This is the College of Education and Human Development section of the 2002-2004 Undergraduate Catalog for the University of Minnesota, Twin Cities campus.

Admission ........................................................................................................................................................... 109
General Information ..................................................................................................................................... 109
Programs of Study ......................................................................................................................................... 109
Minors .................................................................................................................................................................. 110
Policies and Procedures .............................................................................................................................. 110
Graduation Requirements ......................................................................................................................... 110
Certification/Licensure ................................................................................................................................. 110
Advising ............................................................................................................................................................... 111
Special Learning Opportunities, Resources, and Organizations ........................................... 111
Scholarships ...................................................................................................................................................... 111
Career Information ........................................................................................................................................ 111
Student Organization ................................................................................................................................... 112
Directory .............................................................................................................................................................. 112
Agricultural Education ................................................................................................................................. 113

Degree Programs, Minors, and Certificates
Business and Industry Education: Career and Technical Education ........................................ 116
Coaching .............................................................................................................................................................. 117
Foundations of Education: Early Childhood .................................................................................... 117
Foundations of Education: Elementary .............................................................................................. 119
Human Resource Development .............................................................................................................. 121
Kinesiology ........................................................................................................................................................ 121
Recreation, Park, and Leisure Studies ................................................................................................. 122
Sport Studies ..................................................................................................................................................... 123
Technology Education ................................................................................................................................. 124
Undergraduate Leadership Minor ......................................................................................................... 125
Certificates .......................................................................................................................................................... 125
The College of Education and Human Development (CEHD) consists of six departments: Institute of Child Development; curriculum and instruction; educational policy and administration; educational psychology; kinesiology; and work, community, and family education. Classrooms, offices, computer labs, and more than 20 research and service centers occupy several buildings on the Minneapolis and St. Paul campuses. Founded in 1905, the college has about 700 undergraduate students, 2,500 graduate students, and 122 faculty.

CEHD’s mission is to generate and apply knowledge about teaching, learning, and human development and to improve education for all individuals. A distinguishing feature of the college is the breadth, depth, and careful integration of its core disciplines and fields of study. Another is the college’s strong commitment to community outreach as well as intellectual development. This extensive network of community ties facilitates both the transfer of knowledge to practice and the incorporation of community viewpoints into the college’s teaching and research missions. The college seeks to prepare students to meet the challenges of teaching and leading in increasingly culturally diverse classrooms, schools, and society.

The roles and requirements of educators and human development professionals have expanded dramatically in the past decade. Administrators, practitioners, and researchers must develop a new breadth and depth of knowledge. To meet the complex needs of 21st-century learners, colleges must prepare educational leaders who will shape policies, define agendas, and initiate fundamental change. Consistently ranked as one of the most productive professional schools of education in the country—public or private—the college is a state, national, and international leader in teaching, research, and outreach. Several of the college’s academic units are ranked in the top five nationally and its graduate programs place the college as one of the University’s leading academic units in conferring graduate degrees.

Admission

Students wishing to complete a CEHD major begin a course of study in a freshman-admitting college and transfer to CEHD after one or two years of specified courses, depending on their desired major.

CEHD admission criteria vary by program. Criteria may include prerequisite courses, grade point average (GPA), total credits, and experience related to the proposed career.

Prospective students are strongly encouraged to attend an information group meeting or meet with an adviser before applying. For more information, contact the college’s office of Student & Professional Services (SPS), 110 Wuling Hall, 86 Pleasant Street S.E., Minneapolis, MN 55455 (612-625-6501).

Procedures

Applying to undergraduate programs at the College of Education and Human Development (CEHD) requires submission of separate sets of application materials to the University of Minnesota and to CEHD.

Applicants must submit the following items:

University Application—Students who have not been admitted to a degree program at any University of Minnesota campus must complete the University’s undergraduate application. The form is available from the Office of Admissions, 240 Williamson Hall, 231 Pillsbury Dr. S.E., Minneapolis, MN 55455-0213 (612-625-2008 or 800-752-1000) or on the Web at http://admissions.tc.umn.edu. Contact the admissions office for application deadlines; submit the completed application to the admissions office.

Students who have previously been admitted to any University of Minnesota campus and college must complete the Application for Undergraduate Change of College or the Application for Admission to Second Undergraduate Degree Program. These forms are available from the One Stop Student Services Center, 200 Fraser Hall, 106 Pleasant St. S.E., Minneapolis, MN 55455 (612-625-5333) or on the Web at www.onestop.umn.edu/Forms/. Contact the registrar’s office for application deadlines; submit the completed application to the One Stop Student Services Center.

CEHD Application—Applicants must submit the completed Application Materials form for individual degree programs to the college’s office of Student & Professional Services (SPS) (110 Wulling Hall, 86 Pleasant St. S.E., Minneapolis, MN 55455; 612-625-6501; fax: 612-626-1580) by the deadlines listed below. Application forms are available at SPS or can be downloaded from the Web at www.education.umn.edu/SPS/Forms/. Required application materials vary by program.

Application Deadlines—Most CEHD undergraduate programs admit students twice a year according to the schedule below. CEHD application materials are due by these deadlines:

- March 1 for fall term admission
- October 1 for spring term admission.

The sport studies program admits students only once per year; application deadline for fall term admission is March 1.

Programs of Study

CEHD is a professional school focused on both undergraduate and advanced study, offering programs in a wide range of education and human development disciplines. Students can prepare for careers in government, business, and community settings as well as formal or informal education settings. Programs of study include bachelor of science (B.S.) degrees, minors, certificates, master of education (M.Ed.)/initial teacher licensure, (M.Ed.)/professional studies, and licensure endorsement. The University’s Graduate School offers the
master of arts (M.A.), specialist certificate, doctor of education (Ed.D.), and doctor of philosophy (Ph.D.) in education and human development.

Undergraduate programs are described below. For information about other programs, see the college’s Professional Studies Catalog or the Graduate School Catalog.

**Bachelor of Science (B.S.)**
The college’s undergraduate majors prepare students for careers as educators and human development professionals in varied settings. All University of Minnesota students, whatever their declared major, may complement their degree programs by taking a variety of elective courses available in all six CEHD departments.

**Agricultural Education**—Prepare to teach agriculture-related subjects to grades 5-12 or adults by specializing in either agricultural science and technology or natural and managed environmental education. Also, prepare to work in agricultural industry and business settings by specializing in agricultural leadership, training, and development.

**Business and Industry Education: Career and Technology Education**—Prepare to teach career and technical education in technical colleges or high schools.

**Child Psychology**—See College of Liberal Arts section.

**Foundations of Education (FOE): Early Childhood**—This program prepares upper division (typically junior or senior status) students to work with young children and their families, and to work with both typically and atypically developing children. With an extensive core of liberal education courses that are central to early childhood teaching and child development, the program prepares graduates to move into non-licensed educational settings (including day-care centers or youth community programs), or pursue advanced degrees. The program also prepares students for entry into the master of education (M.Ed.)/initial licensure program in early childhood and early childhood special education.

