

7. Residency requirement: Doctoral students must complete two consecutive semesters with a minimum of 9 hours taken each semester. Consecutive semesters may include summer, and employment is not restricted.
8. Students have 10 years to complete the program. No course work beyond the master's degree that is more than 10 years old at the time the doctoral degree is conferred can be used toward the doctoral degree.
9. The student must complete successfully the common exit examinations (written qualifying examinations) prepared by the Federation Doctoral Committee, which consists of one member from each institution. The examination will consist of one and a half days of written work in the major and a half day in the minor.
10. The student must successfully develop a dissertation proposal, defend the proposal, and complete and defend the proposed research.

Doctoral Committee

Each student's program will be guided by a doctoral committee. Each committee must have a representative from the alternate federation institution who actively participates in (a) drawing up the student's degree plan, (b) evaluating the written and oral qualifying exams, (c) evaluating the dissertation proposal and final defense and (d) attending the dissertation defense.

Initial Teacher Certification with Master's Degree

See the College of Education section in this catalog.

Post-Baccalaureate Teacher Certification Without Master's Degree

See the College of Education section in this catalog.

Courses of Instruction

All Courses of Instruction are located in one section at the back of this catalog.

Course and Subject Guide

The "Course and Subject Guide," found in the Courses of Instruction section of this book, serves as a table of contents and provides quick access to subject areas and prefixes.

Department of Technology and Cognition

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Bill Elieson, Interim Chair

Graduate Faculty: Allen, Bullock, Callahan, Combes, Cox, Ditzenberger, Elleven, Ennis-Cole, Henson, Jones, Knezek, Norris, Poirot, Rademacher, Sayler, Schumacker, Tyler-Wood, Walker, J. Wircenski, M. Wircenski, Young.

The Department of Technology and Cognition offers course work in applied technology, training and development; computer education, instructional technology, cognitive systems; research design and measurement, applied statistics program evaluation; and the education of special populations and gifted learners.

Certification and degree programs in the department focus on such areas as technological solutions in education, non-traditional education, research and evaluation design, applied technology, special education and gifted education.

Financial support may be available on a limited basis for research, teaching and internships. Funds vary depending on grants and other activities of the faculty in the department.

Research

Faculty in the department have extensive research interests that include the examination of the development, delivery and evaluation of instruction in education and industrial training environments, and issues related to providing appropriate services to persons with disabilities and who are gifted.

Faculty interests include but are not limited to academic, social and behavioral assessment; designing effective instructional environments for exceptional learners; behavioral management systems for special populations, parent and professional communication and collaboration; establishment of partnerships to facilitate services for exceptional individuals; programs and procedures for gifted learners; identification of gifted and talented learners; academic acceleration; early entrance to school for college; social and emotional aspects of giftedness; microcomputer

applications; networks; telecommunications; artificial intelligence; multimedia; computer-assisted and managed instructional environments; human-computer interfaces; cognitive development and information processing of traditional and special populations; utilization of technology in assessment; ethical considerations of the application of technology; statistical modeling; program evaluation; and strategies for working with adult populations.

Grants

Grants from the U.S. Department of Education, Texas Education Agency, Job Training Partnership Program and other sources provide financial support to graduate students, depending on program needs. Tuition and stipend support is available for both full- and part-time students in the areas of emotional and behavior disorders, autism and autism intervention, and transition and correctional special education.

Texas Center for Educational Technology

The Texas Center for Educational Technology (TCET) is designed to promote research and development collaboration among universities, school districts, the Educational Service Centers and the technology industry for the purpose of integrating the use of technology into Texas schools. Educational technology information and products are disseminated statewide via monthly publications transmitted in print and electronically. Research projects focusing on technology development, use and quality are supported.

UNT Institute for Behavioral and Learning Differences

The UNT Institute for Behavioral and Learning Differences (UNT-IBLD) was created in 1993 for the advancement of research and educational issues and techniques related to individuals with unique behavioral and learning characteristics. The UNT-IBLD vision includes not only those individuals who are not keeping pace with their peer group, but also those who are advanced beyond normal expectations. The goals of the UNT-IBLD include advancing the understanding of behavioral and learning differences; developing liaisons with public and private facilities; effecting in-service development of regular education faculty; focusing on transitional strategies for community, work and postsecondary education; developing technological innovations for enhancing educational and life opportunities; and serving as a resource for professionals, parents, schools, and community and state agencies.

