

Valdosta State University
Education Specialist in Instructional Technology

Overview and Scope

(1) Brief narrative description and objectives of the program, including explanation of the knowledge base, philosophy for preparation, and goals and objectives of the program.

The Department of Curriculum and Instructional Technology offers an online program of study culminating in an Education Specialist Degree (Ed.S.). The Ed.S. in Instructional Technology degree program prepares graduates for positions of leadership and support as instructional technologists in a variety of contexts: education, business, industry, government, the military, health fields and higher education. The Instructional Technology program is organized around the AECT definition of Instructional Technology. *“Instructional technology is the theory and practice of design, development, utilization, management, and evaluation of processes and resources for learning.”* (AECT, 1994)

Professional studies in the Ed.S. in Instructional Technology program prepares and supports graduates who:

- Work efficiently, effectively, and cooperatively as leaders and members of teams and groups.
- Provide pedagogical expertise in using a variety of technologies in a variety of contexts.
- Develop and implement facility designs that support technology use in instructional programs.
- Serve as consultants, change agents, trainers, and managers of resources and facilities.
- Model and promote ethical, legal, and equitable use of instructional technology.
- Plan, implement, and manage networked systems.
- Manage projects and programs within the organizational culture.
- Demonstrate effective communication/interpersonal/group dynamics skills in diverse settings.
- Select, integrate, and evaluate hardware and software to support P12 curricula.
- Employ advanced skills in managing and using instructional/informational technologies.
- Design, develop, deliver, and evaluate staff development activities.
- Access, analyze, interpret, synthesize, and communicate information and ideas.
- Integrate theory, research, and practice related to teaching and learning.
- Evaluate and apply techniques and processes for decision making and implementing change.
- Conduct, support, and apply research concerning technological applications.
- Demonstrate commitment to reflective practice and professional development.
- Assume an influential leadership role in the planning, selection, implementation, evaluation, and management of a variety of instructional technologies.
- Support the changing roles of learners and educators in their application of instructional technology.

In 1999, the Ed.S. degree program was approved to be delivered completely online. Participants complete their coursework at a distance using the Internet and the web-based online learning system. The Education Specialist degree program offers the student an opportunity to follow an integrated plan of study beyond the Master’s program. The Ed.S. is a terminal degree and it is not intended as an intermediate step toward the doctorate.

Development of Major Content

The Ed.S. degree program emphasizes leadership and applied research in Instructional Technology (IT) practice and prepares students to meet present and future technological challenges within an educational organization. The program is structured as four major core courses, two selected courses based on each individual student's career goals, and three research courses culminating in a field-based research project appropriate to the student's work situation. It is expected that students entering the program will have completed a master's degree in instructional technology, or related field, and will have at least three years experience in teaching, library media technology or implementation or utilization of educational or information technology.

Students are oriented to the program through a beginning conference in which career goals are discussed with the academic advisor. Because students come to the program as professionals in IT or a related field, the coursework is built upon the previously developed knowledge base. If students have not completed a graduate course in instructional design and a general curriculum course, they are required to take a course in each of those subject areas and may use them as guided electives.

Individual professional development is the goal of the guided electives. Areas of interest might be organizational psychology, adult education, supervision, materials production, etc. Guided elective courses, which must be numbered 6000-8000, may be taken from departments across the university.

The major courses include emphases on theoretical perspectives, and selection and use of technologies and tools for instructional development and leadership. Theories, Models and Perspectives of Instructional Technology (ITED 8100) requires students to review and apply theories and models of learning and instruction, and develop a deeper knowledge base in the additional theoretical perspectives of change, communications and systems as applied in instructional technology. Leadership in Instructional Technology (ITED 8500) continues this study, requiring field-based application of change theory and examination of the role of instructional technologists as change agents. Technology Tools for Training and Education (ITED 8300) builds upon the previously developed instructional design skills of students (ITED 7301 or equivalent), requiring them to learn to use new tools (e.g. Authorware, MS-Project, WebCT) to create instructional materials. The perspective of instructional technologist as informed consumer frames Technology Selection for Learning Environments (ITED 8400). Practical experience in source, vendor and product analysis helps to develop skills in research, selection, implementation, and evaluation for the purposes of improving instructional effectiveness.