**Foundations of Education (FOE): Elementary**—Work as an educator or human services professional in an informal setting or prepare for elementary teacher licensure. When students complete the B.S., they can go on to complete licensure with only two to three additional semesters at the master’s level.

**Human Resource Development**—Prepare for human resource development positions in business, training and development, quality improvement, career development, employee assistance, or other areas. Students also can prepare for graduate study in this field.

**Kinesiology**—Pursue a career in fitness/wellness, human performance, and health programs or prepare for teacher licensure at the master’s level in physical education. Students also can prepare for professional degrees in the health sciences, including physical or occupational therapy, medicine, and nursing.

**Music Education**—See College of Liberal Arts (CLA) section.

**Recreation, Park, and Leisure Studies**—Prepare for leadership, supervisory, or administrative positions in recreation, park, and leisure services agencies. Students can specialize in leisure services management or therapeutic recreation.

**Sport Studies**—This major focuses on contemporary sport as a product of social, psychological, and economic phenomena. Choose an emphasis in coaching, pre-sport management, or youth services/development.

**Technology Education**—This program prepares students who want to teach in public schools for state teaching licensure in technology education for grades 5-12.

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**Minors**
Two minors are available: coaching and leadership. The coaching minor is available to students admitted to a B.S. degree program in the college’s School of Kinesiology. For more information, call 612-625-5300. The undergraduate leadership minor is open to students who have completed EdPA 1301/PA 1961 with a grade of at least S (or C- or better). For more information, call the Office for Student Affairs at 612-625-6531.

**Policies and Procedures**

**S-N Grading**—CEHD strictly limits the use of S-N grading. All major coursework in an undergraduate program must be taken A-F unless otherwise indicated. See the Class Schedule to determine grading options for each course.

**Change of Major**—CEHD undergraduates who wish to change or add a major within the college should apply through SPS, 110 Wulling Hall (612-625-6501).

**Graduation Requirements**

**Amount and Quality of Work**—Completion of at least 120 credits with a C (2.00) average, including the specified coursework in psychology (minimum grade of C-) and writing, is required for graduation. Students in teaching licensure programs (agricultural and technology education) must earn a minimum 2.50 GPA to be recommended for state licensure. All GPA requirements for student teaching, internships, and graduation are computed using University of Minnesota, Twin Cities coursework only. Contact SPS, 110 Wulling Hall (612-625-6501), or the major department for specific requirements for individual majors.

**Applying for a Degree**—Students must apply to graduate one full semester before completion of the final coursework. The Application for Degree form may be completed at any of the One Stop Student Services Centers, 612-625-5333 or downloaded from the Web at <www.onestop.umn.edu/Forms/>. The final program form or degree audit must also be submitted to the faculty adviser at that time. In addition, students whose major fields are agricultural education; business and industry education; human resource development; kinesiology; recreation, park, and leisure studies; or technology education must file an adviser-approved program with the college’s Student Scholastic Standing Committee.

**Certification/Licensure**

**Certification**
The college offers several certificates at the undergraduate level: coaching, sport management, human resource development, career and technical education, and disability policy and services. For more information about certificates, contact SPS (612-625-6501) or visit the Web site at <www.education.umn.edu/SPS/programs/certificates/>.

**Licensure**
To teach in a public school classroom, students must be licensed by the state. Three CEHD teacher licensure programs are offered at the undergraduate level: agricultural education; business and industry education; career and technical education; and technology education. All other CEHD initial licensure programs are offered at the master’s level; students must first complete an undergraduate degree with appropriate prerequisites.
The college offers initial licensure programs in adult basic education, agricultural education, art education, business and marketing education, early childhood education and early childhood special education, elementary education, English education, family education, industrial education (technology education), mathematics education, physical education, science education, second languages and cultures education (including English as a second language), social studies education, and special education. These licensure programs reflect the most current thinking and research in the field, with strong clinical experiences and special attention to multicultural education. CEHD licensure programs are approved by the Minnesota State Board of Teaching and accredited by the National Council for the Accreditation of Teacher Education (NCATE).

Teaching licenses are awarded by the Minnesota State Board of Teaching; CEHD is responsible for recommending eligible candidates to the state. The CEHD recommendation for licensure is based on successful completion of coursework that includes a standards-based curriculum, favorable faculty judgment regarding teaching competence, and meeting minimum standards on state-required examinations.

Minnesota state law and a State Board of Teaching regulation require teacher licensure candidates to meet specific competencies. This requirement is met through a combination of required and elective coursework at the graduate level. Candidates also must pass the Praxis Series tests, which assess basic skills of reading, writing, and mathematics; content knowledge; and pedagogy and teaching methods. Minnesota state law also requires all initial licensure applicants to be fingerprinted and pass criminal background checks.

**Early Admission Option**

This program allows undergraduate juniors or seniors at the University of Minnesota to get a head start on a teaching career by offering preferred admission to a master of education (M.Ed.)/initial licensure program. Students in the early admission program explore the teaching profession by attending a one-credit course (EdHD 3001) with other pre-education students each semester. Students also spend at least 100 hours working in an educational setting, which fulfills one of the M.Ed./initial licensure program admission requirements. Students are expected to complete the undergraduate degree within two years of starting the early admission program and begin the M.Ed./initial licensure program within two years of receiving the B.S. or B.A. degree.

For more information about early admission requirements, contact SPS, 110 Wulling Hall (612-625-6501).

**Advising**

Student & Professional Services (SPS) is CEHD’s centralized admissions and student services office (110 Wulling Hall, 612-625-6501 or on the Web at <www.education.umn.edu/SPS/>). SPS provides general information, enrollment, registration, and career services for prospective students, applicants, enrolled students, and graduates. Professional advising staff are available by appointment or on a walk-in basis during specific times each weekday to answer general questions regarding admission, program requirements, academic planning, registration, academic progress, scholarships, career services, teacher licensure, commencement, and other student-affairs issues. SPS also offers information group meetings monthly for individual degree programs.

**Special Learning Opportunities, Resources, and Organizations**

**Diversity Initiatives**

CEHD is committed to recruiting, enrolling, and educating a diverse population of students who represent the overall composition of U.S. society. The college has several programs that provide support for increasing its student population diversity. In addition, the college has an ongoing Committee on Diversity made up of students, faculty, and staff. For more information on college diversity initiatives, contact SPS, 110 Wulling Hall (612-625-6501) or visit the Web site at <www.education.umn.edu/SPS/prospective/diversity/>.

**Computing Facilities**

CEHD students have access to several instructional computing labs, four computer classrooms, and several smaller computer learning areas for students and faculty. For more information about University computing services and facilities, see Computing in the General Information section of this catalog.

**College of Education and Human Development Alumni Society**

Alumni can benefit from a combined membership in the Education and Human Development Alumni Society and the University of Minnesota Alumni Association (UMAA). With more than 5,000 members, the society sponsors programs and scholarships for current students and offers a variety of opportunities for alumni to stay connected to the college. Benefits include the CEHD alumni magazine, The Link; the UMAA magazine, Minnesota; discounts on Internet access; discounts on theatre and athletic tickets; and library access. For membership information, call 612-625-1310 or 800-UM ALUMS or visit the Web site at <www.education.umn.edu/alumni/>.

