LDT 1000 City of Design: Exploring Creativity in Detroit Cr. 3
Students will develop creativity by examining their individual growth, by employing creative design strategies to solve problems and by investigating "City of Design" Detroit locations to analyze innovative design solutions. Offered Every Term.

Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 2015 Introduction to Learning Design and Technology Cr. 3
Provides a historical overview of the field and delineates the foundational knowledge, skills, and attitudes needed by professionals. Students will explore various aspects of the field, including potential opportunities and career paths. Students will be able to distinguish between educational technologies and understand how design and technology teams impact practice. Offered Every Term.

Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 3115 Instructional Design Cr. 3
Explores broad conceptions of design including all activities involved in generating intentional change via artifacts and experiences. Offered Every Term.

Restriction(s): Enrollment is limited to students with a major, minor, or concentration in Instructional Technology or Learning Design and Technology; enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 3125 Evaluation Techniques and Tools Cr. 3
Evaluation techniques and tools for learning design and technology; formative and summative evaluation approaches; selecting appropriate evaluation techniques; designing effective evaluation tools to generate feedback and facilitate improvement. Offered Fall, Winter.

Prerequisites: IT 3115 with a minimum grade of D- (may be taken concurrently) or LDT 3115 with a minimum grade of D-

LDT 3135 Practical Project Management Cr. 3
Basic techniques and skills needed to handle projects: goal setting, scheduling, resource management, monitoring and problem solving. people and process fundamentals, software applications.

Prerequisites: IT 3115 with a minimum grade of D- (may be taken concurrently) or LDT 3115 with a minimum grade of D-

LDT 3145 Interactive Course Design Cr. 3
Strategies and techniques for organizing, presenting, assessing and evaluation web-based learning. Includes individual oral and written reports, development of an instructional web site. Offered Yearly.

Prerequisites: IT 3115 with a minimum grade of D- (may be taken concurrently) or LDT 3115 with a minimum grade of D-

LDT 4135 Engaging Presentation and Facilitation Strategies Cr. 3
Knowledge and delivery skills for conducting professional presentations in multiple settings; facilitation of small and large group sessions; focus on communication process, audience analysis, research, preparation, selection of content and support materials. Offered Yearly.

Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 4145 Digital Games for Learning Cr. 3
Design and development of games that are engaging and lead to learning. Students develop a learning game in a studio environment. Offered Yearly.

Prerequisites: IT 3115 with a minimum grade of D- (may be taken concurrently) or LDT 3115 with a minimum grade of D-

Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 4155 Simulations for Learning Cr. 3
Design and development of models and interfaces for simulations, including devices, discrete and continuous models, and branching scenarios. Offered Yearly.

Prerequisites: IT 3115 with a minimum grade of D- (may be taken concurrently)

Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 4165 Digital Video for Learning Cr. 3
Principles of multimedia learning applied to video production for the web or digital media. Offered Yearly.

Prerequisites: IT 3115 with a minimum grade of D- (may be taken concurrently) or LDT 3115 with a minimum grade of D-

Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 4195 Emerging Technologies Cr. 3
Emerging digital technologies and their potential impact on learning in different settings as well as evaluation and implementation of new technologies. Offered Yearly.

LDT 4235 Directed Study in Learning Design and Technology Cr. 1-4
Directed study on special topics, supervised on an individual basis and which fall outside the scope of formal courses. Offered Every Term.

Restriction(s): Enrollment limited to students with a class of Junior or Senior; enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

Repeatable for 4 Credits

LDT 4310 Next Generation Learning Management Systems Cr. 3
Design, create, and implement instructionally sound learning environments by using advanced learning management systems to promote learning in face-to-face, blended, and online classes. Offered Fall.

Prerequisite: LDT 3115 with a minimum grade of D-

LDT 4410 Multi-dimensional Learning Environments Cr. 3
Design principles and use of multi-dimensional learning environments in various contexts like education, business, and communication by using mobile apps, devices, and tools. Offered Winter.