Degree Programs

The department offers the following degrees at the master's and doctoral level:

- Master of Education, and
- Master of Science, both with a major in applied technology and performance improvement.
- Doctor of Education, and
- Doctor of Philosophy, both with a major in applied technology and performance improvement.
- Master of Science with a major in computer education and cognitive systems.
- Doctor of Philosophy with a major in educational computing.
- Master of Science with a major in educational psychology.
- Doctor of Philosophy with a major in educational research.
- Master of Education with a major in special education.
- Doctor of Philosophy with a major in special education.

Further specialization at the master's level is offered in applied technology and performance improvement for cognitive systems, educational media, health science technology, marketing education, office education, trade and industrial education, training and development. Specializations in special education include educational diagnostician, emotional and behavioral disorders, early childhood, generic, gifted and talented, and learning disabilities. Specializations in educational psychology include educational diagnostician, gifted and talented, research and statistics, and computer education.

The department also supports an interdisciplinary master's degree in corporate training and development and an interdisciplinary doctorate with a major in information science. Additional information on these programs is available from the Toulouse School of Graduate Studies and from the School of Library and Information Sciences respectively. The doctoral program in special education is offered as part of the Federation of North Texas Area Universities.

Depending on the degree attained, graduates of these programs normally seek employment in business, education, industry, military, as teachers, trainers, program administrators, supervisory personnel, guidance counselors, training technologists, curriculum development specialists, research and evaluation specialists, and community college and university faculty members.

Applicants must meet requirements for admission to the Toulouse School of Graduate Studies and meet all requirements of the College of Education. For admission to any of the programs in this department, the applicant should file an application portfolio with the program area in which the student is interested in entering and schedule an interview with a representative of the program area. Contact the individual

program or visit their web site at www.tac.unt.edu for details about the specific admission requirements for each program.

Applied Technology and Performance Improvement Degree Programs

Master of Education

The Master of Education with a major in applied technology and performance improvement is a 36-hour program. Admission to candidacy is contingent upon submission of program specific admission materials. Contact the ATPI program for information or visit their web site: www.attd.unt.edu.

Required for major: ATTD 5110, 5120, 5130, 5140, 5160, 5440, 5480, 5530 and 5720, EPSY 5210, and 3 semester hours of applied technology, training and development courses determined in consultation with the adviser.

Required for minor: 6 hours of courses outside the department. This is the recommended degree for those seeking certification in trade and industrial education, business/office education, marketing education, career investigation and health science technology education.

Master of Science

The Master of Science with a major in applied technology and performance improvement is a 36-semester-hour program that includes 6 hours credit for thesis or problems in lieu of thesis. Admission to candidacy is contingent upon submission of program specific admission materials. Contact the ATPI program for information or visit their web site at www.attd.unt.edu.

Required courses for the major are: ATTD 5010, 5100, 5160, 5440, 5480, 5490, 5500, 5530, 5720 and 6470, EPSY 5210, and 3 semester hours of applied technology, training and development courses determined in consultation with the adviser. A comprehensive research project covering the student's field of specialization is required. This is the recommended degree for those seeking careers in the field of training and development.

Doctor of Education

The purpose of this program is to prepare administrative and supervisory personnel, community college faculty and curriculum development specialists. Admission to the program is contingent upon submission of program specific admission materials and passing a written admission exam. Contact the ATPI program for information or visit their web site at www.attd.unt.edu. Required for the major: ATTD 5430, 6030, 6100, 6200, 6210, 6450, 6460 and

6470; and 9 hours of ATTD courses. The 12 hours of research, statistics and computer requirements include ATTD 6480, EDER 6010 and 6020; and 3 hours from EDER 6230 or 6240. Dissertation credit is earned through ATTD 6950.

Required for minor: 12 hours in a field outside the major.