**Scholarships**

In addition to financial aid opportunities offered by the University, CEHD administers several scholarship programs of its own. Awards are subject to change or cancellation depending on availability of funds. Details about qualifications and application materials and instructions may be obtained from department offices or SPS, 110 Wulling Hall (612-625-6501) or on the Web at <www.education.umn.edu/SPS/awards/>.

**Career Information**

Education and human development fields are among the fastest growing career tracks in the country. Demographic changes expected over the next several decades will cause increased demand for professionals in such fields as early childhood education, special education, English as a second language, recreation and leisure studies, technology education, child psychology, and human resource development. CEHD graduates work in public school classrooms, higher education institutions, corporate education settings, human service agencies, schools and clinics, and a broad range of other settings. SPS can provide career counseling and information as well as referrals to other University career and employment services.
Prospective students can learn more about the current employment outlook for teachers during information sessions, through individual advising, and from the college’s annual placement report, *The Occupational Status Report of Graduates: How Their Careers Began*. For more information, contact SPS Career Services (612-625-9884) or see the Web site at <www.education.umn.edu/SPS/career/>.

## Student Organization

The Association of Students in Education and Human Development (ASEHD) is open to all CEHD undergraduates as well as students in other University colleges who aspire to be educators or human development professionals. ASEHD has three subcommittees: intramurals, professional development, and community service. The intramural group participates in intramural sports organized by the University’s Department of Recreational Sports. Students interested in learning more about their chosen careers participate in the professional development group. The community service group serves the college, University, and Twin Cities metropolitan area. For more information, contact SPS, 110 Wulling Hall (612-625-6501).

### Directory

#### (area code 612)

#### Administrative Offices
- **College Office**
  - 104 Burton Hall, Minneapolis
  - <www.education.umn.edu/>
  - 625-6806
- **Student & Professional Services (SPS)**
  - 110 Wulling Hall, Minneapolis
  - <www.education.umn.edu/SPS/>
  - 625-6501, fax: 626-1580
  - e-mail spsinfo@umn.edu
  - Academic Progress
  - Admission
  - Advising
  - Career Services (625-9884)
  - Commencement
  - Graduation Requirements
  - Registration (625-5815)
  - Teacher Licensure

#### Development and Alumni Relations
- 105 Burton Hall, Minneapolis
  - 625-1310

#### Departments
- **Curriculum and Instruction**
  - 145 Peik Hall, Minneapolis
  - <www.education.umn.edu/CI/>
  - Deborah Dillon, chair
  - 625-1362
- **Educational Policy and Administration**
  - 330 Wulling Hall, Minneapolis
  - <www.education.umn.edu/EdPA/>
  - James Hearn, chair
  - 624-1006
- **Educational Psychology**
  - 206 Burton Hall, Minneapolis
  - <www.education.umn.edu/EdPsych/>
  - Mary McEvoy, chair
  - 624-3543
- **Institute of Child Development**
  - 180 Child Development Building, Minneapolis
  - <www.education.umn.edu/ICD/>
  - Ann Masten, director
  - 624-0526
- **Kinesiology**
  - 110 Cooke Hall, Minneapolis
  - Michael Wade, director
  - 625-5300
  - Bob Pickert, undergraduate contact
  - 625-8868
- **Work, Community, and Family Education**
  - 210A Vocational and Technical Education Building, St. Paul
  - <www.education.umn.edu/WCFE/>
  - Jane Plihal, chair
  - 625-3757

#### Organizations
- **Association of Students in Education and Human Development**
  - Student & Professional Services
  - 110 Wulling Hall, Minneapolis
  - 625-6501
- **College of Education and Human Development Alumni Society**
  - 105 Burton Hall, Minneapolis
  - <www.education.umn.edu/alum/>
  - 625-1310
Agricultural Education

Department of Work, Community, and Family Education

B.S.
The undergraduate agricultural education program is a collaborative partnership between CEHD and the College of Agricultural, Food, and Environmental Sciences. Three specializations are available; the following two prepare students for Minnesota state teaching licensure:

- agricultural science and technology education
- natural and managed environmental education

The agricultural leadership, training, and development specialization prepares students for agricultural industry and leadership careers, but does not lead to teaching licensure.

Agricultural Science and Technology Education Specialization

This specialization serves students preparing to teach agriscience, agribusiness, agriculture, horticulture, food systems, agrimechanics, and natural resource management under the licensure field of agricultural education in public schools at the 5-12 level. The specialization’s broad agricultural science and technology background also prepares graduates for a wide range of agriculturally related positions in sales, management, finance, and production aspects of agriculture.

Admission Requirements—Students may be admitted to this program as freshmen or may transfer into the program any semester. They must have a GPA of 2.50 for admission and complete the Praxis I: Pre-Professional Skills Tests (PPST).

Degree Requirements

Students may graduate from this program with a minimum 2.00 GPA, but a minimum 2.50 GPA is required for recommendation for a Minnesota teaching license.

Students must complete at least 128 credits to graduate, including required courses in the major. Students also must complete the University’s liberal education requirements, including approved writing intensive (W) courses. For more information, see page 31 in this catalog.

The specialization requires a broad study of agriculture, including plant science (horticulture, agronomy, plant pathology, and entomology), animal science, natural resources, soils, economics and agribusiness, agricultural mechanization, food science, foundations of education, foundations of agricultural education, and a full-year student teaching experience.

Required Courses

Communications (11 cr)
Rhet 1101—Writing to Inform, Convince, and Persuade (4 cr)
Rhet 1223—Oral Presentations in Professional Settings (3 cr)
Rhet 3562W—Technical and Professional Writing (4 cr)

Physical and Biological Sciences (19-20 cr)
BioC 2011—Biochemistry for the Agricultural and Health Sciences (3 cr)
Biol 1009—General Biology (4 cr)
or Biol 1051—Introduction to Environmental Science (3 cr)
or Agro 1101—Biology of Plant Food Systems (4 cr)
Chem 1011—General Principles of Chemistry (4 cr)
Miei 2022—General Microbiology (2 cr)
Phys 1001W—Energy and the Environment (4 cr)
or Phys 1101W—Introductory College Physics I (4 cr)
ScAg 1501—Biotechnology, People, and the Environment (3 cr)

Mathematics (3 cr)
Math 1031—College Algebra and Probability (3 cr)

Social Science (8 cr)
HSec 1814—Introduction to History of Science: Ancient Science to the Scientific Revolution (4 cr)
or HSec 1815—Introduction to History of Science: Modern Science (4 cr)
Psy 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr)

Agricultural Sciences and Applied Economics (40 cr)

Plant Science (6 cr)
Agri 3001—Pests and Crop Protection (3 cr)

