The undergraduate program of study prepares students for careers in education, business, industry and government and leads to a Bachelor of Applied Arts and Sciences degree with a major in applied technology and performance improvement.

Students may select programs of study in either teaching or non-teaching career interest areas.

Students planning teaching careers in career technology education may complete the program of study for the Bachelor of Applied Arts and Sciences with an emphasis in one of five certification areas. The five career and technology education certification programs are: Career Investigations/Career Connections, Health Science Technology Education, Marketing Education, Business Education, and Trace and Industrial Education. The non-teaching career interest offers occupational instruction in performance improvement, general technology, and interdisciplinary studies. It is appropriate for students who desire to complete a baccalaureate degree after completing an occupational specialization program in a community college or four-year institution. It provides an interdisciplinary undergraduate degree for students who were enrolled in or who have graduated from an applied technology program.

Several research centers are affiliated with the Technology and Cognition department:

**The Texas Center for Educational Technology (TCET)** is designed to promote research and development collaboration among universities, school districts, the Education 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.

**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 post-secondary education, developing technological innovations for enhancing educational and life opportunities and serving as a resource for professionals, parents, schools, community and state agencies.
Bachelor of Applied Arts and Sciences with a Major in Applied Technology and Performance Improvement

Non-Teaching Career Interest

1. Hours Required and General/College Requirements: A minimum of 125 semester hours, of which 42 hours must be advanced, and fulfillment of degree requirements for the Bachelor of Applied Arts and Sciences degree as specified in the “General University Requirements” in the Academics section of this catalog and the College of Education requirements.

2. Major Requirements:
   Occupational Specialization: 36 hours may be completed in an applied technology program at a community college or in occupational training and development courses at the university level. Students should contact an adviser in the applied technology and performance improvement program to determine the 36 semester hours of course work needed to complete the occupational specialization section of the degree plan.

   Professional Development: 42 semester hours of 3000- and 4000-level courses from within the professional development section of the degree plan (to be determined in consultation with an adviser), which must include the following 30 semester hours:
   • ATTD 3010, Personal Development
   • ATTD 4070, Principles of Leadership, Empowerment and Team Building
   • ATTD 4100, Principles of Training and Development
   • ATTD 4120, Instructional Strategies in Career and Technical Education, or ATTD 4121, Technical Presentation Skills
   • ATTD 4121, Technical Presentation Skills
   • ATTD 4300, Computer Applications in Education and Training
   • ATTD 4350, Advanced Computer Applications in Education and Training
   • ATTD 4360, Desktop Publishing in Education and Training
   • ATTD 4470, Human Relations in Business, Education and Industry
   • ATTD 4510, Communications in Business, Education and Industry
   • ATTD 4741, Applied Technology and Performance Improvement Capstone

3. Minor Requirements: A minor is not required for this degree.

4. Other Course Requirements: None.

5. Electives: See individual degree plan.

6. Other Requirements: A minimum overall GPA (all UNT and transferred courses) of 2.50 is required for graduation.

Students are encouraged to see their advisers each term/semester for help with program decisions and enrollment.

Teaching Career Interest—Applied Technology

1. Hours Required and General/College Requirements: A minimum of 125 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Applied Arts and Sciences degree as specified in the General University Requirements in the Academics section of this catalog and the College of Education requirements.

2. Major Requirements: Occupational Specialization: 36 hours may be completed in an applied technology program at a community college or in occupational training and development courses at the university level. Students should contact an adviser in the applied technology and performance improvement program to determine the 36 semester hours of course work needed to complete the occupational specialization section of the degree plan.

   Professional Development: 42 semester hours of 3000- and 4000-level courses from within the professional development section of the degree plan (to be determined in consultation with an adviser), which must include the following 27 semester hours:
   • ATTD 3010, Personal Development
   • ATTD 4070, Principles of Leadership, Empowerment and Team Building
   • ATTD 4120, Instructional Strategies in Career and Technical Education
   • ATTD 4300, Computer Applications in Education and Training
   • ATTD 4350, Advanced Computer Applications in Education and Training
   • ATTD 4440, Advanced Instructional Strategies
   • ATTD 4470, Human Relations in Business, Education and Industry
   • ATTD 4510, Communications in Business, Education and Industry
   • ATTD 4741, Applied Technology and Performance Improvement Capstone

3. Other Course Requirements: PSCI 1040; a minimum of 42 hours of advanced work (3000- or 4000-level courses) selected in consultation with a faculty adviser to enhance professional development. BAAS students in applied technology and performance improvement may complete course work requirements for career and technology education teacher certification in marketing education, business education or trade and industrial education. To fulfill the certification requirements, students must complete the required number of courses for the certificate, the number of hours of work experience required for the certificate, pass the reading (230) and writing (220) portions of the THEA, and teach at least two years on an emergency teaching certificate in an
approved applied technology education program at
the secondary school level (grades 8-12).