Doctor of Philosophy

The purpose of this program is to prepare potential university faculty and researchers and corporate training specialists. Admission to the program is contingent upon submission of program specific admission materials, passing a written admission exam and a personal interview with the faculty. Contact the ATPI program for information or visit their web site at www.attd.unt.edu. Required for major: ATTD 5100, 6100, 6200, 6210, 6450, 6460 and 6470; and 3 hours of ATTD courses and 6 hours of support courses outside the College of Education. The 18 hours of research and statistics requirements include ATTD 6480, EDER 6010, 6020, 6230 and 6240; and 3 hours from EDER 6210 or EPSY 5350. Dissertation credit is earned through ATTD 6950.

Required for minor: 12 hours of course work outside the College of Education.

Further Information

Additional information is available on the program web site (www.attd.unt.edu).

Computer Education and Cognitive Systems Degree Program

Master of Science

This degree is a comprehensive program with options to prepare individuals for positions in both education and industry related to teaching with technology. Options include design and production of technology-based instructional systems, coordination of technology programs, and development and management of instructional systems. Theoretical foundations in cognition and systems processes are expanded through applications in computer-based training, web-based training, distance education and multimedia development.

This degree is a 36-hour program. Requirements include a core of 12 hours: CECS 5210, 5310, 5610 and 5580 (which is to be taken during the last 6 hours of course work). Also required is completion of one of the program tracks and approved electives to reach a total of 36 credit hours.

Computer Education and Cognitive Systems: Instructional Systems Technology. This program track requires the completion of CECS 5200, 5260 5300 and 5420.

Computer Education and Cognitive Systems: Teaching and Learning with Technology. This program track offers preparatory courses for the following State Board of Educator Certification (SBEC) technology certification exams. To receive a barcode for these exams through the University of North Texas College of Education Student Advising Office, students must successfully complete the courses listed for each test:

- Texas Examination of Educator Standards (TExES): Technology Applications Certification 8–12 (CECS 5020, 5030, 5110, 5111)
- TExES: Technology Applications Certification EC–12 (CECS 5020, 5030, 5110, 5111, 5500)
- Texas Examinations for Master Teachers (TexMat): Master Technology Teacher Certification EC–12 (CECS 5020, 5030, 5110, 5111, 5500)

Only teachers who already have initial teacher certification are eligible for the above technology certifications. See the College of Education section of this catalog for information about initial teacher certification.

Admission Requirements

1. Bachelor's degree from an accredited college or university.
2. Bachelor's grade point average (GPA) of 2.8 or higher overall, **or** bachelor's GPA of 3.0 or higher on the last 60 hours, **or** completed master's degree GPA of 3.4 or higher.
3. Submission of GRE scores is required: verbal, quantitative, and analytical writing. The program views high GRE scores as positive indicators of potential success in the program; however, low GRE scores need not exclude a candidate who shows positive indicators in other areas.
4. At least two letters of recommendation from individuals who can give evidence of the candidate's critical thinking ability to engage in graduate studies. The recommendations should also address the candidate's ability to work independently and in groups.
5. Resume or curriculum vitae that includes the candidate's previous work or educational experiences.
6. A personal statement from the candidate stating his or her goals and rationale for applying to the computer education program and a brief description of his or her career and research expectations with regard to work and further education.

Educational Computing Degree Program

Doctor of Philosophy

Admission Requirements

Admission to doctoral study in educational computing is competitive within the capacity of the program faculty to mentor doctoral students. Each prospective student will be subjected to a competitive evaluation conducted by the computer education and

cognitive systems (CECS) graduate faculty. The admission process is competitive each term/semester for a limited number of openings. The number of openings depends upon the availability of faculty to mentor doctoral students. The minimum requirements for admission include the following:

1. Master's degree from an accredited college or university. If a candidate already holds a doctorate, the applicant should contact the program adviser. Under unusual circumstances a student may be admitted without a master's degree.
2. Master's degree GPA of at least a 3.4 on a 4.0 grading system.
3. Submission of GRE scores is required: verbal, quantitative and analytical writing. The program views high GRE scores as indicators of potential success in the program; however, low GRE scores need not exclude a candidate who shows positive indicators in other areas.
4. At least three letters of recommendation from individuals who can give evidence of the candidate's critical thinking ability to engage in doctorate studies. At least one of the letters should be from a faculty member currently working at an academic institution.
5. Personal resume or curriculum vitae that includes a summary of the candidate's previous work or educational experiences and/or training in teaching and administrating.
6. A personal statement from the candidate stating his or her goals and rationale for applying to the computer education program and a brief description of his or her career and research expectations with regard to work and further education.
7. One of the following: (a) an acceptable score on the verbal section of the GRE or (b) first or second author on an article in a respected, peer-reviewed professional journal or on a book published by a major publisher.
8. One of the following: (a) an acceptable score on the quantitative section of the GRE or (b) completion of 9 hours of graduate course work in mathematics or statistics with a GPA of 3.0 or higher (on a 4.0 grading system).
9. One of the following: (a) an acceptable score on the analytical section of the GRE or (b) written response to a problem provided by the educational computing program admissions committee.
10. Three letters of recommendation, one of which must be from a faculty member at an academic institution directed toward the applicant's potential to successfully complete a doctoral program.

Degree Requirements

This program includes formal course work, including a qualifying examination, independent study and

research (including but not limited to a dissertation). The student will spend a substantial portion of time in independent research and collaborative efforts with the faculty related to the dissertation and other projects. The doctoral degree will require a total of at least 66 semester credit hours past the master's degree.

Course Requirements

1. **Core**, 15 hours from the following: CECS 6000, Philosophy of Computing in Education; CECS 6010, Theories of Instructional Technology; CECS 6020, Advanced Instructional Design: Models and Strategies; CECS 6030, Emerging Technologies in Education; CECS 6100, Theory and Practice of Distributed Learning.
2. **Electives**, 21–27 hours from the following: CECS 6200, Message Design in Education; CECS 6210, Interactive Video; CECS 6220, Theory of Educational Technology Implementation; CECS 6230, Advanced Educational Production Design; CECS 6320, Creating Technology Based Learning Environments; CECS 6400, Educational Technology Systems Design and Management; CECS 6600, Developing Educational Funding Opportunities; CECS 6510, Analysis of Research in Educational Computing; ATTD 5010, Performance Assessment; CECS 6050, Practicum/Internship; CECS 6900, Special Problems.
3. **Research**, 12 hours: EDER 6010, Statistics for Educational Research; EDER 6020, Research Methods in Education; and 6 hours from: EDER 6210, Multiple Regression Analysis and Related Methods; EDER 6220, Classical and Modern Educational Measurement Theory; EDER 6230, Advanced Research Design; EDER 6240, Educational Data Processing; EDER 6250, Advanced Educational Measurement Applications; or EDER 6280, Qualitative Research in Education.
4. **Minor**: May be included on the degree plan with 6 hours taken as electives and an additional 6 hours from outside the program. This will increase the total number of hours for the degree to 72 semester hours.
5. **Dissertation**, 12 hours: CECS 6950, Doctoral Dissertation.

Candidates for the PhD in educational computing must additionally complete a tool subject consisting of 9 hours of graduate computer education or 9 hours of educational research.

CECS 5020 and CECS 5030 or the equivalent skills are minimally required for leveling. Additional classes or experiences may be required depending on applicant ability.

CECS 5210, 5310, 5570 or the equivalent skills are considered prerequisite to this degree. These courses may be counted as electives.

No student will count more than 9 hours for this degree from independent studies, practicum or internship.

Doctoral Committee

The doctoral committee is composed of a major professor or co-major professor, a minor professor (where the 12-hour minor option is selected) and an additional committee member. The minor professor must come from the academic unit of the minor. At least two members of the committee must be computer education and cognitive systems (CECS) faculty members.

The selection of the doctoral committee is a collaborative process between the doctoral student and the graduate faculty who will serve on the committee. Generally, the process begins with the identification of a major professor who will chair the committee. In establishing the committee, it is important to bring together a diverse group of faculty who have expertise in the various facets of the student's research agenda.

Further Information

Additional information is available on the program web site (www.cecs.unt.edu).