Plus 3-4 credits from the following:
Agro 1103—Crops, Environment, and Society (4 cr)
Agro/Hort 4401—Plant Genetics and Breeding (4 cr)
Hort 1001—Plant Propagation (4 cr)
Hort 1002—Home Horticulture (3 cr)
Hort 1012—Woody Landscape Plants (3 cr)
Hort 1013—Floral Design (2 cr)
Hort 3002—Greenhouse Management (3 cr)

Animal Science (6 cr)
AnSc 1403—Companion Animal Nutrition and Care (2 cr)
or AnSc 2401—Animal Nutrition (3 cr)

Plus 3-4 credits from the following:
AnSc 1101—Introductory Animal Science (4 cr)
AnSc 1511—Food Animal Products for Consumers (3 cr)
AnSc 2012—Livestock and Carcass Evaluation (3 cr)
AnSc 2301—Systemic Physiology (4 cr)
AnSc/Agro 3203W—Environment, Global Food Production, and the Citizen (3 cr)
AnSc 3221—Animal Breeding (4 cr)

Natural Resources (6 cr)

At least 6 credits from the following:
Agro/AnSc 3203W—Environment, Global Food Production, and the Citizen (3 cr)
EEB 3001—Ecology and Society (3 cr)
ES 1011—Issues in the Environment (3 cr)
ES 1051—Introduction to Environmental Science (3 cr)
FW 1002—Wildlife: Ecology, Values, and Human Impact (3 cr)
NRES 1201—Conservation of Natural Resources (3 cr)

Soils (4 cr)
Soil 2125—Basic Soil Science (4 cr)

Applied Economics and Agribusiness (8-9 cr)
ApEc 1101—Principles of Microeconomics (3 cr)
ApEc 3451—Food and Agricultural Sales (3 cr)
Plus 2-3 credits from the following:
ApEc 1251—Principles of Accounting (3 cr)
ApEc 3401—Markets, Marketing, and Prices (2 cr)
ApEc 3811—Principles of Farm Management (3 cr)
ApEc 3821—Retail Center Management (3 cr)

Agricultural Mechanization (6 cr)
Select two of the following courses:
AFEE 2051—Current Technical Competencies (3 cr)
AFEE/BIE 3112—Technical Drawing and Production Technologies (3 cr)
AFEE/BIE 3121—Communication, Energy and Power, Transportation and Machinery Technologies (3 cr)

Food Science (3 cr)
FScN 1102—Food: Safety, Risks, and Technology (3 cr)

Professional Education (38 cr)
Foundations (15 cr)
EdPA 5001—Learning, Cognition, and Assessment in the Schools (3 cr)
EdHD 5003—Developmental and Individual Differences in Educational Contexts (3 cr)
EdHD 5005—School and Society (2 cr)
EdHD 5007—Technology for Teaching and Learning (1.5 cr)
EdHD 5009—Human Relations: Applied Skills for School and Society (1 cr)
EdPA 5341—The American Middle School (3 cr)
PubH 3003—Fundamentals of Alcohol and Drug Abuse (2 cr)
or PubH 5003—Fundamentals of Alcohol and Drug Abuse (1 cr)

Agricultural Education (15 cr)
AFEE 1001—Introduction to Agricultural Education and Extension (1 cr)
AFEE 1002—Principles of Career Planning for Agricultural Professionals (1 cr)
AFEE 2096—Professional Practicum in Agricultural Education: Early Experience (1 cr)
AFEE 5111—Agricultural Education: Methods of Teaching (4 cr)
AFEE 5112—Agricultural Education Program Organization and Curriculum for Youth (3 cr)
AFEE 5114—Agricultural Education Teaching Seminar (1 cr)
AFEE 5116—Coordination of SAE Programs: Work-based Learning (2 cr)
AFEE 5118—Strategies for Managing and Advising the FFA Organization (2 cr)

Work, Community, and Family Education (8 cr)
WCPE 5697—Teaching Internships: School and Classroom Settings (2 cr)
WCPE 5698—Teaching Internship (6 cr)
Completion of standard first aid and cardiopulmonary resuscitation (CPR) training is required for licensure.

Natural and Managed Environmental Education Specialization
This specialization serves students preparing to teach agriscience, agribusiness, agriculture, horticulture, food systems, agrimechanics, and natural resource management, all under the licensure field of agricultural education in public schools at the 5-12 level. In addition, graduates have an emphasis in natural resource management and education and are prepared for work in environmental learning centers.

Admission Requirements—Students may be admitted to this program as freshmen or may transfer into the program any semester with a minimum overall GPA of 2.50 and complete the Praxis I: Pre-Professional Skills Tests (PPST).

Degree Requirements
Students may graduate from this program with a minimum 2.00 GPA, but a minimum 2.50 GPA is required for recommendation for a Minnesota teaching license.

The specialization requires a broad study in agriculture focused on the natural and managed environmental education areas. Areas of study include the environment, land, water, climate, economics, soil, plant science, animal science, and agricultural mechanization. It also includes foundations in education, foundations in agricultural education, and a full-year student teaching experience.

Required Courses
Communications (11 cr)
Rhet 1101—Writing to Inform, Convince, and Persuade (4 cr)
Rhet 2223—Oral Presentations in Professional Settings (3 cr)
Rhet 3562W—Technical and Professional Writing (4 cr)

Mathematics (3 cr)
Math 1031—College Algebra and Probability (3 cr)

Physical and Biological Science (19-20 cr)
Biol 2011—Biochemistry for the Agricultural and Health Sciences (3 cr)
Biol 1009—General Biology (4 cr)
or Biol 1051—Introduction to Environmental Science (3 cr)
or Agro 1101—Botany of Plant Food Systems (4 cr)
Chem 1011—General Principles of Chemistry (4 cr)
MicB 2022—General Microbiology (2 cr)
Phys 1001W—Energy and the Environment (4 cr)
or Phys 1101W—Introductory College Physics I (4 cr)
ScAg 1501—Biotechnology, People, and the Environment (3 cr)

Social Science (8 cr)
Hist 1814—Introduction to History of Science: Ancient Science to the Scientific Revolution (4 cr)
or Hist 1815—Introduction to History of Science: Modern Science (4 cr)
Psy 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr)

Natural and Managed Environmental Science (40 cr)
Environmental (9 cr)
ES 1011—Issues in Environment (3 cr)
Plus at least 6 credits from the following:
EEB 3001—Ecology and Society (3 cr)
ES 1051—Introduction to Environmental Science (3 cr)
FR 2104—Forest Measurement Techniques (1 cr)
FR 3104—Forest Ecology (4 cr)
FR 3251—Role of Renewable Natural Resources in Developing Countries (1 cr)
FW 1002—Wildlife: Ecology, Values, and Human Impact (3 cr)
FW 3003—Wildlife in Agricultural Land (2 cr)

Land, Water, Atmosphere (7 cr)
Soil 2125—Basic Soil Science (4 cr)
Plus 3-4 credits from the following:
NRES 1201—Conservation of Natural Resources (3 cr)
Soil 1425—The Atmosphere (3 cr)
Soil 3221—Soil Conservation and Land-Use Management (3 cr)
Soil 3416—Plant Nutrients in the Environment (3 cr)

