay on top of your portfolio progress so that you are not rushed and have the time needed to prepare a strong final product that will be presented to your faculty advisor.

Questions?

If it is your first semester in the program this information will be covered in greater detail as part of EDCI 60001. Additional questions can be directed to your Student Services Coordinator, onlinestudentservices@purdue.edu.

VIII. Useful Resources

Learning Design and Technology Program

- LDT Program Website
- LDT Student and Faculty Listserv: edtech-l@lists.purdue.edu
- LDT Facebook: Purdue Learning Design and Technology
- LDT Alumni Facebook Purdue LD&T Online Student Alumni Group
- Purdue Association of Learning Design and Technology PALDT Facebook

Research Integrity

• Purdue Office for Research Integrity

Library Resources and Support

• Purdue University Libraries

Online MSEd Student Center

The LDT Online Student Center is intended to be a central location for announcements, program information, resources, graduation information, faculty and student interaction, and course information. Students should check the Student Center regularly to stay informed about what is happening in the LDT Online Program. The Online Student Center is located in Brightspace. All current online MSEd students are automatically enrolled in the Student Center.

Writing Assistance

The Purdue University Writing Lab and <u>Purdue Online Writing Lab</u> (OWL) assist clients in their development as writers—no matter what their skill level. Students may go to https://cla.purdue.edu/wlschedule/ and get help with brainstorming, drafting, and revisions for any type of writing. Purdue's Writing Lab offers two different options for online tutoring.

- E-tutoring is an asynchronous option where writers can upload their paper, along with a detailed list of concerns, and tutors will respond with comments sent back to the writer in an email attachment.

 Writers will select a day and time for the tutor to respond, but writers do not have to be online during that time.
- Online tutoring is a synchronous option. Writers select a day and time to meet with their tutor virtually. Writers will upload their document, and the conversation takes place in a chat window.

Professional Organizations in LDT

- AERA (American Educational Research Association)
- AECT (Association for Educational Communications and Technology)
- AACE (Association for the Advancement of Computing in Education)
- ISPI (International Society for Performance Improvement)
- PIDT (Professors of Instructional Design and Technology)
- ISTE (International Society for Technology in Education)
- SALT (Society for Applied Learning Technology)
- ISLS (International Society for the Learning Sciences)