Students who plan to obtain teacher certification in any of the applied technology certification programs should contact a faculty adviser in the department before taking any course work to ensure that they have the necessary qualifications to complete the career and technology education teacher certification program and to complete the required statement of qualifications form to be filed with the Student Advising Office in the College of Education (Matthews Hall, Room 105).

**Business Education Certification**
- ATTD 4120, Instructional Strategies in Career and Technical Education
- ATTD 4340, Office Information Processes
- ATTD 4350, Advanced Computer Applications in Education and Training
- ATTD 4630, Organization and Administration of Applied Technology Programs

**Marketing Education Certification**
- ATTD 4120, Instructional Strategies in Career and Technical Education
- ATTD 4140, Work-Based Learning in Career and Technical Education
- ATTD 4435, History and Principles of Applied Technology
- ATTD 4630, Organization and Administration of Applied Technology Programs
- ATTD 4730, Occupational Analysis and Course Development
- MKTG 3650, Principles of Marketing
- MKTG 4600, Retailing

**Trade and Industrial Education Certification**
- ATTD 4110, Instructional Design in Career and Technical Education
- ATTD 4120, Instructional Strategies in Career and Technical Education
- ATTD 4130, Professional Responsibilities and Management in Career and Technical Education
- ATTD 4140, Work-Based Learning in Career and Technical Education
- ATTD 4740, Instructional Internship in Applied Technology and Training (6 hours)

4. **Minor**: A minor is not required for this degree.
5. **Electives**: See individual degree plan.
6. **Other Requirements**: A minimum overall GPA (all UNT and transferred courses) of 2.50 is required for graduation.

*Students are encouraged to see their adviser each term/semester for help with program decisions and enrollment.*

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**Computer Education and Cognitive Systems**

The program of computer education and cognitive systems offers a minor in computer education, as well as a number of elective and service courses designed to enhance the preparation of classroom teachers and corporate professionals by providing opportunities for them to learn about and integrate technology.

*Certifications are under revision by the State Board for Educator Certification. Students should consult the department for current information.*

**Information Processing Technology Endorsement**

The program in computer education and cognitive systems offers Texas Education Agency Level One and Level Two Information Processing Technology (IPT) endorsements. These endorsements are intended to document levels of competency in the area of educational applications of information processing technologies with an emphasis on computing technology.

Teachers holding the IPT Level One endorsement will qualify to teach computer literacy in the middle grades. Beyond preparing educators to teach computer literacy, the program provides skills basic to the use of computing and technology throughout education. The endorsement provides educators in various positions with a means for documenting preparation related to information processing. For example, supervisors, program coordinators and district-level administrators are now able to verify preparation in this area beyond their required credential. Education service personnel, library/media specialists and teachers with credentials in traditional curriculum areas and programs may use IPT endorsement to document competency in the area of computing and technology. Course work for IPT endorsement is available through undergraduate- or graduate-level areas.

Course requirements for IPT endorsements are:
- **Level One IPT Endorsement** (9 hours): CECS 1100, 3440 and 4100
- **Level Two IPT Endorsement** (15 hours): CECS 1100, 3440, 4100, 4900 and 3 hours of additional CECS course work

**Minor in Computer Education**

A minor in computer education requires 18 semester hours in computer education and cognitive systems, 9 of which must be advanced, including CECS 2100, 3220 and 3260. CECS 1100 does not count toward the minor concentration.
Educational Research

Courses in educational research are offered only at the graduate level. See the Graduate Catalog for additional information.

Special Education

Special Education certification is available in conjunction with the Bachelor of Science with a major in Interdisciplinary Studies with EC-4 and 4-8 certification. See "Bachelor of Science with a Major in Interdisciplinary Studies" in the Teacher Education and Administration section of this catalog for specific details.

Courses in special education leading to teacher certification credentials are also offered at the graduate level. See the Graduate Catalog for additional information.

Scholarships

The Danny Miles Scholarship is awarded bi-annually to a student seeking teacher certification in special education. Applicants must exhibit a desire to work with exceptional youth in a community setting. Applications should be made through the Special Education program.

In some field experiences, work-study programs also are available.

Degree Plan

All students should have an approved degree plan on file in the College of Education Student Advising Office, Matthews Hall, Room 105, as early as possible, but not later than the beginning of the final 30 hours of courses. A degree plan worksheet is completed by the student’s faculty adviser and the student. The worksheet is signed by the department chair and submitted to the College of Education Student Advising Office, where the official degree plan is completed for the student.

Graduate Programs

The Department of Technology and Cognition offers a comprehensive curriculum for teacher training, career investigation, administrator preparation, and training and development through the following programs of study:

• Master of Science, both with a major in educational psychology;
• Doctor of Philosophy with a major in educational psychology;
• Master of Education, and
• Doctor of Philosophy, both with a major in special education.

*Name change pending approval by the Texas Higher Education Coordinating Board.

Students interested in graduate studies should consult the Graduate Catalog.

Graduate Applied Technology Certification Programs

The department offers applied technology certification programs in the following areas: administration and supervision, career investigation, office education, job placement, marketing education, trade and industrial education, and health science technology.

For further information on certification, consult the Graduate 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.