Development of Research Content

Contextually-appropriate methods of research are introduced and developed in Decision-Oriented Research and Evaluation (ITED 7070). Students evaluate an educational or training program using both qualitative and quantitative methods and write an evaluation report intended for dissemination. An action research project is also required in ITED 7070. Students propose an instructional intervention to address a problem or concern within the evaluated program. Products include a brief literature review and an action research proposal.

In the Research Seminar (ITED 8970) students continue to study research concepts and methods, particularly those associated with action research. They identify research topics, review studies, and write a full literature review. The products from ITED 8970 include an action research proposal which may be a new topic or may be based on work begun in ITED 7070, ITED 8300 or ITED 8500. Students will also form online research cohorts to provide peer support during work on similar projects.

Journal-Ready Thesis (ITED 8999) completes the research sequence. During this course students enter the data collection, analysis, and reporting phase of the field-based Ed.S. research project. The thesis and presentation must meet stated criteria in the consensus judgment of the thesis committee.

(2) Candidate course of studies with all required courses clearly marked

Degree Requirements for Ed.S. in Instructional Technology

Major Courses (12 hours)

ITED 8100 Theories, Models and Perspectives in IT (3 hours)
ITED 8300 Technology Tools for Training and Education (3 hours)
ITED 8400 Technology Selection for Learning Environments (3 hours)
ITED 8500 Leadership in Instructional Technology

Research Courses (9 hours)

ITED 7070 Decision-Oriented Research and Evaluation
ITED 8970 Research Seminar (3 hours)
ITED 8999 Journal-Ready Thesis (3 hours)

Area of Concentration (6 hours)

Guided Electives

TOTAL: 27 hours

(3) Descriptions of field experiences, student teaching, and internships. Include the amount of time and the type of supervision.

The philosophy of the department is that Ed.S. students should be provided opportunities and requirements to develop and apply advanced skills and knowledge. IT students apply knowledge and skills in clinical and field experiences that are integrated into all ITED courses.

ITED 8100 requires students to show evidence of implementation of a model or theory at the micro, organizational and macro levels in a field setting. ITED 8300 requires design, development, implementation and formative evaluation of an instructional or training intervention in a learning organization. ITED 8400 requires practical activities designed to improve skills in purchasing, installing and integrating computer-related technologies in specific educational environments familiar to the student. ITED 8500 requires design and development of a change project in the student's work environment or other organizational setting to which they have access. The evaluation and action research projects done within ITED 7070, ITED 8970 and ITED 8999 are all field-based and intended to impact organizational and instructional improvement.

Supervision for all course projects is the responsibility of the instructor; depending on the project, field partners or mentors may be appropriate. The majority of the responsibility for conduct of the field-based projects lies with the students themselves. Because students are being prepared to accept professional duties, including roles as responsible members of learning communities, active and timely participation and clear adherence to legal and ethical guidelines is expected.

(4) Explanation of how the program may deviate from the program standards.

There are no deviations from AECT standards in Valdosta State University's Ed.S. in Instructional Technology. A program strength is in integrating instructional technology professionals from various learning organizations in courses and group projects. This integration promotes an understanding of roles/responsibilities of various technology professionals and supports their collaborative relationships within schools, business partners and other community organizations.

(5) Description of where the programs are located within the professional education unit and its interrelationships with other programs in the unit and the university/college.

The Ed.S. in Instructional Technology is housed in the Department of Curriculum and Instructional Technology within the College of Education. Other programs offered within the department are 1) the M.Ed. in Instructional Technology - Library Media Option, 2) the M.Ed. in Instructional Technology – Technology Applications and 3) the Ed.D. in Curriculum and Instruction.