Applied Economics and Agribusiness (3 cr)
ApEc 1101—Principles of Microeconomics (3 cr)
or ApEc 3451—Food and Agricultural Sales (3 cr)

Plant Science (6 cr)
Agri 3001—Pests and Crop Protection (3 cr)
Plus 3-4 credits from the following:
Agro/Hort 4401—Plant Genetics and Breeding (4 cr)
Agro or Hort (Electives)

Animal Science (6 cr)
AnSc 2401—Animal Nutrition (3 cr)
Plus 3-4 credits from the following:
AnSc 1101—Introductory Animal Science (4 cr)
AnSc 1403—Companion Animal Nutrition and Care (2 cr)
AnSc 1511—Food Animal Products for Consumers (3 cr)
AnSc 2012—Livestock and Cattle Evaluation (3 cr)
AnSc 3203W—Environment, Global Food Production, and the Citizen (3 cr)

Agricultural Mechanization (6 cr)
Select 6 credits from the following:
AFEE 2051—Current Technical Competencies (3 cr)
AFEE/BIE 3112—Technical Drawing and Production Technologies (3 cr)
AFEE/BIE 3121—Communication, Energy and Power, Transportation and Machinery Technologies (3 cr)
Food Science (3 cr)
FScN 1102—Food: Safety, Risks, and Technology (3 cr)

Professional Education (38 cr)

Foundations (15 cr)
EdHD 5001—Learning, Cognition, and Assessment in the Schools (3 cr)
EdHD 5003—Developmental and Individual Differences in Educational Contexts (3 cr)
EdHD 5005—School and Society (2 cr)
EdHD 5007—Technology for Teaching and Learning (1.5 cr)
EdHD 5009—Human Relations: Applied Skills for School and Society (1 cr)

EdPA 5341—The American Middle School (3 cr)
PubH 3003—Fundamentals of Alcohol and Drug Abuse (2 cr)
or PubH 5003—Fundamentals of Alcohol and Drug Abuse (1 cr)

Agricultural Education (15 cr)
AFEE 1001—Introduction to Agricultural Education and Extension (1 cr)
AFEE 1002—Principles of Career Planning for Agricultural Professionals (1 cr)
AFEE 2096—Professional Practicum in Agricultural Education: Early Experience (1 cr)
AFEE 5111—Agricultural Education: Methods of Teaching (4 cr)
AFEE 5112—Agricultural Education Program Organization and Curriculum for Youth (3 cr)
AFEE 5114—Agricultural Education Teaching Seminar (1 cr)
AFEE 5116—Coordination of SAE Programs: Work-based Learning (2 cr)
AFEE 5118—Strategies for Managing and Advising the FFA Organization (2 cr)

Work, Community, and Family Education (8 cr)
WCFE 5697—Teaching Internship: School and Classroom Settings (2 cr)
WCFE 5698—Teaching Internship (6 cr)
Completion of standard first aid and cardiopulmonary resuscitation (CPR) training is required for licensure.

Agricultural Leadership, Training, and Development Specialization
This specialization provides a unique, futuristic educational opportunity combining agricultural science, communication, leadership, education, business and industry, training, and development. It provides a general background in agriculture, with agribusiness and industry associations. This specialization does not lead to teaching licensure.

The agricultural industry is faced with leadership and employee training and development challenges. This specialization provides students with opportunities and flexibility in employment ranging from human resource development, sales and marketing, extension, and communications in statewide, national, and international situations.

Admission Requirements—Students may be admitted to this program as freshmen or may transfer into the program any semester. They must have a GPA of 2.00 for admission.

Degree Requirements
Students must complete at least 128 credits, including required courses in the major. Students also must complete the University’s liberal education requirements, including approved writing intensive (W) courses. For more information, see page 31 in this catalog.

This specialization requires business experience as well as completion of courses. Students must maintain an overall GPA of 2.00.

Required Courses

Communications (11 cr)
Rhet 1101—Writing to Inform, Convince, and Persuade (4 cr)
Rhet 1223—Oral Presentations in Professional Settings (3 cr)
Rhet 3562W—Technical and Professional Writing (4 cr)

Mathematics (3 cr)
Math 1031—College Algebra and Probability (3 cr)

Physical and Biological Sciences (14 cr)
Agro 1101—Biology of Plant Food Systems (4 cr)
or Biol 1009—General Biology (4 cr)
BioC 2011—Biochemistry for the Agricultural and Health Sciences (3 cr)

Chem 1011—General Principles of Chemistry (4 cr)
ScAg 1501—Biotechnology: People and the Environment (3 cr)

Social Science (4 cr)
Psy 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr)

Agricultural Sciences and Economics (52 cr)

Plant Science (9 cr)
Agri 3001—Plants and Crop Protection (3 cr)

Plus at least 6 credits from the following:
Agro 1103—Crops, Environment, and Society (4 cr)
Agro 2501—Weed Biology and Systematics (2 cr)
Agro 3005—Applied Crop Physiology and Development (2 cr)

AnSc 3203W—Environment, Global Food Production, and the Citizen (3 cr)

Hort 1001—Plant Propagation (4 cr)
Hort 1002—Home Horticulture (3 cr)
Hort 3005—Environmental Effects on Horticultural Crops (2 cr)

Animal Science (10 cr)
AnSc 1101—Introductory Animal Science (4 cr)
AnSc 1403—Companion Animal Nutrition and Care (2 cr)
or AnSc 2401—Animal Nutrition (3 cr)

Plus 3-4 credits from the following:
AnSc 1511—Food Animal Products for Consumers (3 cr)
AnSc 2012—Livestock and Carcass Evaluation (3 cr)
AnSc 3203W—Environment, Global Food Production, and the Citizen (3 cr)

Soils (7 cr)
Soil 1125—The Soil Resource (4 cr)
or Soil 2125—Basic Soil Science (4 cr)

Plus 3 credits from the following:
Soil 1425—The Atmosphere (3 cr)
Soil 3221—Soil Conservation and Land-Use Management (3 cr)
Soil 3416—Plant Nutrients in the Environment (3 cr)

Applied Economics and Agribusiness (12 cr)
ApEc 1101—Principles of Microeconomics (3 cr)
ApEc 1251—Principles of Accounting (3 cr)
ApEc 3451—Food and Agricultural Sales (3 cr)

Plus 2-3 credits from the following:
ApEc 3401—Markets, Marketing and Prices (2 cr)
ApEc 3811—Principles of Farm Management (3 cr)
ApEc 3821—Retail Center Management (3 cr)

Agricultural Mechanization (3 cr)
AFEE 2051—Current Technical Competencies (3 cr)

Agricultural Leadership and Development (6 cr)
AFEE 4221—Rural Leadership Development (3 cr)
AFEE 5361—World Development Problems (3 cr)

Experiential Education (3 cr)
AFEE 3096—Experiential Learning: Production and Business (1-3 cr)

Agricultural Education and Extension (9 cr)
AFEE 1001—Introduction to Agricultural Education and Extension (1 cr)
AFEE 1002—Principles of Career Planning for Agricultural Professionals (1 cr)
AFEE 5111—Agricultural Education: Methods of Teaching (4 cr)
AFEE 5331—History, Philosophy, and Systems of Extension (3 cr)

Girls and Women in Sport, the first center of its kind in the world, explores how sport, recreation, and physical activity affect the lives of girls and women.
Human Resource Development/Adult Education (15 cr)
HRD 5001W—Survey: Human Resource Development and Adult Education (3 cr)
HRD 5105—Strategic Planning in Human Resource Development (3 cr)
HRD 5201—Personnel Training and Development (3 cr)
HRD 5301—Organization Development (3 cr)
Plus (three) elective credits in HRD courses.