Educational Psychology Program Master of Science

The Master of Science in educational psychology both require 36 hours of graduate course work. The MS degree requires completion of a thesis or completion of a project, the exact nature of which is to be determined by the student's advisory committee and is the recommended degree for students preparing to seek a doctorate in a compatible field. The degree requires completion of a core of 15 hours: EPSY 5000, 5010, 5050, 5350; DFEC 5123. Also required is completion of 15 hours in one of the approved content areas:

Computer Education: CECS 5020, 5030, 5210, 5300 and 5570.

Educational Diagnostics: EDSP 5510, 5530, 5540, 5710 and 5800.

Gifted and Talented: EDSP 5105, 5110, 5120, 5130 and 5800.

Research and Statistics: EPSY 5100, 5210, 5220, 5240 and 5250.

The final 6 hours will consist of preparation of a thesis or a negotiated project.

Admission Requirements

1. Bachelor's degree from an accredited college or university. If a candidate already holds a master's degree, the courses and the candidate's performance in that degree are reviewed.
2. Bachelor's grade point average (GPA) of 2.8 or higher overall, **or** bachelor's GPA of 3.0 or higher for the last 60 hours, **or** completed master's degree GPA of 3.4 or higher.

3. Submission of GRE scores is required: verbal, quantitative and analytical writing. The program views high GRE scores as positive indicators of potential success in the program; however, low GRE scores need not exclude a candidate who shows positive indicators in other areas.
4. At least two letters of recommendation from individuals who can give evidence of the candidate's reading, critical thinking, and writing and mathematical skills.
5. Resume or vita that includes the candidate's previous work or educational experiences.
6. A personal statement from the candidate stating his or her goals and rationale for applying to the educational psychology program and a brief description of his or her career and research expectations with regard to work and further education.

Educational Research Degree Program

Doctor of Philosophy

Admission to the program is selective and restricted. Applicants are considered throughout the year; however, applicants are not formally admitted into the doctoral program until the fall term/semester and only if they meet the preceding February 1 deadline and other requirements as specified by the program. For information on additional requirements, please contact the educational research program office.

Applicants must meet requirements for admission to the Toulouse School of Graduate Studies.

1. Master's degree from an accredited college or university or 30 hours of graduate credit from an accredited institution.
2. A grade point average (GPA) of 3.4 or higher overall on a 4.0 point system.
3. Submit GRE scores on the verbal and quantitative sections for the current academic year. The program views high GRE scores as positive indicators of potential success in the program; however, low GRE scores need not exclude a candidate who shows positive indicators in other areas.
4. Three letters of recommendation from individuals knowledgeable of the candidate's capabilities, particularly as it regards research capacity.
5. Transcripts of course work.
6. Resume or curriculum vitae that includes the candidate's previous work or educational experiences.
7. Sample of scholarly writing skills.
8. A personal statement from the candidate stating his or her goals and rationale for applying to the educational research program. Include a brief statement describing career and research expectations with regard to work and further education.

9. Contact the EDER program for information or visit the web site at www.coe.unt.edu/eder. Courses required for the major: EDER 6030 (3–6), 6210, 6220, 6230, 6240, 6250, 6260, 6270 and 6280; plus 3 hours to meet individual needs and interests; plus EDER 6010, 6020 and 6950 as required of all doctoral candidates.

Required for the minor: 12 hours outside the major selected with the advice of the advisory committee.

Further Information

Additional information is available on the program web site (www.coe.unt.edu/eder).

Special Education Degree Programs Master of Education

The Master of Education in special education includes certification in special education, gifted education and educational diagnostics. In addition, a student may choose a course of study that does not include certification, but has an emphasis in autism, behavioral intervention, emotional/behavior disorders, traumatic brain injury or transition.

Recommended minors include, but are not limited to, applied behavioral analysis, criminal justice, educational technology, reading education and rehabilitation studies. Students seeking certification should check the specific requirements for the minor area.