Prerequisite: LDT 3115 with a minimum grade of D-

LDT 4905 Advanced Seminar in Learning Design and Technology Cr. 3
In-depth study for advanced undergraduate students in learning design and technology, covering various topics including instructional design, instructional development protocols, and the applications of learning design and technology in different settings. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Senior; enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 4920 Internship in Learning Design and Technology Cr. 4
Supervised training under professional mentors in organizations. Students will gain experience in demonstration of design, evaluation, project management, presentation skills, etc. Offered Yearly.

Restriction(s): Enrollment limited to students with a class of Senior; enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.
LDT 4995 Capstone Seminar in Learning Design and Technology Cr. 3
Offered Winter.
Restriction(s): Enrollment limited to students with a class of Senior; enrollment is limited to Undergraduate level students; enrollment limited to students in the College of Education.

LDT 5140 Producing and Evaluating Technology-Based Instructional Materials Cr. 4
Design and development of instructional materials and media with an emphasis on technology applications integration. Creation and evaluation of instructional media and materials, based on national and state technology standards. Offered Yearly.
 Restriction(s): Enrollment is limited to Graduate level students.
Equivalent: INF 6360

LDT 5275 Learning in Organizations Cr. 4
Provides an overview of key issues of human resource management, learning, and talent development in organizations. It will also explore considerations for technical training, soft skills training, compliance, as well as the effects of global environments in organizational learning. Offered Every Other Year.
Prerequisites: (IT 3115 with a minimum grade of D-, IT 6110 with a minimum grade of D-, LDT 3115 with a minimum grade of D-, LDT 6110 with a minimum grade of D-, LDT 7111 with a minimum grade of D-), (IT 3125 with a minimum grade of D-, IT 7150 with a minimum grade of D-, LDT 3125 with a minimum grade of D-, or LDT 7150 with a minimum grade of D-), and (IT 3135 with a minimum grade of D- or LDT 3135)

LDT 5310 Next Generation Learning Management Systems Cr. 3
Design, create, and implement instructionally sound learning environments by using advanced learning management systems to promote learning in face-to-face, blended, and online classes. Offered Yearly.
Prerequisite: LDT 3115 with a minimum grade of D-

LDT 5410 Multidimensional Learning Environments Cr. 3
Design principles and use of multi-dimensional learning environments in various contexts like education, business, and communication by using mobile apps, devices, and tools. Offered Yearly.
Prerequisite: LDT 3115 with a minimum grade of D-

LDT 6135 Technology Applications in School Administration Cr. 2-3
Use of technology tools by school administrators; factors related to leadership and research in technology integration. Also offered online. Offered Fall.
Repeatable for 3 Credits

LDT 6140 Designing Web Tools for the Classroom Cr. 4
Design, development and evaluation of learning experiences using the World Wide Web. Student creates and evaluates learning activities using the Web; creation of personal learning portal. Basics of HTML and common authoring tools. Also offered online. Offered Fall.
Restriction(s): Enrollment is limited to Graduate level students.

LDT 6230 Internet in the Classroom Cr. 4
Students use a variety of tools from the read/write web and explore their potential for use in K-12 education. Students also examine the use of online learning in the K-12 classroom. Offered Winter.
Prerequisites: IT 6140 with a minimum grade of D- or LDT 6140 with a minimum grade of D-
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7100 Foundations of Instructional Technology Cr. 3
Introduction to the foundations of instructional technology: intellectual history, careers, job roles, organizations, scholarly literature, requisite technology skills; introduction to course content and initial planning for students' programs. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7105 Micro Analysis Methods Cr. 4
Following a high-level needs assessment, students will apply a variety of analytical methods to define specific solution requirements used during the design phase. Focus will include: job, task, process, content, learner and contextual analysis. Offered Fall, Winter.
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7111 Design Thinking and Knowledge Cr. 4
Exploring broad conceptions of design including all activities involved in generating intentional change via artifacts and experiences; design thinking and knowledge. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.
Equivalent: INF 6350