Emphasis Areas
Students must select 10 credits in one of the following three emphasis areas:
Agricultural Science (10 cr)
Agro 2103—Grain Grading and Crop Utilization (1 cr)
Agro 2105—Seed Technology (1 cr)
Agro 2501—Weed Biology and Systematics (2 cr)
Agro 3203W—Environment, Global Food Production, and the Citizen (3 cr)
Agro 3005—Applied Crop Physiology and Development (2 cr)
AnSc 1511—Food Animal Products for Consumers (3 cr)
AnSc 2102—Livestock and Carcass Evaluation (3 cr)
AnSc 2211—Biometrics for Livestock (3 cr)
AnSc 2301—Systemic Physiology (4 cr)
FScn 1102—Food: Safety, Risks, and Technology (3 cr)
PiPa 2002—Diseases of Field Crops (3 cr)
PiPa 3002—Air Pollution, People, and Plants: The Science and the Ethics (3 cr)

Agricultural Business and Management (10 cr)
ApEc 3041—Economic Development of U.S. Agriculture (3 cr)
ApEc 3401—Markets, Marketing, and Prices (2 cr)
ApEc 3411—Grain Marketing Economics (2 cr)
ApEc 3421—Livestock and Meat Marketing Economics (2 cr)
ApEc 3811—Principles of Farm Management (3 cr)

Communication (10 cr)
Rhet 1152W—Writing on Issues of Science and Technology (4 cr)
Rhet 3221W—Theories of Human Communication (4 cr)
Rhet 3257—Scientific and Technical Presentations (3 cr)
Rhet 3266—Group Process, Team Building, Leadership (3 cr)
Rhet 3401—Accessing Information Through Electronic Media (3 cr)

Business and Industry Education: Career and Technical Education

Department of Work, Community, and Family Education

B.S.
The major in business and industry education: career and technical education is a professional development degree program offering professional preparation in career and technical education.

Students may select one of several program options.
The general career and technical education option is for current and prospective technical college instructors and other educators who are not seeking teaching licensure for grades 9-12. Students completing this option are awarded the bachelor of science (B.S.) degree and concurrently complete the Teacher Education Series (TES).
The licensure program option prepares students for Minnesota teaching licensure for grades 9-12 in one of eight career and technical education fields in the following list:

- communication technology careers
- construction careers
- creative design careers
- early childhood careers
- hospitality service careers
- manufacturing careers
- medical careers
- transportation careers
For more information on program and licensure requirements, contact the BIE program adviser at 612-625-7250.

Admission Requirements—To be admitted to this program, students must have completed 30 credits (or sufficient verified and approved technical work experience to be awarded 30 credits toward the degree) and have a 2.50 minimum GPA.

Degree Requirements
Students may graduate from this 120-credit program with a minimum 2.00 GPA, but a minimum 2.50 GPA is required for the recommendation for Minnesota teaching licensure. A minimum 2.00 GPA with no grade lower than C- is required for major courses with the following designators: BIE, HRD, and WCPE. A minimum grade of C- is also required for general psychology. Students must also complete at least 30 credits at the University of Minnesota after admission to CEHD as a student in the bachelor of science program.

Students must complete the University’s liberal education requirements, including approved writing intensive (W) courses. Courses that meet these requirements may be found in the current Class Schedule or on the Web at <www.onestop.umn.edu/schedule/html/tc.html>.

Required Courses
TES (Teacher Education Series) notation indicates that the course fulfills TES state licensure requirements.

Business and Industry Education Pedagogical Studies (19-22 cr)
BIE pedagogical studies includes courses in curriculum, teaching methods, testing, career guidance, and working with special-needs students, as well as in the history and purposes of business and industry education.

BIE 5325—Foundations of Industrial Education (3 cr)
or BIE 5401—Introduction to Business and Marketing Education (3 cr)
EdHD 5001—Learning, Cognition, and Assessment in the Schools (3 cr)
HRD/WCFE 3601—Student and Trainee Assessment (2 cr) TES
or HRD/WCFE 5601—Student and Trainee Assessment: Advanced (2 cr) TES
HRD/WCFE 3629—Course Development for Business and Industry (2 cr) TES
or HRD/WCFE 5629—Course Development for Business and Industry: Advanced (2 cr) TES
HRD/WCFE 3661—Instructional Methods for Business and Industry (2 cr) TES
or HRD/WCFE 5661—Instructional Methods for Business and Industry: Advanced (2 cr) TES

For business and marketing education students:
BIE 5463—Methods of Teaching Keyboarding and Word Processing (2 cr)
or BIE 5452—Methods of Teaching Business and Marketing Concepts (3 cr)
or BIE 5457—Methods of Teaching Business Employment and Marketing Employment (3 cr)
WCPE 1301—Introduction to Career and Technical Education Teaching (2 cr) TES
Required for initial state licensure (not required of students who have completed two of the other TES courses).

WCPE 5801—Educating Special Populations in Work, Community, and Family Settings (3 cr)

Two courses from the following list, as approved by an adviser:
BIE 5321—Vocational Guidance in Business and Industry Education (2 cr)
BIE 5344—Facilities Management in Business and Industry (3 cr)
BIE 5463—Methods of Teaching Keyboarding and Word Processing (2 cr)
BIE 5452—Methods of Teaching Business and Marketing Concepts (3 cr)
BIE 5457—Methods of Teaching Business Employment and Marketing Employment (3 cr)
BIE 5628—Multimedia Presentations in Business (3 cr)

Core Courses (44 cr)

Issues, structures, and functions of business and industry (8 cr)
Course selection must be approved by adviser.