Admission Requirements

1. Bachelor's degree from an accredited college or university. If a candidate already holds a master's degree, the courses and the candidate's performance in that degree are reviewed.
2. Bachelor's grade point average (GPA) of 2.8 or higher overall, or bachelor's GPA of 3.0 or higher in the last 60 hours, or completed master's degree GPA of 3.4 or higher.
3. Submission of GRE scores is required. The special education program generally views strong GRE scores as a positive indicator of potential success in any robust graduate program; however, low GRE scores need not exclude a candidate who shows positive indicators in other areas.
4. The special education program requires at least two letters of recommendation from individuals who can give evidence of the candidate's critical thinking ability as it relates to engaging successfully in graduate studies.
5. Resume or curriculum vitae that includes the candidate's previous work and/or educational experiences, including teaching certifications and degrees held.
6. A personal statement from the candidate stating his or her goals and rationale for applying to the special education program and a brief description of his or her career and research expectations with regard to work and further education.

Degree Requirements

Specific master's degree requirements are listed below. Course substitutions may be made by the faculty adviser.

Special Education: EDSP 5210, 5240, 5330, 5430, 5510, 5670, 5710, 5720, 5730, 5740 and 5750; 6 hours of electives; valid Texas teaching certificate at the time of application for endorsement.

Special Education: Emotional/Behavior Disorders: EDSP 5240, 5330, 5510, 5600, 5610, 5620, 5630, 5640, 5670, 5710 and 5720; EPSY 5210; 3-hour elective; valid Texas generic special education teaching certificate (or must pursue simultaneously).

Special Education: Gifted and Talented: EDSP 5105, 5110, 5120, 5130, 5410, 5510, 5550 (or two years of documented teaching in a gifted and talented program) and 5710; 6 hours from 5240, 5330 and 5900; 6 hours of electives; valid Texas teaching certificate at the time of application for supplemental gifted certification.

Special Education: Educational Diagnostician: EDSP 5210, 5240, 5330, 5510, 5530, 5540, 5550, 5600, 5710 and 5720; one course in each of the following areas: functional assessment, legal aspects of special education and human development; valid Texas teaching certificate in special education or a related area and three years of successful teaching experience at the time of application for certification.

Special Education: Correctional Special Education: EDSP 5240, 5330, 5600, 5620, 5640, 5650, 5670 and 5800 (when taught as "Positive Behavioral Interventions and Support"); CJUS 5470; 3 hours from ATTD 5400 or CJUS course (selected in consultation with program adviser); 6 additional hours in EDSP 5200 and 5510.

Special Education: Transition: EDSP 5240, 5330, 5600, 5620, 5630, 5640, 5660 and 5670; 3 hours from ATTD 5440, 5470, 5490 or RHAB 5060, 5720, 5730; 6 additional hours in EDSP 5510 and 5710.

Requirements for special education certificates and endorsements are described in the College of Education section.

Doctor of Philosophy

Applicants must meet requirements for admission to the Toulouse School of Graduate Studies. The general requirements for education are described in the College of Education section. The PhD in special education is offered as a cooperative program between the University of North Texas and Texas Woman's University under guidelines established by the Federation of North Texas Area Universities. The program enables students to use the combined faculties, libraries, computer facilities and research opportunities available at both universities in the development of their doctoral studies.

The federation doctoral program provides opportunities for formal course work, independent study, internships, practicum and dissertation research. The program also includes federation-sponsored seminars featuring outstanding nationally and internationally recognized educators.

Given the importance of appropriate educational experiences during the early years for both the individual and the society at large, graduate programs are needed that provide education for future leaders in the conceptualization and provision of special education programs, as well as expertise in conducting research that will extend understanding of the importance and means of providing special education experiences. The purpose of the federated doctoral program in special education is to train professional educators to assume leadership roles in higher education and in public and private education settings. Graduates of both institutions have a broad base of information and are prepared to assume diverse roles, including teaching, research and administrative responsibilities.

Students initially apply for admission to the graduate school of one of the participating universities. After meeting the general university admission standards, each student's application is then reviewed by the Special Education Federation Admissions Committee, made up of faculty from both UNT and TWU. Students graduating from the federation program will receive the degree from the university through which they entered the program.