Graduate courses offered by other College of Education departments often serve as guided electives for students within the programs, especially in the areas of adult learning, vocational education, children's literature, computer technology and organizational psychology. The department offers required elective courses for other departments including CIED 7060 Curriculum, Instruction and Technology Integration, ITED 7000 Technologies for Teaching and Learning, ITED 7040 Thinking and Learning with Computers and ITED 7050 Distance Education.

Instructional Technology faculty and students have frequent contact with other departments within the College and University through offering technology consulting services, faculty development workshops and course projects offering students as tutors.

(6) List of faculty with primary assignments in the advanced educational communications and information technologies programs. Provide rank, responsibilities and tenure status.

Faculty	Responsibilities
Andrew J. Brovey, Ed.D. Associate Professor Tenured	Instructional Technology Program Coordinator, teaches ITED 7200, ITED 7500, ITED 7040, ITED 7050, ITED 7401, ITED 7403, ITED 8400. Advises M.Ed. Instructional Technology –Technology Applications Option students. Chairs and serves on doctoral dissertation committees; chairs and serves on Ed.S. thesis committees.
Dianne Dees, Ed.D. Instructor Not Tenured	Teaches ITED 7201, ITED 7202. Serves on Instructional Technology Advisory Committee.
Lars F. Leader, Ph.D. Assistant Professor Not Tenured	Portfolio Coordinator, teaches ITED 7200, ITED 7070. Advises M.Ed. Instructional Technology – Library Media Option students. Supervises interns. Chairs and serves on Ed.S. thesis committees.
Catherine B. Price, Ph.D. Professor Tenured	Department head. Teaches ITED 7299, supervises interns. Chairs and serves on doctoral dissertation committees; chairs and serves on Ed.S. thesis committees.
Arthur M. Recesso, Ed.D. Assistant Professor Not Tenured	Ed.S. Program Coordinator. Assigned to PT3 grant. Teaches ITED 7400, ITED 7080, ITED 8100. Advises Ed.S. Instructional Technology students. Chairs and serves on Ed.S. thesis committees.
Lorraine Schmertzling, Ed.D. Assistant Professor Not Tenured	Assigned to PT3 grant. Teaches ITED 7000 (nonmajors), ITED 8300 and ITED 8500. Serves on Ed.S. thesis committees.
Ellen W. Wiley, Ed.D. Associate Professor Tenured	Curriculum and Instruction Program Coordinator, teaches CIED 7060, ITED 7300, ITED 7301. Advises undergraduate students. Chairs and serves on doctoral dissertation committees; chairs and serves on Ed.S. thesis committees.
Jane E. Zahner, Ph.D. Professor Tenured	Assessment Coordinator, teaches ITED 7100, ITED 7302, ITED 7500, ITED 8970. Advises M.Ed. Instructional Technology – Library Media Certification Only students. Chairs and serves on doctoral dissertation committees; chairs and serves on Ed.S. thesis committees.

(7) Number of graduates from the program(s) at different levels over the past three years.

2 Ed.S. graduates, 1998. Currently have 42 enrolled in new online Ed.S. program.

(8) Brief description of the facilities and equipment utilized in the ECIT program.

Department faculty use a number of technologies to share course content and to communicate with students, colleagues and others.

The primary onsite teaching facility is the Instructional Technology Laboratory. This networked teaching and learning laboratory is equipped with twenty-one new Compaq multimedia computers and ten PowerPC Macintosh computers. Faculty have similar equipment in their offices. A wide variety of productivity and other software is installed on this equipment. Other equipment includes a new data/video projector, and a variety of peripherals including a SonyVisual Presenter, two scanners, two

digital cameras, VHS and Hi-8 cameras, a large screen TV, and several VCRs. A large whiteboard and separate meeting area are also available.

Faculty also lead a number of distance learning course sessions and entire courses using the Internet, WebCT courseware, and other forms of computer-mediated communication. In addition, faculty and students use the Georgia Statewide Academic and Medical System (GSAMS), a sophisticated, two-way distance learning system for course interaction and communication as well as staff development.

