Learning Design and Technology
Guide to MSEd Program
On Campus Program

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West Lafayette, IN 47907-2098

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Learning Design and Technology (LDT)
Guide to MSEd Program

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I. Introduction

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 MSEd program, requirements, and timelines. You should become familiar with the information in this guide as it is relevant to your degree program.

Mission of our Learning Design and Technology Graduate Programs 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 Advisor or the graduate office.

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 to a committee of three faculty members. This committee will be chaired by your major professor. In general, any written work that is to be presented to your entire committee (e.g., Master’s portfolio) should be approved by your major professor/chair first. 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 advisor.
II. Degree Requirements

Master’s Program Course Requirements (minimum 33 credits)

Learning Design and Technology Prerequisites Requirements
- EDCI 57200: Prerequisite for EDCI 56900
- EDCI 57200: Prerequisite for EDCI 67200
- EDCI 56900, EDCI 57200, EDCI 67200 are prerequisites for EDCI 57300

Core MSEd Learning Design and Technology Requirements (total of 24 credits)
- EDCI 51300, Foundations of Educational 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 66000a, Learning Design and Technology Seminar (1 credit hour)
- EDCI 66000b, Learning Design and Technology Seminar (1 credit hour)
- EDCI 67000, Learning Design and Technology Integrated Portfolio (1 credit hour)
- EDCI 67200, Advanced Practices in Learning Systems Design (3 credit hours)

Electives (total of 9 credit hours)—Three courses selected from the following courses*:
- EDCI 52800, Human Performance Technology (3 credit hours)
- EDCI 56000, Educational Technology for Teaching and Learning (3 credit hours)
- EDCI 55600, Educational Video Game Design (3 credit hours)
- EDCI 56400, Integration and Management of Computers in Education (3 credit hours)
- EDCI 56600, Educational Applications of Multimedia (3 credit hours)
- EDCI 56800, Partnering with Web-based Tools for Learner-centered Environments (3 credit hours)
- EDCI 57500, Foundations of Distance Learning (3 credit hours)
- EDCI 58800, Motivation and Instructional Design (3 credit hours)
- EDCI 62700, Instructional Design Project Management (3 credit hours)
- EDPS 53300 Introduction To Educational Research I: Methodology (3 credit hours)

*Additional electives might be available across campus.

Masters students will complete all core courses (exceptions may be made on a case-by-case basis depending on previous graduate coursework) in roughly the order shown on page 5. 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 at previous universities; 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
- **Note:** Not all courses are offered online while others may only be offered online

*Course descriptions can be found on pages 6-7.*
### Sample Plan of Study for MSEd Program
#### Full-time Enrollment

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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</table>
| Year 1| EDCI 66000 (1 cr)  
EDCI 51300 (3 cr)  
EDCI 57200 (3 cr)  
EDCI 57700 (3 cr) or Elective (3 cr) | EDCI 53100 (3 cr)  
EDCI 56900 (3 cr)  
EDCI 56400 or Elective (3 cr) | EDCI 56400, EDCI 52800 (3 cr) or Elective (3 cr) |
|       | (10 credits)                        | (9 credits)                          | (3 credits)                 |
| Year 2| EDCI 66000 (1 cr)  
EDCI 57700 (3 cr) or Elective (3 cr)  
EDCI 67200 (3 cr) | EDCI 67000 (1 cr)  
EDCI 57300 (3 cr)  
Elective (3 cr) | Register for courses as applicable |
|       | (7 credits)                         | (7 credits)                          |                             |
| Year 3|                                     |                                      |                             |
MSEd Program Course Descriptions

Core MSEd Learning Design and Technology Requirements (total of 24 credits)

- EDCI 51300, Foundations of Educational Technology (3 credit hours): This course provides an 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 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 66000, Learning Design and Technology Seminar (1 credit hour, taken twice): This course is an investigation of trends, developments, and issues in learning design and technology with a focus on current practices, problems, and research. This one-credit seminar is designed to help students learn about applications of instructional design and educational technology in various settings and to interact with faculty and guest speakers about topics related to the field and the LDT program.

- EDCI 67000, Learning Design and Technology Portfolio (1 credit hour)—This one credit course was created
to help guide LDT students near completion of their coursework to develop their competency portfolio. The 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.

Electives (total of 9 credit hours)—Three courses selected from the following courses:

- 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. Note: EDCI 528 is a 6-week summer course.

- 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 Computers in Education (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.