Program Faculty

The doctoral program is staffed by faculty from both the University of North Texas and Texas Woman's University. The following faculty members from each university participate in the program:

- *University of North Texas:* Lyndal Bullock, Kevin Callahan, Bertina Combes, Joyce Rademacher, Michael Saylor and Tandra Tyler-Wood.
- *Texas Woman's University:* Beth Ferri, Ronald Fritsch, Jane Irons, Charlotte Keefe, Lloyd Kinnison and Barbara Learner.

The policies of the doctoral program are guided by committees made up of faculty from both of the participating institutions. The policies are consistent with the policies of both participating universities.

Faculty Research Interests

Faculty of the two participating universities pursue a variety of research topics. The faculty in special education at UNT actively pursues a broad range of research interests. These include leadership personnel needs in special education, implications of school reform/refinement for delivery of services to students with special needs, implications of social policy on decision making for special populations, links between training and research in leadership preparation,

applications of technology in special education (both for personnel preparation and student evaluation), gifted and talented education, and educational assessment/evaluation of students with special needs.

Other research topics are construction of assessment/evaluation instruments, teacher ratings of student behaviors, management/instructional systems for students with learning and/or behavioral problems, competencies needed by teachers of special populations, predictors of student success in school, cognitive development in children, parental involvement/cooperation relationships in student educational decision making, management strategies for students with aggressive and violent behaviors, educational decision making in juvenile correction facilities, ecological assessment, acceleration of gifted students and identification frameworks for students with special needs (including gifted/talented).

The UNT faculty also conducts research in evaluation of programs for students with special needs, creativity in children and youth, strategies for conducting applied research with special populations, learning/management strategies relevant to serving culturally and linguistically diverse children with special needs in both urban and rural areas, application and outcomes of various consultation models with teachers serving students with special needs, and prevention/interventions for at-risk populations.

Research interests of TWU faculty include adolescent aggression; adolescent suicide among the gifted; the development of personality type in children and the application of type concepts in education; identification/assessment of individuals with disabilities; intervention strategies for use with emotionally disturbed students; programs and facilities for mentally retarded and emotionally disturbed people; and definition of gifted, talented and creative.

Other research interests of the TWU faculty are Attention Deficit Hyperactivity Disorder in adults; the operational definition of psychological processing abilities in learning disabilities definitions; methods and materials for handicapped learners; learning disabilities in children, adolescents and adults; behavioral characteristics and educational intervention strategies for high-risk infants and young children; the effects of physical and/or health problems on academic, social and emotional development; and educational programming for individuals diagnosed with developmental disabilities, health problems and neurological impairments.

Admission Requirements

Admission to the doctoral program in special education takes into consideration several critical factors deemed important for success in graduate studies. No single factor determines an individual's eligibility for admission.

Admission to the federation doctoral program in special education is a two-step process. Each applicant first must apply to and meet the general admission requirements of either the Graduate School at TWU or the Toulouse School of Graduate Studies at UNT. The student should apply to the school that best meets their individual research and career interests.

Applications for students who meet initial admission standards are forwarded to the Special Education Federation Admissions Committee for review. Initial acceptance into the federation doctoral program is contingent upon the successful holistic review of these materials:

1. Master's degree from an accredited institution of higher learning. Applicants who do not have the appropriate academic and experiential backgrounds in special education are required to complete a minimum of 9–12 semester hours of course work in special education as a prerequisite to doctoral studies.
2. Master's degree grade point average (GPA) of 3.0 or higher (on a 4.0 scale).
3. Three years of successful teaching experience with the appropriate populations or related acceptable experience or special arrangements.
4. Submission of GRE scores: verbal, quantitative and analytical writing. The special education program generally views strong GRE scores as a positive indicator of potential success in any robust graduate program; however, low GRE scores need not exclude a candidate who shows positive indicators in other areas.
5. Submission of additional program-specific admission materials which include (a) a letter of intent to pursue doctoral studies; (b) a professional position statement of 1,000 words or less; (c) a professional resume that delineates the applicant's previous work, educational experiences, membership and involvement in professional organizations, or scholarly activities; and (d) three letters of recommendation from persons who can attest to the applicant's ability to do advanced graduate work. After an analysis of the aforementioned materials by the review committee, whenever possible, a personal interview is arranged.
6. A written doctoral admissions examination is required within the first 12 semester hours of course work.
7. Approval of the Special Education Federation Admissions Committee.