(9) Criteria used at admission to post-baccalaureate programs to determine if the candidate has adequate academic background in the subject to be taught.

Criteria for regular admission into the Ed.S. in Instructional Technology program are the same as for other Education Specialist programs in the College of Education: a masters degree from an accredited or approved college or university, a GPA of at least 3.0 on a 4.0 scale in all graduate work attempted, and an acceptable score on the GRE (850 or above) or the MAT (36 or above). Additional admission materials required for IT applicants are the Career Goals Statement and the Technology Skills Self-Report. The department reserves the right to interview any or all applicants prior to admission.

It is expected that students entering the major will be computer literate. If a student cannot demonstrate competency through prior completion of relevant coursework or by examination, he/she may be required to take an approved course or to complete self-instructional learning modules before or within the first term of enrollment. Ed.S. students are required to attend a one-day orientation seminar introducing the program and the online system.

**MATRIX FOR ADVANCED PROGRAMS IN
EDUCATIONAL COMMUNICATIONS AND INFORMATION TECHNOLOGIES**

Program Standards	Courses and/or experiences that fulfill the guideline
<p>1. The program in educational communication and information technologies is initiated, developed, and implemented by the faculty members whose own preparation is in this field of specialization.</p>	<ul style="list-style-type: none"> •All faculty participate in curriculum design and development; full curriculum revision for online program conversion, Fall 1999. Faculty preparation matches ECIT standards. Terminal degrees (3 Ph.D., 4 Ed.D.) in Instructional Systems Design (2), Educational Technology (2), Curriculum and Instruction (1) Educational Administration and Policy Studies (1), Research and Diversity Studies (1).
<p>2. The program for preparing specialists in educational communications and information technologies clearly identifies the roles their candidates might take in practice such as management of media programs, product development of various specified media, and instructional program development.</p>	<ul style="list-style-type: none"> •IT Forum: All students invited for course previews, advising sessions, skills sessions, advisory group meeting, portfolio presentations and workshops. •Student listserv with job listings and education opportunities •Goals statement required in admissions materials •8300 Instructional Design Projects contracted by students for field-based implementation and evaluation •8400 Development of web-based resources based on readings, review of online information and analysis of peer postings to discussion area. •8400 Practical experiences as evaluators and consumers of educational technology based on research and review of commercial, educational and other authoritative resources. •8500 Organizational Support Website.
<p>3. The program for preparing personnel in educational communications and information technologies is clearly grounded in the knowledge base for the field of ECIT.</p>	<ul style="list-style-type: none"> •Instructional design and curriculum knowledge base prerequisite to program (or take 7301, CIED 7060) •7070 Published research findings located and analyzed; Action research concepts and methods studied as applicable to evaluation of IT in schools. •8100 Study and examination on theories and models of learning and instruction, communications, systems and change. •8300 Production of research summary of related professional literature

Program Standards	Courses and/or experiences that fulfill the guideline
<p>4. The program includes such cognitive, humanistic, behavioral, ethical, and multicultural studies as are appropriate to the individual candidate's needs in understanding the background of educational communications and information technologies.</p>	<ul style="list-style-type: none"> •8100 Backward Mapping Project, Micro-level Impact Project, Theory Interrelatedness Project, Online Discussion Log •8100 Study and examination on theories and models of learning and instruction, communications, systems and change. •8500 Organizational Support Website
<p>5. The program makes available direct and simulated experiences as appropriate to the roles identified in the goal statement.</p>	<ul style="list-style-type: none"> •8300 Instructional Design Projects contracted by students for field-based implementation and evaluation •8500 Organizational support website and stakeholder/user review and report
<p>6. A study of research in educational communications and information technologies is included in the program.</p>	<ul style="list-style-type: none"> •7070 Literature review for action research •8300 Employs a variety of WWW search tools and online databases to locate resources; includes extensive study of Galileo, Georgia's online library system. •8970 Research Seminar includes study analyses, literature review, proposal development, research cohort discussion.
<p>7. Advanced graduate programs in educational communications and information technologies include the design and conduct of research in the field.</p>	<ul style="list-style-type: none"> •7070 Action research proposal addresses a learning/performance problem through design of instructional intervention; •7070 Evaluation project addresses learning/performance effects of technology integration/ implementation. •8970 Research Seminar includes study analyses, literature review, proposal development, research cohort discussion •8999 Journal-Ready Thesis requires action research project including construction of two journal-ready articles for selected Instructional Technology publications.