- 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 62700 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.
Timeline for Major MSEd Reviews and Evaluations

Following should be used as a guide to accomplishing needed tasks for the master’s degree in Learning Design and Technology. It includes descriptions for major reviews and evaluations by the faculty, and recommendations for submitting the Plan of Study:

<table>
<thead>
<tr>
<th>Review</th>
<th>Description</th>
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<tbody>
<tr>
<td>Draft Plan of Study</td>
<td>Initially, check with your advisor to confirm the names of your committee members and chair and to review a draft Plan of Study. This may also occur in your first course, EDCI 66000.</td>
</tr>
<tr>
<td>Progress Review</td>
<td>A progress review will be conducted by your advisor, and, if necessary, the committee members on an annual basis.</td>
</tr>
<tr>
<td>Plan of Study</td>
<td>Work with your advisor 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.</td>
</tr>
<tr>
<td>Portfolio Review</td>
<td>Continuously develop a portfolio, which will be reviewed by your committee when it is completed at the conclusion of EDCI 67000.</td>
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Checklist for Major MSEd Reviews and Evaluations

<table>
<thead>
<tr>
<th>Semester</th>
<th>Checklist</th>
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</table>
| Semester 1 | ✓ Take courses based on your Plan of Study  
 ✓ Confirm your graduate committee and chair  
 ✓ Review your draft Plan of Study and submit                                                                 |
| Semester 2 | ✓ Take courses based on your Plan of Study  
 ✓ Develop your portfolio (see pgs. 11-12)                                                                                                    |
| Semester 3 | ✓ Take courses based on your Plan of Study  
 ✓ Develop your portfolio (see pgs. 11-12)                                                                                                    |
| Semester 4 | ✓ Take courses based on your Plan of Study  
 ✓ Develop your portfolio (see pgs. 11-12)  
 ✓ Submit and present your portfolio to the committee as applicable  
 ✓ Graduate                                                                                                                                 |
III. Faculty Reviews and Evaluations

You can expect your committee members and other faculty to conduct an annual review of your progress. This will include:

- Overall program progress
- Achievement of Learning Design and Technology Graduate Competencies
- Plan of Study
- Portfolio — Ongoing development during semesters 2+ and submission at the conclusion of EDCI 67000

Your faculty committee will meet to 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. Learning Design and Technology Graduate Competencies and Portfolio
IV. Learning Design and Technology Graduate Competencies and 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 portfolio as the primary vehicle for demonstration of student attainment of the graduate competencies. The aim of the graduate competencies is to help you develop your ability to create and synthesize knowledge, think critically and reflectively, master written and oral communication skills, engage in professional development, participate actively in our professional field, apply instructional design principles, and apply the use of computers and media appropriately. By meeting these competencies, you also demonstrate the competencies embodied in the five core propositions of the National Board for Professional Teaching Standards (NBPTS).

List of Competencies for LDT Master’s Program Competency 1:

Synthesize Knowledge
• Demonstrates ability to read and understand educational literature related to Educational Technology
• Demonstrates ability to describe fundamental theories of human learning
• Applies knowledge of human learning, diversity, and effective pedagogy to solution of problems

Competency 2: Create Knowledge
• Demonstrates ability to describe common research methods in Educational Technology
• Demonstrates ability to read and evaluate Educational Technology research
• Applies research findings to the solution of common problems in Educational Technology

Competency 3: Communicate Knowledge
• Communicates effectively in oral and written formats
• Effectively communicates content through the design and delivery of teaching/learning activities that integrate content and pedagogy
• Demonstrates the ability to adapt instruction and assessment techniques to the needs of diverse learners

Competency 4: Think Critically and Reflectively
• Develops a personal vision of inclusive educational practice
• Describes the relationship between Educational Technology and the broader field of Education
• Critically evaluates theory and practice

Competency 5: Engage in Professional Development
• Demonstrates the disposition for life-long learning and continuous professional development

Competency 6: Participate Actively in the Profession
• Identifies and participates in communities of practice within the field of Educational Technology

Competency 7: Apply Instructional Design Principles
• Identifies and analyzes learning and performance problems
• Design, plans, and develops instructional interventions using appropriate strategies and techniques
• Develops an evaluation plan for a project based on stated goals and recognized standards

Competency 8: Apply Technology to Solve Instructional Problems
• Plans and designs effective learning environments and experiences supported by technology
• Applies technology to facilitate a variety of effective assessment and evaluation strategies
• Demonstrates understanding of social, ethical, legal, and human issues surrounding the use of technology and applies it in practice
The Sample Relevant Assignments are to be used as a guide to help you; they are by no means all-inclusive. Similarly, course developers/instructors may modify assignments from time-to-time rendering some listings unsuitable for a particular competency.