LDT 7112 Advanced Learning Design Cr. 4
Exploration and application of techniques, tools and competencies characteristic of expert designers. Topics may include: instructional strategies, program design, advanced analysis techniques, empathic design, rapid prototyping, reducing design cycle time, designing instruction for diverse learner populations and developing designer professional identity. Offered Every Term.
Prerequisite: LDT 7111 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7115 Understanding the Adult Learner Cr. 4
Analysis of how adults learn: learner readiness, development, motivation. Developmental and learning theories, memory, creativity, experiential learning, and affective learning. Content based primarily on psychology of teaching and learning of adults; secondarily on application to instruction and training. Offered Every Other Year.
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7130 Facilitation of On-Line Learning Cr. 4
Design, development, implementation, facilitation and evaluation of various learning activities for diverse learners in online contexts, using appropriate learning technologies. Offered Winter.
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7140 Interactive Course Design Cr. 4
Design, development and implementation of web-based courseware. Characteristics, advantages and limitations of the web as an instructional delivery system. Appropriate instructional strategies for the web. Use of contemporary development tools to create engaging, interactive, instructionally-sound web materials; design and development teams create and test a web-based instructional module. Also offered online. Offered Fall, Winter.
Prerequisites: IT 6110 with a minimum grade of C, LDT 6110 with a minimum grade of C, or LDT 7111 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7150 Evaluation of Learning and Performance Cr. 4
Prerequisites: IT 6110 with a minimum grade of C, LDT 6110 with a minimum grade of C, or LDT 7111 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7180 Message Design for Learning Cr. 4
Design, development and implementation of web-based courseware. Characteristics, advantages and limitations of the web as an instructional delivery system. Appropriate instructional strategies for the web. Use of contemporary development tools to create engaging, interactive, instructionally-sound web materials; design and development teams create and test a web-based instructional module. Also offered online. Offered Fall, Winter.
Prerequisites: IT 6110 with a minimum grade of C, LDT 6110 with a minimum grade of C, or LDT 7111 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7185 Message Design for Learning Cr. 4
Design, development and implementation of web-based courseware. Characteristics, advantages and limitations of the web as an instructional delivery system. Appropriate instructional strategies for the web. Use of contemporary development tools to create engaging, interactive, instructionally-sound web materials; design and development teams create and test a web-based instructional module. Also offered online. Offered Fall, Winter.
Prerequisites: IT 6110 with a minimum grade of C, LDT 6110 with a minimum grade of C, or LDT 7111 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.
LDT 7210 Foundations of Distance Education Cr. 4
Critical review of the theoretical foundations, principles, current status and future directions of distance education. Offered online. Offered Fall.  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7220 Multimedia for Instruction Cr. 4
Instructional design and development applied to multimedia instruction, such as games for learning. Instructional strategies for higher-order learning, including problem solving. Alternative design and development methodologies. Essential multimedia production tools. Also offered online. Offered Every Other Year.  
Prerequisites: IT 6110 with a minimum grade of C, LDT 6110 with a minimum grade of C, or LDT 7111 with a minimum grade of C  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7230 Advanced Multimeda for Instruction Cr. 4
Advanced topics in multimedia and web-based learning, including topics such as design, planning, production and editing of digital audio and video for use in multimedia websites and CDs/DVDs used for learning. Offered Fall.  
Prerequisites: IT 7140 with a minimum grade of C, IT 7220 with a minimum grade of C, LDT 7140 with a minimum grade of C, or LDT 7220 with a minimum grade of C  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 998.99 Credits

LDT 7310 Learning Management Systems Cr. 4
Design and implementation of systems to support e-learning and traditional delivery. Implementation of traditional courses in a generic LMS; interface of course materials to standards-based management systems, reusable learning objects, standards, and collaborative learning. Also offered online. Offered Fall.  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7320 Human Performance Technology Cr. 4
Fundamentals of human performance technology, performances, standards, tools and techniques for the performance improvement consultant; analyzing jobs and tasks; improving individual performance; performance technology and instructional development strategies and tactics for performance improvement, performance support systems, organizational behavior; strategic planning and thinking; general processes; professional practices; human performances interventions of an instructional and non-instructional nature. Also offered online. Offered Fall.  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 998.99 Credits