Program Standards	Courses and/or experiences that fulfill the guideline
<p>8. These AECT program standards, and others, have been used in forming and/or changing the institution's program in educational communications and information technologies.</p>	<ul style="list-style-type: none"> •IT program designed around the AECT definition and domains. Other standards include University System of Georgia Board of Regents principles and Valdosta State University College of Education Graduate Conceptual Framework.

**MATRIX FOR ADVANCED PROGRAMS IN
EDUCATIONAL COMMUNICATIONS AND INFORMATION TECHNOLOGIES**

Performance Indicators Candidate will:	Course Number, Activity; and/or Other Evidence that the Program Standards Have Been Met
Design	
1.1.a Apply a variety of instructional systems design models.	Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Instructional Design Projects contracted by students
1.1.b Identify learning theories from which a variety of ID models are derived and the consequent implications.	Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8100 Midterm Exam requires students describe learning theories, give examples of their implementation, and describe their relationship to other theories, models, and perspectives impacting local schools. 8100 Backward Mapping Project requires students to explain a learning theory and make the connection between local impact and macro level policy intent. 8100 Micro-level Impact Project requires that students review a learning theory, fully explain an example of implementation at the micro level (e.g. classroom) and describe the impact it has had on instruction and/or learning. 8100 Theory Interrelatedness Project requires that students identify and explain the relationship between various theories, models, and perspectives impacting schools. 8100 Online Discussion Log requires students to explain the relationship of theories, models, and perspectives and peer review analyses that are submitted.
1.1.c Demonstrate proficiency in the prescription, implementation, and evaluation of treatments to maximize learning / performance outcomes in a variety of contexts.	Pre-requisite or required elective (if not previously taken) CIED 7060 Online readings and online discussions support development of Group and Individual Technology Integration Projects. 7070 Appropriate techniques are used to effectively collect, analyze, and report evaluation data. 7070 Action research proposal addresses a learning/performance problem through design of an instructional intervention. 8970 Research proposal 8999 Journal-ready thesis
1.1.1.a Utilize research methodologies appropriate to the investigation of instructional tasks and content.	7070 Appropriate techniques are used to effectively collect, analyze, and report evaluation data. 7070 Action research proposal addresses a learning/performance problem through design of an instructional intervention. 8970 Research proposal 8999 Journal-ready thesis

<p>1.1.1.b Identify the theories and historical background of analysis as a component of instructional design and instructional systems development.</p>	<p>Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Instructional Design Projects contracted by students</p>
<p>1.1.2.a Demonstrate in-depth synthesis and evaluation of the theoretical constructs and research methodologies related to instructional design as applied in multiple contexts.</p>	<p>Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8970 Research proposal 8999 Journal-ready thesis</p>
<p>1.1.2.b Utilize principles and procedures of instructional design in a variety of contexts and systems.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Online readings and online discussions support development of Group and Individual Technology Integration Projects. Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Instructional Design Projects contracted by students 8970 Research proposal 8999 Journal-ready thesis</p>
<p>1.1.2.c Recognize and articulate current trends in the development of theory and emerging practice related to instructional design.</p>	<p>Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Instructional Design Projects contracted by students 8100 Micro-level Impact Project 8100 Online Discussion Log</p>
<p>1.1.3.a Demonstrate personal skill development with two or more: computer authoring application, video tool, or electronic communication application (not telephone).</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Group and Individual Technology Integration Projects; Computer mediated communication via WebCT discussions. 8100 Micro-level Impact Project 8100 Theory Interrelatedness Project 8100 Online Discussion Log 8300 Instructional Design Projects contracted by students 8500 Organizational Support Website</p>
<p>1.1.3.b Utilize the research, theoretical, and practitioner foundations of the field in the development of instructional materials.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Design, develop, and evaluate Group and Individual WebQuest projects according to research-based criteria Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Instructional Design Projects contracted by students</p>
<p>1.1.3.c Utilize the research, theoretical, and practitioner foundations of the field in the selection of media for instructional settings.</p>	<p>8300 Instructional Design Projects contracted by students 8400 Development of web-based resources based on readings, review of online information and analysis of peer postings to discussion area.</p>

