

Career and Technical Education

Introduction

Education Specialist Degree This program is 36 semester credits beyond the master's degree. Two concentrations are available leading to an education specialist degree in industrial and vocational education: (1) industry and technology; and (2) professional education.

The program is for those who have a master's degree in technical education, industrial education, technology education, vocational education or equivalent. (*Equivalency meaning agriculture, business education, marketing education, family and consumer education, and trade and industrial education.*) It is also for those who have a master's degree and are a certified employee of a technical college or community college.

Admission

Students seeking admission to the program should complete the following at least 30 days prior to the opening of the term in which they plan to begin their program.

1. File an Application for Admission.
2. Submit a current vita listing all pertinent biographical and educational data.
3. Present official transcripts of all college and university work completed certifying award of bachelor's and master's degrees in industrial education, industrial arts education, technology education, vocational education or an equivalent field with a cumulative grade point average of at least 3.25 on a four-point scale in all graduate work. Persons having master's degrees in other fields who are certified and employed in vocational-technical education are also eligible for admission. Transcripts need not be submitted for work completed at UW-Stout.
4. Provide evidence of at least two years of successful teaching experience and professional promise by requesting letters from at least two administrators or supervisors.

The Education Specialist Degree Program Committee, comprised of graduate faculty and an Ed. S. degree student, will review the candidate's credentials and make a recommendation relative to admission to the director of the Ed.S. degree program. The committee may recommend that certain standardized examinations be completed or that the candidate be interviewed by the committee. The director of the major will recommend admission with full or provisional status to the Graduate School.

After review of the application data, the Graduate School will assign program status and inform the student of it immediately.

- a. Full status will be granted to those who meet all admission requirements.
- b. Provisional status may be granted to those who do not fully qualify on some requirements. At the conclusion of the first term of enrollment, the status will be re-evaluated.
- c. Admission will be denied students whose qualifications do not meet the requirements and if the admissions committee decides provisional status is not warranted.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: application for admission; degree candidacy; final oral examination; and intent to graduate.

Degree Program Supervision

For the first enrollment, the program director will aid in developing a class schedule in keeping with degree requirements. Prior to enrolling for a second term, the student will prepare a total program plan in keeping with degree requirements and the student's special needs.

At that time, the student will work with the program director to obtain a supervisory committee consisting of three members of the graduate faculty.

The committee will act on the appropriateness of the student's degree program, approve the proposed field study, administer the oral examination and recommend the award of the degree.

Teaching Experience

This program is designed for people in education. It is felt that course work will be more significant for those who have some experience in teaching. Thus, no more than eight credits in the degree program may be completed prior to satisfying the requirement of two years of successful teaching experience.

Requirements for the Ed.S. Degree

Prior to the award of the Ed.S. degree, the following requirements will be met:

1. Completion of an approved degree program of 36 semester credits with an overall grade point average of at least 3.25, and with a minimum of 18 credits which are at the graduate only level – 700 or 800 level.
2. Filing of an Intent to Graduate form at least seven weeks prior to the expected graduation date.
3. Completion of an oral examination on field study research prior to graduation.
4. Filing of an approved field study report and abstract at least one week prior to graduation.
5. Recommendation for the degree by the supervisory committee.
6. Approval of degree candidacy at the appropriate time.

Industry and Technology Concentration

This concentration is designed for the graduate student desiring a broad educational experience leading to a professional career as a teacher of technology education, and industrial and technical subjects in high schools, vocational schools, technical colleges, junior colleges and universities.

Content for the advanced degree program will be drawn from three bodies of knowledge: (a) industry and technology; (b) applied research; and (c) professional education. Selection of these three components is based on the assumption that the holder of an advanced degree should be a scholar in the discipline (industry and technology), capable of solution of problems through applied research techniques (researcher), and a practicing educator.

Curriculum

The Ed.S. degree with a concentration in industry and technology consists of three groups of courses and/or experiences as follows: industry and technology, applied research, and professional education. The industry and technology component consists of courses basic to the science of industry and technology and a field study. This component is intended to be flexible in order to afford candidates an opportunity to broaden themselves if their prior work has been narrow, or to study in depth a particular conceptual area of industry and technology if their prior work has been broad in nature. In this component, the advanced graduate student will have the opportunity to take additional physics, chemistry, mathematics, sociology, psychology and course work to develop a level of competence in one or two conceptual areas in their substantive teaching field. The Impacts of Technology course, required of all students in the program, permits the students to look at how their teaching area has had an effect on people and society. The culminating activity is a field study. The main purpose of the field study is to provide students with an opportunity to apply and synthesize the contents of their program. Education specialists are encouraged to select practical problems related to their professional appointment or, if not presently employed, to select a problem from their discipline.

