Instructional Design and Technology

Degrees Offered

• Master of Arts
• Doctor of Education

Nature of the Program

The online Master of Arts in Instructional Design and Technology Program is designed for the individual who wants to apply cutting edge instructional technologies and design strategies in business, education, and other educational settings. The Learning Goals for the program are to advance knowledge and critical thinking relative to instructional design and instructional technologies. Features of the program include courses in educational psychology, instructional design and technology, and program evaluation.

The online Instructional Design and Technology Doctor of Education (Ed.D.) Program is designed to allow a graduate to immediately apply knowledge and skills to pragmatic needs in any educational setting, particularly for those interested in teaching and conducting research in a university environment. The Learning Goals for the program are to enhance knowledge and skill-building that are designed into the courses and address three areas of competency, including inter-connectivity, instructional design, and software-multimedia design. Students are encouraged to address research toward the pragmatic needs of students, programs, and institutions. IDT knowledge and skills are developed within courses, practicums, and independent studies as jointly determined by student and advisor. Student interests and career plans are discussed upon enrollment in the program and students are advised to be prepared to identify these in their application and throughout the program.

Students are encouraged to identify topics of interest and to develop an appropriate topic for inquiry as they take courses. Research in instructional technology is addressed throughout the courses and supplements the college research core requirements. The program features seminar courses that provide opportunities to conduct research and develop instructional interventions, including technological integration of tools. Teaching opportunities may be found working with faculty members, the college’s Teaching and Learning Technologies Center (TLTC), and internships in corporate settings in the Morgantown / Fairmont area.

FACULTY

PROFESSOR
• William Beasley - Ed.D. (University of Georgia)
  Instructor presence in online environments, integration of external technologies with learning management systems, elearning in cross-cultural contexts

ASSOCIATE PROFESSOR
• Ugur Kale - Ph.D. (Indiana University Bloomington)
  IDT Program (Coordinator); Instructional Design, Computational Thinking, Technology Integration, Online Learning, Professional Development, Teacher Education

ASSISTANT PROFESSOR
• Jiangmei (May) Yuan - Ph.D. (University of Georgia)
  Learning, Design, and Technology; Formative Assessment, Feedback Design, and Learner Engagement in Online Learning Environments; Robotics in STEM Teacher Education

PROFESSORS EMERITI
• Paul W. DeVore
• David L. McCrory - Ph.D. (Case Western Reserve University)
• Edward C. Pytlik - Ph.D. (Iowa State University)
• R. Neal Shambaugh - Ph.D. (Virginia Polytechnic Institute and State University)

Admissions

ADMISSIONS REQUIREMENTS - MASTER'S
• A cumulative GPA of 3.0 or higher
• An undergraduate degree from an accredited university
• Cover letter describing past work experience and goals for graduate study
• Transcript(s) of completed undergraduate program
• Resume or Vitae
• GRE or GMAT scores OR a narrative describing two years of professional work experience (individuals with 2+ years work experience can ask to have the testing requirement waived)
• Three letters of reference commenting on professional background and plans for graduate study
• Given the online nature of the majority of the courses, the enrollment in this program is not sufficient to satisfy visa requirements for international students in the United States

ADMISSIONS REQUIREMENTS - DOCTORATE - ED.D.
• Undergraduate GPA of at least 3.0
• Master's Degree
• Total GRE scores of 302 (on the verbal and quantitative combined) or MAT score of 418-423
• Letter of application explaining purpose, motivation, and research interests for an IDT Ed.D. degree
• Three letters of references
• Scholarly writing sample
• Curriculum Vita
• Given the online nature of the majority of the courses, the enrollment in this program is not sufficient to satisfy visa requirements for international students in the United States

Please note that the Instructional Design and Technology program does not grant conditional or provisional admissions into the degree. The program faculty will not review incomplete applications.

Admissions materials for the Instructional Design and Technology master and doctoral program should be uploaded to the online application. For answers to questions about application materials contact:

Dana Musick (dmusick2@mail.wvu.edu)
c/o The Department of Learning Sciences and Human Development
West Virginia University
PO Box 6122
Morgantown, West Virginia 26506-6122.