<p>1.1.4.a Conduct basic and applied research related to technology integration and implementation.</p>	<p>7070 Evaluation project addresses learning/performance effects of technology integration/implementation. 8400 Practical experiences as evaluators and consumers of educational technology, based on research and review of commercial, educational and other authoritative sources. 8970 Research proposal 8999 Journal-ready thesis</p>
<p>1.1.4.b Utilize the research, theoretical, and practitioner foundations of the field in the implementation of instructional plans.</p>	<p>8970 Research proposal 8999 Journal-ready thesis</p>
<p>1.1.5.a Demonstrate congruency among goals / objectives, instructional strategies and assessment measures.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Congruent goals/objectives, instructional strategies, and assessment measures are developed as part of the Group and Individual WebQuest projects. Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 – Planning documentation for Instructional Design Projects contracted by students</p>
<p>1.1.5.b Conduct basic and applied research in the evaluation of emergent learner assessments.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Congruent goals/objectives, instructional strategies, and assessment measures are developed as part of the Group and Individual WebQuest projects. Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 – Peer evaluation of Instructional Design Projects contracted by students 8970 Research proposal 8999 Journal-ready thesis</p>
<p>1.1.5.c Articulate the relationships within the discipline between theory, research, and practice as well as the inter-relationships between people, processes, and devices.</p>	<p>8100 Midterm Exam. 8100 Backward Mapping Project 8100 Theory Interrelatedness Project 8100 Online Discussion Log 8100 Micro-level Impact Project 8300 – IT Research Summary of related professional literature 8400 – Discussion forum contribution and synthesis. 8970 Literature Review, Research proposal, Research Discussion 8999 Journal-ready thesis</p>
<p>1.2.a Conduct basic and applied research related to message design, which includes multiple media.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Readings and online activities support applied research on the effectiveness of message design. 8300 Planning documentation for Instructional Design Projects contracted by students</p>

<p>1.3.a Identify multiple instructional strategy models and demonstrate appropriate contextualized application within practice and field experiences.</p>	<p>Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Instructional Design Projects contracted by students</p>
<p>1.3.b Demonstrate appropriate uses of instructional strategies for complex, interactive environments.</p>	<p>Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Instructional Design Projects contracted by students</p>
<p>1.4.a Analyze the effectiveness of macro- and micro-level design efforts by considering the interactions of learner characteristics, instructional strategies, nature of content, and the learning situation.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Students evaluate the effectiveness of Group and Individual WebQuest projects. Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8100 Backward Mapping Project 8100 Theory Interrelatedness Project 8100 Micro-level Impact Project 8300 Planning documentation and peer evaluation for Instructional Design Projects contracted by students</p>
<p>1.4.b Demonstrate in-depth synthesis and evaluation of the theoretical constructs and contemporary research related to the identification and importance of learner characteristics.</p>	<p>8300 Planning documentation for Instructional Design Projects contracted by students. IT Research Summary of related professional literature 8970 Literature Review, Research proposal 8999 Journal-ready thesis</p>
<p>Development</p>	
<p>2.0.1 Collaborate with a development team to apply principles of design specifications to produce technological products.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Group WebQuest projects are developed through online collaboration. 8300 Instructional Design Projects contracted by students</p>
<p>2.0.2 Use theory, research , and evaluation to select appropriate technological tools for developing effective instructional products and processes.</p>	<p>8300 Planning documentation for Instructional Design Projects contracted by students. IT Research Summary of related professional literature 8400 Multiple course activities in selecting technology based on research and review of commercial, educational and other authoritative sources. Also includes review and use of peer contributions.</p>