The applied research component consists of course work in computer science, research design and procedures, and statistics. A holder of an advanced degree should have an intimate knowledge of research design, measurement and statistics, and a broad background in the problems associated with industrial and vocational education.

The professional education component consists of courses in the foundational areas of education and curriculum and instruction. There is a growing body of knowledge and research dealing with education and the instructional process. It is imperative that the education specialist be able to implement current innovative educational practices and thought into the curriculum and the teaching process.

The three components are shown here as they appear in the curriculum requirements for the degree.

Program Plan

To qualify for the Ed.S. degree with a concentration in industry and technology requires that the student earn not less than 36 semester credits beyond the master's degree which will be distributed as follows:

Industry and Technology

16-20 credits

TECED-895	Field Study in Industry and Technology	2-6
TECH-733	Impacts of Technology	2-3
	<i>Selectives</i>	7-14

Applied Research

6-10 credits

CS-741	Computer Programming Techniques	2
EDUC-816	Instrumentation for Research	3
	<i>Selectives</i>	1-5

Professional Education

6-10 credits

PSYC-850	Psychology of Development	3
	<i>Selectives</i>	3-7

Selectives

The student should confer with the program director in choosing selective credits to complete the 36-hour degree requirement. Students can specialize in one of several course sequences that we recommend in areas such as leadership, manufacturing, technology, program development and evaluation, training, or curriculum and instruction. There is considerable flexibility in the program with regard to selectives, and they may be taken as needed to fulfill the individual goals and objectives of the student.

Professional Education Concentration

This concentration has been designed for the individual who is committed to additional depth in preparation as a professional educator in the areas of curriculum and instruction, and the supervision of instruction. Content for the advanced degree program will be drawn from three bodies of knowledge: (a) industry and technology; (b) applied research; and (c) professional education. Selection of these three components is based on the assumption that the holder of an advanced degree should be a practicing educator, capable of solving problems through applied research techniques, and a scholar within a discipline.

Curriculum

The curriculum consists of three groups of courses and/or experiences as follows: industry and technology, applied research, and professional education (*curriculum and instruction, and the supervision of instruction*).

The industry and technology component consists of courses in the sciences basic to industry and technology (*math, computer science, sociology, psychology, communication and economics*), and the impacts of technology on society.

The applied research component consists of course work in management information systems, instrumentation for research, employment and training research, and planning. A holder of an advanced degree should have knowledge of research design, measurement and statistics, and an understanding of problems associated with industrial and vocational education.

The professional education component has two sub-components: curriculum and instruction, and the supervision of instruction. Curriculum and instruction involves the advanced graduate student in curriculum engineering, instructional systems, instructional strategies, structuring knowledge, principles of learning, guidance of learning activities, identification and determination of instructional content, and computer assisted instruction as related to technology, and industrial and vocational education. Supervision of instruction involves policy developments, cost analysis, cost effectiveness, program evaluation review techniques, accountability in education, decision making models, evaluation systems, improvement of instruction, financial aspects, coordination, leadership procedures, management information systems, and management techniques as related to industrial and vocational education. The culminating activity is a field study which is six semester credits of the total (*16-20 credits*) in this component. The field study provides the opportunity to put into practice some aspect of the program that will benefit both the student and the institutional setting where the student is employed or aspires to be employed.

Program Plan

To qualify for the Ed.S. degree with a concentration in professional education, the student must earn not less than 36 semester credits beyond the master's degree, which will be distributed as follows:

Industry and Technology

6-10 credits

TECH-733	Impacts of Technology	2-3
PSYC-850	Psychology of Development	3
	<i>Selectives</i>	0-5

Applied Research

6-10 credits

EDUC-816	Instrumentation for Research	3
	<i>Selectives</i>	3-7

Professional Education

16-20 credits

EDUC-895	Field Study in Professional Education	2-6
	<i>Selectives</i>	10-14

Selectives

The student should confer with the program director in choosing selective credits to complete the 36-hour degree requirement. There is considerable flexibility in the program with regard to selectives, and they may be taken as needed to fulfill the individual goals and objectives of the student.