Master of Arts

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
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<tr>
<td>EDP 617</td>
<td>Program Evaluation</td>
<td>3</td>
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<td>EDP 640</td>
<td>Instructional Design</td>
<td>3</td>
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<td>IDT 600</td>
<td>Instructional Design and Technology Theories and Models</td>
<td>3</td>
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<tr>
<td>IDT 610</td>
<td>Distance Education</td>
<td>3</td>
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<td>Competency Courses</td>
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<tr>
<td>IDT 620</td>
<td>Social Network Media</td>
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<td>IDT 630</td>
<td>Instructional Delivery System</td>
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<td>Visual Literacy</td>
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<td>IDT 650</td>
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<td>IDT 660</td>
<td>Instructional Design and Technology Authoring Systems</td>
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<td>IDT 670</td>
<td>Digital Tools and Web</td>
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<td>IDT 693</td>
<td>Special Topics</td>
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<td>IDT 720</td>
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<td>Technology Integration</td>
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<td>IDT 740</td>
<td>Design Studio</td>
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<td>IDT 750</td>
<td>Prototype Studio</td>
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<td>IDT 655</td>
<td>Technology for Teachers</td>
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<td>IDT 665</td>
<td>Game &amp; Simulation Design for Instruction</td>
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<td>IDT 715</td>
<td>School Networks</td>
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Total Hours 30
### Suggested Plan of Study

| First Year |  |  |  |  |
| --- | --- | --- | --- |  |
|  | **Fall** | **Hours** | **Spring** | **Summer** | **Hours** |
| IDT 610 | 3 | IDT 620 | 3 EDP 612 | 3 |
| IDT 600 | 3 | IDT 660 | 3 IDT 630 | 3 |
|  | 6 | 6 | 6 |  |

| Second Year |  |  |  |  |
| --- | --- | --- | --- |  |
|  | **Fall** | **Hours** | **Spring** | **Hours** |
| IDT 735 | 3 | EDP 617 | 3 |  |
| EDP 640 | 3 | IDT 650 | 3 |  |
|  | 6 | 6 |  |  |

Total credit hours: 30

- Any IDT courses at the 600-level may be substituted with advisor approval.

### Doctor of Education

#### MAJOR REQUIREMENTS

**Common Core**

- EDP 740 Principles of Instruction 3
- EDP 600 Educational Psychology 3
- IDT 799 Graduate Colloquium 6

**College Research Core**

- EDP 612 Introduction to Research 3
- EDP 613 Statistical Methods 1 3
- EDP 614 Statistical Methods 2 3
- SCFD 615 Qualitative Research Methods 3

**Research Elective** 3

**Competency Areas** 27

- **Interconnectivity**
  - IDT 620 Social Network Media
  - IDT 630 Instructional Delivery System
  - IDT 715 School Networks
  - IDT 655 Technology for Teachers

- **Instructional Design**
  - EDP 640 Instructional Design
  - IDT 720 Instructional Systems Design
  - IDT 740 Design Studio

- **Software and Multimedia**
  - IDT 650 Multimedia Learning
  - IDT 665 Game & Simulation Design for Instruction
  - IDT 640 Visual Literacy
  - IDT 660 Instructional Design and Technology Authoring Systems
  - IDT 750 Prototype Studio
  - IDT 693 Special Topics

**Specialization Electives** 18

- Other IDT courses
- Courses from Master’s program
- Courses from other programs

**Dissertation** 6

- IDT 797 Research
IDT master’s program requires 5 competency courses and 5 foundational courses, that can be categorized under two practical skills sets: 1- Analysis & Design and 2- Development & Evaluation. On the other hand, IDT doctoral program requires 9 competency courses (in addition to research core, common core, dissertation hours and specialization). Competencies are abilities, skills, and to some extent dispositions, attitudes, and motivations. Desires to work together and efforts for continuous improvement are just as important as solo skills. With additional competency course requirements, IDT doctoral students are prepared to gain deeper knowledge and skills in these areas, which would benefit their research and development efforts in IDT. Knowledge and skill-building regarding research and development are designed into the competency courses and address three areas of competency: 1-interconnectivity, 2-instructional design, and 3-software-multimedia design.

Major Learning Outcomes

INSTRUCTIONAL DESIGN AND TECHNOLOGY

Major features of the Instructional Design and Technology (IDT) program include course preparation in educational psychology, instructional design, multimedia, and research methods. Three areas of competencies are featured: networks, instructional design and development, and use of software and multimedia.

The IDT program is designed to address the following learning goals:

- Understand the context for technology use, history of the field, theoretical foundations, trends and issues, and ethical uses of technology in educational settings.
- Develop an awareness of current IT tools and practices.
- Apply learning principles to instruction.
- Design, implement, and evaluate the use of technology and media in instruction and to support learning.
- Conduct research on the design, use, and evaluation of technology, teaching, and educational programs.

COURSES

IDT 600. Instructional Design and Technology Theories and Models. 3 Hours.
Introduces students to the knowledge base of instructional design and technology.

IDT 610. Distance Education. 3 Hours.
This course addresses the nature of technical communication systems in distance education, their configuration and behavior, and the organizational factors associated with their development, acquisition, use, evaluation, and maintenance.