<p>2.0.3 Compare, analyze, critique, and evaluate commercially produced products to determine how learning theories, instructional design specifications, production principles, and teaching strategies are embedded within the product.</p>	<p>8400 Practical experiences as evaluators and consumers of educational technology, based on research and review of commercial, educational and other authoritative sources.</p>
<p>2.0.4 Solve problems of design specifications for embedding learning theories and effective teaching strategies into technological products.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Group and Individual Technology Integration projects are developed. Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Planning documentation for Instructional Design Projects contracted by students; IT Research Summary of related professional literature</p>
<p>2.0.5 Evaluate the effective use of design specifications in products used in a variety of learning or training environments.</p>	<p>Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8300 Planning documentation for Instructional Design Projects contracted by students; IT Research Summary of related professional literature; Peer Evaluation of ID projects</p>
<p>2.0.6 Create instructional or professional products using technology resources such as CD-ROMs, laser discs, Web page, and other emerging technology resources.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Group and Individual Technology Integration projects 8300 Instructional Design Projects contracted by students 8400 Online research, course tools and web page software are used to create midterm and final projects which serve as professional references and resources. 8500 Organizational support website</p>
<p>Utilization</p>	
<p>3.2.1 Implement strategies for the diffusion and adoption of innovations in learning communities.</p>	<p>Pre-requisite or required elective (if not previously taken) CIED 7060 Readings and online activities 8500 Readings, online discussions, organizational support proposal, organizational support website and stakeholder/user review activity and report. 8970 Research proposal 8999 Journal-ready thesis</p>
<p>3.3.3 Implement strategies to engage stakeholders in the process of diffusion and adoption.</p>	<p>8500 Readings, online discussions, organizational support proposal, organizational support website and stakeholder/user review activity and report. 8970 Research proposal 8999 Journal-ready thesis</p>

<p>3.3.5 Evaluate the effects of diffusion and adoption.</p>	<p>8500 Readings, online discussions, organizational support proposal, organizational support website and stakeholder/user review activity and report. 8970 Research proposal 8999 Journal-ready thesis</p>
<p>3.4.4 Implement effective policies related to the utilization of instructional technologies.</p>	<p>8500 Readings, online discussions, organizational support proposal, organizational support website and stakeholder/user review activity and report. 8970 Research proposal 8999 Journal-ready thesis</p>
<p>Management</p>	
<p>4.0.1 Implement and evaluate a micro-level technology plan in an appropriate setting.</p>	<p>8400 Readings, online discussion and practice activities related to the development and implementation of technology plans.</p>
<p>4.1.1 Implement and evaluate project management techniques using current research.</p>	<p>8500 Readings, online discussions, organizational support proposal, organizational support website and stakeholder/user review activity and report.</p>
<p>4.2.1 Implement and evaluate resources management techniques using current research.</p>	<p>8400 Readings, online discussion and practice evaluation activities related to resource management as a component of technology planning.</p>
<p>4.3.1 Implement and evaluate delivery system management techniques using current research.</p>	<p>8400 Readings, online discussion and practice activities related to system management as a component of technology planning. 8500 Organizational support website and stakeholder/user review activity and report.</p>
<p>4.4.1 Implement and evaluate information management techniques using current research.</p>	<p>8400 Readings, online discussion and practice activities related to information management as a component of technology planning. 8500 Organizational support website and stakeholder/user review activity and report.</p>
<p>Evaluation</p>	
<p>5.0.1 Exhibit a knowledge of and display skill in the analysis on current ECIT research on evaluation in order to evaluate ECIT projects and programs.</p>	<p>7070 Published research findings are located and analyzed. Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8400 Review and analysis of authoritative guidebooks and other documents related to technology planning. 8970 Research proposal 8999 Journal-ready thesis</p>