LDT 7850 Needs Assessment and Analysis Cr. 4
Discussion and application of needs assessment and analysis concepts, approaches and procedures across various performance levels (organizational, human, and instructional). Discusses evidence and processes required for performance intervention selection. Offered Fall.  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7920 Strategic Planning for Training and Organization Improvement Cr. 4
Current organizational issues and new competencies in the training profession, respecting: growth of organizational intellectual capital, resolution of complex performance problems, transformation of organizational culture and engineering of change. Offered Every Other Year.  
Prerequisites: IT 7320 with a minimum grade of C or LDT 7320 with a minimum grade of C  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7940 Capstone Course in Learning Design and Technology Cr. 4
Capstone course for the Learning Design and Technology program. Offered Winter.  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 7980 Capstone Seminar in Learning Technologies Cr. 4
Capstone seminar for advanced students in Learning Technologies track. Offered Winter.  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 8100 Background, Issues and Trends in Instructional Technology Cr. 4
History of instructional technology practice and intellectual foundations; implication for current issues. Factors likely to affect the future of the field, including contributions of key leaders. Electronic communication techniques used to explore issues with others in the field. Offered Fall.  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 12 Credits

LDT 8110 Advanced Instructional Design Theory and Research Cr. 4
Analysis of theoretical foundations of instructional design and their application in design practice. Current design research and theory, future directions in design theory and practice. Offered Winter.  
Prerequisites: IT 6110 with a minimum grade of C, LDT 6110 with a minimum grade of C, or LDT 7111 with a minimum grade of C  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 998.99 Credits

LDT 8120 Practicum in Instructional Technology Cr. 1-9
Students design, develop, use, and evaluate instructional systems and subsystems in an educational, business, industrial, or human services setting. Offered Fall, Winter.  
Prerequisites: IT 6110 with a minimum grade of C, LDT 6110 with a minimum grade of C, or LDT 7111 with a minimum grade of C  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 12 Credits

LDT 8130 Individual Projects in Instructional Technology Cr. 1-6
Students develop instructional technology material packages and devices through individual design and production. Offered Fall, Winter.  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 6 Credits

LDT 8135 Technology Applications in Central Administration Cr. 3
Use of technology tools and data by central administrators; factors related to central office leadership and research in technology integration. Offered Winter.  
Restriction(s): Enrollment is limited to Graduate level students; enrollment limited to students in the College of Education.

LDT 8180 Readings in Instructional Technology Cr. 1-6
Individually-paced course: investigation of recent research studies and theoretical essays in the field. Offered Fall, Winter.  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 6 Credits

LDT 8320 Performance Consulting and Analysis Cr. 4
Practical application of principles of performance consulting to solve problems in large and small organizations. Topics include: role of performance consultant, identifying business needs, assessing performance, contracting techniques, managing the performance improvement process. Also offered online. Offered Winter.  
Restriction(s): Enrollment is limited to Graduate level students.

LDT 8500 Strategies for Teaching in Higher Education Cr. 3
Teaching in higher or adult education; topics may include: course design, writing tests, presentation skills, leading discussions, use of technology including course management systems. Offered Winter.  
Restriction(s): Enrollment is limited to Graduate level students.  
Repeatable for 9 Credits
LDT 9105 Conducting Research in Learning Design and Technology Cr. 4
Design, execution, and reporting of research in learning design and technology. Students should complete most of the course work for the learning design and technology program before registering for this course. Offered Fall.
Prerequisites: EER 7000-9999 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

LDT 9110 Advanced Research Seminar and Practicum Cr. 4
Course designed for advanced doctoral students in Learning Design and Technology; however it is also appropriate for students in other disciplines. Students should have completed almost all of their coursework in their major, and preferably also their work in EER. Offered Winter.
Restriction(s): Enrollment is limited to Graduate level students.