Master of Science in

Instructional Design and Development

College of Education
Educational Technology

As the world moves to information-based economies, organizations large and small increasingly emphasize that their most valuable capital assets are their employees' knowledge and skills. Professionals trained in the science of improving human learning and performance have an unprecedented variety of career opportunities available in many different work settings including schools, universities, businesses, consulting firms, learning centers, publishing companies, educational software development companies, museums, social service agencies, nonprofits, and the military.

Instructional Design and Development is the systematic formation of an instructional solution to an organization's training needs. Using empirically proven learning theory to ensure the quality of instruction, instructional design and development spans the entire process from the initial analysis of learning needs and goals to the development of a delivery system to meet those needs. It includes defining the problematic knowledge gap; defining the audience; identifying objectives and assessment strategies; selecting and sequencing content and learning activities; developing instructional materials and technologies; evaluating the instruction; and revision.

Professionals trained in instructional design and development use systematic processes to help individuals acquire specific knowledge and skills to improve performance, thereby contributing to the overall mission of the organization.

Lehigh's Instructional Design and Development program prepares graduates for careers in three broad areas:

- Adult Training (corporate, military, government)
- Formal Education (private and public K-12 and higher education institutions)
- Informal Learning (museums, public outreach, educational software)

Our graduates are in demand in each of these areas because they know how to use their instructional design and development skills to help systematically identify and derive strategies that solve organizational performance problems.

Admission to the graduate program is open to all who are interested, regardless of their undergraduate preparation. Our students bring insights and experiences to our class discussions from a wide variety of backgrounds including graphic design, English, computer science, education, engineering, mathematics, music, and psychology, to name a few. One thing our students do have in common, however, is a sincere interest in learning new things and in creating innovative learning environments that will help others understand as well.

This is a particularly exciting time to be entering or advancing in the field of instructional design. We are witnessing extraordinary innovations in learning technologies. But high-quality learning materials don't just happen —they are designed by professionals trained in the best practices of instructional design, learning interactions, needs analysis, and technology integration.

The College of Education is a nationally ranked graduate school at Lehigh University, a private institution located in the Lehigh Valley between Philadelphia and New York City.

If you think you might be interested in joining the exciting, dynamic field of instructional design and development or are interested in learning about our other programs in educational technology, contact Dr. MJ Bishop (610-758-3235 mj.bishop@lehigh.edu) or visit (http://www.lehigh.edu/collegeofeducation/).

See reverse side for more program details.

Requirements for the Master of Science in Instructional Design and Development
Educational Technology Program, College of Education, Lehigh University

This 30-hour (minimum) master of science program in educational technology requires the student to take 15 hours in the Technology Core and 6 hours in the College Core.

Once a student has completed these 21 hours, he or she completes the program by taking at least 9 additional hours. Three of these hours will come from the Advanced Study in Instructional Design and Development area and 3 hours will come from an "integrating experience" in the field. The remaining 3 hours may come from additional courses in the Advanced Study in Instructional Design and Development area, from electives focusing on key issues and skills, or from independent studies intended to enrich the student's portfolio.

The expectation is that students in the program are actively seeking to become designers or developers of technology-based teaching/learning materials and will work to make the transition in competence from "student" to "professional" as quickly as possible. This means students will be expected to work on projects throughout their program and will work outside class settings to maintain and enhance their skills

Technology Core (15 hours)

Strand	Course
Foundations	EdT 401. Foundations of Educational Technology (3)
Instructional Design	EdT 422. Design I: The Systematic Design of Instruction (3) — Introductory exploration of instructional design models and philosophies and their implications for teaching and learning using technology.
	EdT 425. Design II: Applied Instructional and Interface Design Principles (3) — Exploration and application of design models for learning.
Development of Instructional Technologies	EdT 432. Development I: Website and Resource Development for Learning (3) — Introduction to resource development and HTML editing tools used in the creation of eLearning Websites.
	EdT 435. Development II: Interactive Multimedia Programming for Learning (3) — Introduction to creating educational applications utilizing sound, video, graphics and other digital resources.

College Core (6 hours)

Educ 403. Research (3)

Educ 471. Diversity and Multicultural Issues (3)

Advanced Study in Instructional Design and Development (3-6 hours) — With guidance from advisor, student should take at least one of the three advanced courses listed below.

Strand	Advanced Course
Foundations	EdT 408. Advanced Learning Theories Applied to Educational Technology (3) — Advanced seminar examining theories of socio-historical psychology and their application to educational technology.
Instructional Design	EdT 428. Design III: Advanced Instructional Design (3) — Advanced instructional design and interface issues.
Development of Instructional Technologies	EdT 438. Development III. Advanced Development of Instructional Resources and Technologies: (Subtitle) (3) -- Focus on using more sophisticated Website and digital resource development-and-manipulation tools to create multimedia learning materials. May be repeated for credit under different subtitle

Integrating Experience (3-6 hours) — With guidance from advisor, student should take at least one of the culminating experience opportunities listed below.

EdT 490. Integrating Experience in Instructional Design and Development (3) — Project-based design and development.

Educ 493. Internship in Educational Technology (3)

Educ 494. Fieldwork in Educational Technology (3)

Electives/Portfolio Development (0-3 hours) — With guidance from advisor, student may take related electives or work to expand his/her portfolio.

Educ 495. Independent Study in Educational Technology (1-6)

EdT 415. Topics in Educational Technology (1.5) [May be repeated for credit under different subtitle.]

EdT 485. Applied Research in Educational Technology (3)

Educ 491, 492. Advanced Seminars (special topics in educational technology) (1-6)

Other EdT courses as appropriate; Other non-EdT courses as appropriate

Total Hours (minimum): 30