<p>5.0.2 Display skill in the conception, design, implementation, and reporting of original ECIT research on evaluation in order to evaluate ECIT projects and programs.</p>	<p>7070 Evaluation project activities include conception and design of the research. 7070 Appropriate techniques are used to effectively collect, analyze, and report evaluation data. 8500 Organizational support website and stakeholder/user review activity and report. 8970 Research proposal 8999 Journal-ready thesis</p>
<p>5.0.3 Apply theories underlying the five ECIT domains to instructional projects.</p>	<p>Pre-requisite or required elective (if not previously taken) 7301 Course readings and online discussions; Instructional Systems Design Project 8100 Backward Mapping Project 8100 Micro-level Impact Project 8100 Theory Interrelatedness Project 8100 Online Discussion Log 8100 Midterm Exam 8500 Readings, online discussions, organizational support proposal, organizational support website and stakeholder/user review activity and report. 8970 Research proposal 8999 Journal-ready thesis</p>
<p>5.0.4 Identify and apply strategies to develop a long-range plan for an ECIT program or project.</p>	<p>8400 Readings, online discussion and practice activities on the components and development of technology plans. 8500 Readings, online discussions, organizational support proposal, organizational support website and stakeholder/user review activity and report. 8970 Research proposal 8999 Journal-ready thesis</p>

APPENDIX A: COURSE DESCRIPTIONS for Ed.S. in Instructional Technology

All courses are three semester hours

CIED 7060 Curriculum Issues P-16

An exploration of curriculum issues and trends, curriculum development, integration of technology into the curriculum, implementation of innovative instructional techniques, and legal/ethical issues across content areas and grade levels.

ITED 7070 Decision-Oriented Research and Evaluation

Introduction to field-based research and evaluation issues and methodologies. Covers problem identification, sources of data, research and evaluation techniques including action research, communicating with clients, legal/ethical considerations, and using data for decision making.

ITED 7301 Instructional Design & Development II

Prerequisite: ITED 7300 and ITED 7070. Application of systematic design principles to instructional and non-instructional projects. Includes project management, team building, and development issues for different delivery systems.

ITED 8100 Theories, Models and Perspectives in Instructional Technology

Survey and analysis of the theoretical perspectives of change, communication, diffusion, systems, learning, and instruction as applied in instructional technology.

ITED 8300 Technology Tools for Training and Education

Prerequisite: ITED 7301 or equivalent Instructional Design course. Application of various technologies and products to improve learning environments. Includes in-depth use of at least two selected technology tools to develop quality instructional materials.

ITED 8400 Technology Selection for Learning Environments

Prerequisite: ITED 8100. Practical experiences as evaluators and consumers of educational technology based on research and review of commercial, educational, and other authoritative sources. Includes source, vendor, and product analysis, study of effectiveness, and other benefits, and incorporation in technology plans and facilities.

ITED 8500 Leadership in Instructional Technology

A study of theories and techniques for working with individuals and groups to implement change and to accomplish education goals. Emphasis is on reflective practice and application in a field-based setting.

ITED 8970 Research Seminar

Prerequisite: ITED 7070 or equivalent. A review of studies applying a variety of methodologies to problems in curriculum and instructional technology. Includes development of a research proposal. May be repeated.

ITED 8999 Thesis

Prerequisites: ITED 7070, ITED 8970. The data collection, analysis, and reporting phase of the Education Specialist research project. May be repeated.

APPENDIX B: Course Syllabi for Ed.S. in Instructional Technology

CIED 7060 Curriculum Issues P-16 (a curriculum course is prerequisite or co-requisite for program)

ITED 7070 Decision-Oriented Research and Evaluation

ITED 7301 Instructional Design and Development II (an instructional design course is prerequisite or co-requisite for program)

ITED 8100 Theories, Models and Perspectives in IT (3 hours)

ITED 8300 Technology Tools for Training and Education (3 hours)

ITED 8400 Technology Selection for Learning Environments (3 hours)

ITED 8500 Leadership in Instructional Technology

ITED 8970 Research Seminar (3 hours)

ITED 8999 Journal-Ready Thesis (3 hours)