WCPE 3011W—Introduction to Technology and Public Ethics (3 cr)
or WCPE 5011W—Technology and Public Ethics (3 cr)

Work experience in business and industry or career and technical specialization courses (30 cr)
At least 10 credits must be earned through BIE 5596 or verified work experiences.
BIE 3151—Technical Development: Advanced (1-30 cr)
BIE 5151—Technical Development: Specialized (1-12 cr)
BIE 5596—Occupational Experience in Business and Industry (1-10 cr)
Degree Programs

Technical/occupational development in business or industry (6 cr)
BIE 3111—Exploring Technology Systems (3 cr)
BIE 3112—Technical Drawing and Production Technologies (3 cr)
BIE 3113—Manufacturing Technology (3 cr)
BIE 3114—Construction Technology (3 cr)
BIE 3121—Communication, Power and Energy, Transportation and Machinery Technologies (3 cr)
BIE 3122—Communication and Information Technology (3 cr)
BIE 3123—Energy, Power, and Transportation Technology (3 cr)
BIE 5011—Introduction to Computer Applications (3 cr)
BIE 5012—Advanced Word Processing (3 cr)
BIE 5013—Spreadsheet Analysis Using Computers (3 cr)
BIE 5014—Database Computer Applications (3 cr)
BIE 5015—Integrated Computer Applications in Business and Marketing Education (3 cr)
BIE 5151—Technical Development: Specialized (1-12 cr)
BIE 5596—Occupational Experience in Business and Industry (1-10 cr)

Additional requirements (12-17 cr)
AdEd 5102—Perspectives of Adult Learning and Development (3 cr)
BIE 1396—Supervised Career and Technical Teaching (4 cr) (required only of those students without teaching experience)
BIE 5011—Introduction to Computer Applications (3 cr)
EdHD 5009—Human Relations: Applied Skills for School and Society (1 cr)
PubH 3004—Basic Concepts of Personal and Community Health (4 cr)
or PubH 3001—Personal and Community Health (2 cr)
and PubH 3003/5003—Fundamentals of Alcohol and Drug Abuse (2 cr/1 cr)

Required for state career and technical licensure, and recommended for business education:
WCFE 3301—Philosophy and Practice of Career and Technical Education (2 cr) TES
or WCFE 5301—Philosophy and Practice of Career and Technical Education: Advanced (2 cr) TES

Electives—selected in consultation with adviser to complete 124 credits.
American Red Cross standard first aid and personal safety certificates must be current at graduation. Requirement may be waived for business education majors with adviser approval.

Coaching

School of Kinesiology
Minor Only
The coaching minor offers an in-depth study of the theoretical and practical nature of coaching through a planned and integrated series of courses. Completion of the coaching minor also will qualify the student for the University of Minnesota Coaching Certificate.

Additional offerings include certificates in coaching and sport management. For more information, see the Certificates section on page 125.

Admission Requirements—Admission is open to all University students. A Coaching Program Application Form must be submitted (available in 220 Cooke Hall).
Students must maintain a 2.50 GPA in courses submitted for the completion of the coaching minor.

Required Courses
Kin 3027—Human Anatomy for Kinesiology Students (3 cr)
or Kin 3111—Human Anatomy (2 cr)
or InMd 3001—Human Anatomy (3 cr)
and InMd 3002—Human Anatomy Laboratory (1 cr)
Kin 3113—First Responder for Coaches and Athletic Trainers (3 cr)
or current American Red Cross Standard First Aid and CPR certification
Kin 3114—Prevention and Care of Athletic Injuries (3 cr)
Kin 3133—Motor Control, Learning, and Development (3 cr)
Kin 3134—Organization and Management of Sport (3 cr)
or Kin 5725—Organization and Management of Physical Education and Sport (3 cr)
Kin 5697—Student Teaching: Coaching (1-10 cr)
Two courses from Kin 3112, 4385, 5126, 5136, SpSt 3621, 3641
Two courses from Kin 3168, 3169, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3181, 5720

Final Project
Kin 5697—Student Teaching: Coaching consists of two parts. The first part is a supervised coaching experience with a professional in the field (student coaching practicum covering a specific sport season from beginning to end). The second part involves participation in coaching seminar classes and a written integrative paper delving into such topics as a personal coaching philosophy, the role of coaching in society, and the identification and solution of various issues/challenges in coaching.

Foundations of Education: Early Childhood

Department of Curriculum and Instruction
B.S.
The foundations of education (FOE): early childhood program prepares upper-division (typically junior or senior) students to work with young children and their families and to work with both typically and atypically developing children. The curriculum includes an extensive core of liberal education courses that are central to early childhood teaching and child development.
The program prepares graduates to move into non-licensure educational settings (including day-care centers or youth community programs), pursue advanced degrees, or work in other settings where a strong liberal education base is useful.
In addition, the undergraduate degree program prepares students for entry into the master of education (M.Ed.)/initial licensure program in early childhood and early childhood special education. M.Ed. admission requirements include successful completion of all requirements for the B.S. degree, and successful school practicum experiences. Preferred admission to the M.Ed. program requires a minimum 2.70 GPA.
Admission Requirements—To be admitted to this program, students must complete at least 60 semester credits in specified courses (contact SPS program adviser), and have a 2.00 minimum overall GPA; a higher GPA is recommended.

Degree Requirements

Students must have a total of 120 credits with a minimum 2.00 overall GPA to complete this program. A minimum 2.00 GPA with no grade lower than C- is required for major courses with the following designators and course numbers: CL, CPsy, EdHD, EPsy, and Kin 3327. A minimum grade of C- is also required for general psychology. Students seeking to pursue the M.Ed./initial licensure program in early childhood and early childhood special education and Minnesota state teaching licensure must have a 2.70 GPA in the undergraduate program and meet other requirements.

Students must complete the University’s liberal education requirements, including the writing intensive (W) requirement. For more information, see page 31 in this catalog.

Content areas 1–6 listed below correspond to both the University’s liberal education requirements and the college’s FOE: early childhood requirements for the B.S. degree. By planning carefully, students can select courses that apply to both sets of requirements.

Content Areas

Courses prepare students for competency in Standard 1 of the Minnesota Standards of Effective Practice for Teachers (SEPT)—The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

Note: All exceptions to these requirements must have written approval of the FOE: early childhood adviser at Student & Professional Services, 110 Wulling Hall.

1. Basic Requirements

Pre-admission
(2 courses, must be completed before admission)
Psy 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr)
CPsy 2301—Introductory Child Psychology (4 cr)
or CPsy 3301—Introductory Child Psychology (4 cr)
or GC 2283—The Psychology of Human Development (4 cr)

Highly recommended elective
One year college-level second spoken language or American Sign Language (ASL)

2. Language and Communication (3 courses)

Two courses in language and communication
Comm 1101—Introduction to Public Speaking (3 cr)
or Comm 3402—Introduction to Interpersonal Communication (3 cr)
or GC 1461—Oral Communication in the Public Sphere (3 cr)
Ling 1701—Language and Society (4 cr)

One course in language development
CPsy 4345—Language Development and Communication (4 cr) (recommended course)
or EPsy 5603—Childhood Language Development: Classroom Implications (3 cr)
or Ling 5501—Introduction to Language Acquisition (3 cr)

3. Mathematics (3 courses)

One course in college algebra
Math 1031—College Algebra and Probability (3 cr)

One course in statistical reasoning
Psy 4801—Introduction to Statistics (3 cr) (recommended course)
or EPsy 3264—Basic and Applied Statistics (3 cr)
or GC 1454—Statistics (4 cr)
or Stat 1001—Introduction to the Ideas of Statistics (3 cr)
Logic/computer skills—Consult with adviser.

4. Science (3 courses)

For course selection, see liberal education charts in the Class Schedule.