IDT 620. Social Network Media. 3 Hours.
This course will address the fundamental mechanics of using computers to access information networks for application in elementary, secondary, and higher education classroom instruction, as well as other education/business teaching/learning environment.

IDT 630. Instructional Delivery System. 3 Hours.
Emphasis on the four elements of content development: presenting, engagement, integration and assessment using open source systems.

IDT 640. Visual Literacy. 3 Hours.
Introduce students to knowledge of how humans use visual and nonverbal communication, and how visuals can be used in educational settings.

IDT 650. Multimedia Learning. 3 Hours.
Understand the use and design of multimedia materials in educational settings.

IDT 655. Technology for Teachers. 3 Hours.
The course provides students with experiences to consider and make informed decisions regarding various emerging technologies for instructional purposes. As an in-service teacher, a preservice teacher, or a current or future technology integration specialist, students will have the opportunity to explore and discuss various emerging educational technologies, and design and reflect on learning activities incorporating such technologies.

IDT 660. Instructional Design and Technology Authoring Systems. 3 Hours.
Design and development of online instruction through the use of current authoring systems.

IDT 665. Game & Simulation Design for Instruction. 3 Hours.
This is a hands-on course about designing digital games for instruction. In this course the student will learn the theories and the instructional design strategies appropriate for making and using digital games in the classroom. The student will learn how to develop rules that constrain, create a playable learning environment, and how to situate the game in an instructional context.

IDT 670. Digital Tools and Web. 3 Hours.
Review, use and discussion of existing emerging web-based tools, and incorporate these tools in their instructional development.

IDT 675. Online Teaching and Learning. 3 Hours.
PR: Graduate standing. This course provides an overview of major teaching models and factors to be considered in creating and teaching an online course, and guides the learner through the process of actually developing a specific online course in a learning management system.
IDT 685. Practicum. 1-12 Hours.
IDT 691A-Z. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

IDT 693A-Z. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

IDT 698. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of student reports (698), or dissertations (798). Grading is normal.

IDT 715. School Networks. 3 Hours.
Hands-on exploratory course in the design, development and deployment of a school network. Explore the issues of design, policy, and security by building and deploying your internet server.

IDT 720. Instructional Systems Design. 3 Hours.
The systems approach is used to design instruction, applying the principles of instructional design.

IDT 735. Technology Integration. 3 Hours.
Apply the latest theories of learning and instructional design to a range of learning contexts, including public school, higher education and corporate/institutional needs, and develop technology-based instructional products.

IDT 740. Design Studio. 3 Hours.
Apply principles of instructional design, knowledge of learning theories, and experience with technological tools to the design of instructional products and curriculum for actual clients.

IDT 750. Prototype Studio. 3 Hours.
(May be repeated for a maximum of 6 hours.) Implement and revise design of online educational materials developed in IDT 740.

IDT 790. Teaching Practicum. 1-3 Hours.
Supervised practice in college teaching of technology education. Note: This course is intended to insure that graduate assistants are adequately prepared and supervised when they are given college teaching responsibility. It will also present a mechanism for students not on assistantships to gain teaching experience. (Grading will be S/U.).

IDT 791A-Z. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

IDT 792. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

IDT 793. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

IDT 794. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

IDT 795. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

IDT 796. Graduate Seminar. 1 Hour.
PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.

IDT 797. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project or a dissertation. (Grading may be S/U.)

IDT 798. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of student reports (698), or dissertations (798). Grading is normal.

IDT 799. Graduate Colloquium. 1-6 Hours.
PR: Consent. For graduate students not seeking course work credit but who wish to meet residency requirements, use the University's facilities, and participate in its academic and cultural programs. Note: Graduate students who are not actively involved in coursework or research are entitled, through enrollment in their department's 699/799 Graduate Colloquium to consult with graduate faculty, participate in both formal and informal academic activities sponsored by their program, and retain all of the rights and privileges of duly enrolled students. Grading is S/U; colloquium credit may not be counted against credit requirements for masters programs. Registration for one credit of 699/799 graduate colloquium satisfies the University requirement of registration in the semester in which graduation occurs.

IDT 900. Professional Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology.) The continuing education courses are graded on a pass/fail grading scale and do not apply as graduate credit toward a degree program.
IDT 930. Professional Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology.) These tuition waived continuing education courses are graded on a pass/fail grading scale and do not apply as graduate credit toward a degree program.

IDT 931. Professional Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology.) These tuition waived continuing education courses are graded on a Pass/Fail grading scale and do not apply as graduate credit toward a degree program.