Degree Requirements

Students are required to have a master's degree in special education or an appropriate related field to enter the program. Students not meeting this requirement or who are deficient in specific areas will be required to take additional courses. Students are not admitted to the doctoral program until the master's degree and deficiency requirements are met.

A minimum of 60 hours beyond the master's is required, plus satisfaction of the tool subject requirement. Based upon a review of the preparation of each entering student, additional deficiency courses may be required. The following specific degree requirements must be completed. A list of UNT and TWU early childhood education course descriptions follows after the program description materials.

1. Each student must complete a 12-credit-hour core. The student must complete the following courses.

- EDSP 6290, Special Education and Public Policy (3 hours) (UNT)
- EDSP 6440, Research Issues in Special Education (3 hours) (UNT)
- EDUC 6103, Social, Psychological and Educational Aspects of Mental Retardation and Developmental Disabilities (3 hours) (TWU)
- An approved EDUC course from TWU (3 hours) (TWU)

In addition to the above 12 hours, students must complete a sequence of courses at their respective degree-granting institutions. The following courses apply to each institution.

UNT

- EDSP 6030, Practicum, Field Problem or Internship
- EDSP 6270, Analysis of Trends, Issues and Research in Special Education
- EDSP 6280, Program Analysis in Special Education
- EDSP 6300, Program Development for Providing Quality Services to Children and Youth with Emotional and Behavioral Disorders
- EDSP 6310, Current Research and Best Practices in the Education and Treatment of Children/Youth with Emotional and Behavioral Disorders
- EDSP 6320, Computing Applications for Special Populations
- EDSP 6410, Theoretical Issues in Learning Disabilities
- EDSP 6900, Special Problems

TWU

- EDUC 6023, Practicum in Assessment and Evaluation of Individuals with Disabilities
- EDUC 6333, Seminar in Emotional and Behavioral Disorders
- EDUC 6403, Seminar in Learning Disabilities
- EDUC 6423, Seminar in Policies and Procedures of Special Education Administration
- EDUC 6723, Practicum
- EDUC 6903, Special Topics

2. **Minor area requirements.** Each student must complete a minor area. This minor area consists of 12 to 18 semester credit hours. In fulfillment of this requirement, students will select the most appropriate courses from the offerings of both participating universities with the advisement of the minor area professor.

3. **Additional degree requirements.** Additional requirements to complete the degree may be imposed by the Special Education Federation Admissions Committee. All entering students at UNT must complete 9 semester hours of introductory research and statistics and 9 additional credit hours in either advanced research and statistics or computer education.

4. Each student must complete a research tool subject that will enhance the completion of the dissertation research. In most cases the research tool subject will consist of research methods or computer-related courses. Students enrolling through UNT are required to take 9 semester credit hours of computer education to fulfill this requirement.

5. The student must complete successfully the written and oral qualifying examination prepared by the Special Education Federation Qualifying Examination Committee.

6. The student must successfully develop a dissertation proposal, defend the proposal, and successfully complete and defend the proposed research. The research project should add substantive confirmation or understanding of the principles, theories and practices of special education. Both quantitative and qualitative research projects are acceptable.

Doctoral Committee

Each student's program will be guided by a doctoral committee. While the committee will be composed primarily of faculty from the degree-granting institution, at least one committee member will be from the alternate participating school. The chair of the committee will be a faculty member from the university through which the student will receive the degree. The committee actively participates in (a) developing the student's degree plan, (b) evaluating the written and oral qualifying exams, and (c) evaluating the dissertation proposal and final defense.

Further Information

Additional information is available on the program web site (www.edsp.unt.edu).

Alternative Teacher Certification

See the College of Education section of this catalog for information about UNT's Alternative Teacher Certification option in special education.

Courses of Instruction

All Courses of Instruction are located in one section at the back of this catalog.

Course and Subject Guide

The "Course and Subject Guide," found in the Courses of Instruction section of this book, serves as a table of contents and provides quick access to subject areas and prefixes.