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Sample Relevant Assignments</th>
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<tbody>
<tr>
<td><strong>Synthesize Knowledge: Competency 1</strong></td>
<td></td>
</tr>
<tr>
<td>Demonstrates ability to read and understand educational literature related to Educational Technology</td>
<td>EDCI 51300 – Individual Paper</td>
</tr>
<tr>
<td>Demonstrates ability to describe fundamental theories of human learning</td>
<td>EDCI 53100 – Final Paper</td>
</tr>
</tbody>
</table>
| Applies knowledge of human learning, diversity, and effective pedagogy to solution of problems | EDCI 52800 – Major Project  
EDCI 56900 – Major Project  
EDCI 57200 – Group Design Portfolio  
EDCI 58800 – Major Project  
EDCI 67200 – Case Analyses |
| **Create Knowledge: Competency 2** | |
| Demonstrates ability to describe common research methods in Educational | EDCI 51300 – Individual Paper |
| Demonstrates ability to read and evaluate Educational Technology research | EDCI 51300 – Individual Paper  
EDCI 53100 – Final Paper |
| Applies research findings to the solution of common problems in Educational Technology | EDCI 51300 – Individual Paper  
EDCI 53100 – Final Paper |
| **Communicate Knowledge: Competency 3** | |
| Communicates effectively in oral and written formats | EDCI 51300 – Individual Paper  
EDCI 67200 – Case Analyses and Case Facilitation |
| Effectively communicates content through the design and **delivery** of teaching/learning activities that integrate content and pedagogy | EDCI 56400 – Technology Integration Project  
EDCI 56600 – Digital Storytelling Project  
EDCI 56900 – Paper Prototype Assignment  
EDCI 56900 – Final Digital Prototype  
EDCI 57300 – Practicum Final Report  
*Note: should be a project that has at least had formative evaluation if not fully implemented* |
| Demonstrates the ability to adapt instruction and assessment techniques to the needs of diverse learners | EDCI 56400 – Integrated Instructional Project  
EDCI 56600 – Digital Job Aid Project  
EDCI 56900 – Final Project  
EDCI 57200 – Group Design Portfolio  
EDCI 57700 – Evaluation of an Instructional Product  
EDCI 57700 – The Evaluation Plan |
| **Think Critically and Reflectively: Competency 4** |  |
| Develops a personal vision of inclusive educational practice | EDCI 51300 – Initial/Revised Ed Tech Definitions  
EDCI 56400 – Initial/Final Vision Statements  
EDCI 66000A – Initial/Final Reflective Essays |
| Describes the relationship between Educational Technology and the broader field of Education | EDCI 51300 – Initial/Revised Ed Tech Definitions  
EDCI 56400 – Initial/Final Vision Statements |
| Critically evaluates theory and practice | EDCI 53100 – Final Paper |
| **Engage in Professional Development: Competency 5** |  |
| Demonstrates the disposition for life-long learning and continuous professional development | EDCI 66000A – Initial/Final Reflective Essays  
EDCI 56400 – Initial/Final Vision Statements  
EDCI 57300 – Practicum Final Report  
EDCI 67200 – Reflection on Developing Expertise  
Attendance at workshops and conferences for professional development purposes |
| **Participate Actively in the Profession: Competency 6** |  |
| Identifies and participates in communities of practice within the field of Educational Technology | EDCI 51300 – Prof Organization Discussion Membership in Professional Communities or Associations; Contribution to the field such as offering workshops, webinars, etc. |
| **Apply Instructional Design Principles: Competency 7** |  |
| Identifies and analyzes learning and performance problems | EDCI 56900 – Task Analysis Project  
EDCI 67200 – Case Analyses |
| Design, plans, and develops instructional interventions using appropriate strategies and techniques | EDCI 55600 – Major Project  
EDCI 56400 – Technology Integration Project  
EDCI 56600 – Digital Storytelling Project and Storyboard  
EDCI 56900 – Paper Prototype Assignment  
EDCI 56900 – Digital Prototype Assignment  
EDCI 57200 – Group Design Portfolio  
EDCI 57500 – Final Project, Learning Modules  
EDCI 58800 – Major Project  
EDCI 67200 – Case Analyses |
| Develops an evaluation plan for a project based on stated goals and recognized standards | EDCI 56400 – Technology Integration  
EDCI 56900 – Major Project  
EDCI 57200 – Group Design Portfolio  
EDCI 57700 – Evaluation of an Instructional Product  
EDCI 57700 – The Evaluation Plan |

**Apply Technology to Solve Instructional Problems: Competency 8**

| Plans and designs effective learning environments and experiences supported by technology | EDCI 55600 – Major Project  
EDCI 56400 – Technology Integration Project  
EDCI 56600 – Digital Storytelling Project and Storyboard  
EDCI 56600 – Digital Job Aid/Instruct. Plan  
EDCI 56900 – Paper Prototype Assignment  
EDCI 56900 – Digital Prototype Assignment |
| Applies technology to facilitate a variety of effective assessment and evaluation strategies | EDCI 56400 – Technology Integration Project  
EDCI 56900 – Digital Prototype Assignment  
EDCI 57700 – Evaluation of an Instructional Product  
EDCI 57700 – Evaluation Plan |
| Demonstrates understanding of social, ethical, legal, and human issues surrounding the use of technology and applies it in practice | EDCI 56400 – Technology Integration Project  
EDCI 57700 – The Evaluation Plan |