Biological science with a lab
Select any liberal education course that satisfies the diversified core requirement for Biol/L (Biological Science with Laboratory).

Physical science with a lab
Select any liberal education physics or chemistry course that satisfies the diversified core requirement for Phys/L (Physical Science with Laboratory).

One science elective with or without a lab
Select any one liberal education course in the diversified cores of Biol/L, Biol/NL, Phys/L, or Phys/NL.

5. Social Studies (3 courses)

American history
Hist 1302—U.S. History: 1880 to Present (4 cr)
or Hist 1308—U.S. History: 1880 to Present (4 cr)
or GC 1231—U.S. Growth of National Power (4 cr)

Human geography
Geog 1301—Introduction to Human Geography (4 cr)
or Geog 3381—Population in an Interacting World (4 cr)

Cultural pluralism/diversity in the United States
CSCL 3979—Issues in Cultural Pluralism (3 cr)
or GC 1851—Multicultural Relations (3 cr)
or AmSt 3113W—America’s Diverse Cultures (3 cr)
or Soc 3211W—American Race Relations (3 cr)

6. Communication Arts and Literature (4 courses)

First-year writing
EngL 1011, 1012, 1013, 1014—University Writing and Critical Reading (4 cr)
or GC 1421—Writing Laboratory: Basic Writing (3 cr)
and GC 1422—Writing Laboratory: Communicating in Society (3 cr) or equivalent

Children’s literature
Cl 5401—Children’s Literature in the Elementary School (3 cr)

American literature
EngL 1201W—Introduction to American Literature (4 cr)
or EngL 1301W—Introduction to Multicultural American Literature (4 cr)
or EngL 3005W—Survey of American Literatures and Cultures I (4 cr)
or EngL 3006W—Survey of American Literatures and Cultures II (4 cr)
or EngL 3591—Introduction to African American Literature (3 cr)
or GC 1364—Literature of the American Immigrant Experience (3 cr)
or GC 1365W—Literatures of the United States (3 cr)
or GC 1816—African American Literature (3 cr)
or GC 1836—Asian American Literature (3 cr)

Arts and humanities
One elective from the following areas is required: music, art, dance, theater, philosophy

7. Foundation Courses (taken after admission)

Students are required to take four courses in the Required Courses list as part of the program and at least 4 credits from the Other Courses list. Remaining credits from this list will be taken for graduate credit, as part of the M.Ed./initial licensure program in early childhood and early childhood special education.

Required Courses
CPsy 4336—Development and Interpersonal Relations (4 cr)
CPsy 4343—Cognitive Development (4 cr)
CPsy 4993—Directed Instruction in Child Psychology (3 cr)
Kin 3327—Teaching Physical Education in the Elementary School (2 cr) or equivalent

Other Courses (4 cr min)
CPsy 4334W—Children, Youth, and Society (4 cr)
EPsy 5849—Observation and Assessment of the Preschool Child (3 cr)
EdHD 5007—Technology for Teaching and Learning (1.5 cr)
EdHD 5009—Human Relations: Applied Skills for School and Society (1 cr)
PubH 3003/5003—Fundamentals of Alcohol and Drug Abuse (2 cr/1 cr)
8. Major Courses (taken after admission)

Students are required to complete a minimum of 29 out of 39 credits of the following major courses for graduation from the program.

Remaining major coursework will be taken for graduate credit, as part of the M.Ed./initial licensure program in early childhood and early childhood special education.

Junior Year

Fall or spring semester
CI 5111—Introduction to Elementary School Teaching (3 cr)

Fall semester
CI 5251—Social and Philosophical Foundations of Early Childhood Education (3 cr)
CI 5253—Cognitive and Creative Learning in Early Childhood Education (3 cr)

Spring semester
CI 5252—Facilitating Social and Physical Learning in Early Childhood Education (3 cr)

Senior Year

Fall or spring semester
CI 5261—Student Teaching in Early Childhood Education (3-6 cr)
EPsy 5625—Education of Infants, Toddlers, and Preschool Children with Disabilities: Methods and Materials (3 cr)

Spring semester
EPsy 5681—Education of Infants, Toddlers, and Preschool Children with Disabilities: Methods and Materials (3 cr)

Other major courses toward 29-credit minimum
CI 5183—Applying Instructional Methods in the Elementary Classroom (2 cr)
CI 5415—Literacy Development in the Primary Grades (3 cr)
CI 5504—Elementary School Science (3 cr)
CI 5731—Social Studies for the In-service Elementary Teacher (3 cr)
CI 5821—Teaching Mathematics in the Elementary School (2 cr)
EPsy 5609—Family-Centered Services (2 cr)
EPsy 5616—Behavior Analysis and Classroom Management (3 cr)

Many of the major courses have an experiential component.

Degree Requirements

Students must have a total of 120 credits with a minimum 2.00 overall GPA to complete this program. A minimum 2.00 GPA with no grade lower than C- is required for major courses with the following designators and course numbers: CI, EdHD, EPsy 5613, and EPsy 5616.

A minimum grade of C- is also required for general psychology. Students seeking to pursue the M.Ed./initial licensure program in elementary education and Minnesota state teaching licensure must have a 2.80 GPA in the undergraduate program and meet other requirements.

Students must complete the University’s liberal education requirements, including the writing intensive (W) requirement. For more information, see page 31 in this catalog.

Content areas 1-6 listed below correspond to both the University’s liberal education requirements and the college’s FOE: elementary requirements for the B.S. degree. By planning carefully, students can select courses that apply to both sets of requirements.

Curriculum—Students in the FOE: elementary program who decide to pursue the M.Ed./initial licensure program in elementary education must meet all content area requirements for the B.S. degree and an additional set of requirements for one of five preadmission specialty areas: preprimary education (ages 3-4) or one of the four middle school specialty areas (grades 5-8) in math, science, social studies, or communication arts and literature.

Content Areas

Courses allow students to work toward competency in Standard 1 of the Minnesota Standards of Effective Practice for Teachers (SEPT)—The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

Note: All exceptions to these requirements must have written approval of the FOE adviser at Student & Professional Services (SPS), 110 Wulling Hall.

1. Basic Requirements (4 courses)

Pre-admission courses
(These courses must be completed before admission)
CI 1001—Introduction to the Elementary School (3 cr)
Psy 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr)
Language and communication  
Ling 1701—Language and Society (4 cr) (recommended course)  
\textit{or} EngL 3601W—Analysis of English Language and Culture (4 cr)  
\textit{or} Ling 3001—Introduction to Linguistics (4 cr)  
\textit{or} Ling 5001—Introduction to Linguistics (4 cr)

Musical aptitude  
MUs 1001—Fundamentals of Music (3 cr)  
This requirement may be waived for students who have musical aptitude equivalent to five-six year's study of an instrument, through high school. Contact SPS preadmission adviser for more information.

2. Mathematics (4 courses)  
\textit{One course in college algebra}  
Math 1031—College Algebra and Probability (3 cr)

\textit{Mathematics for elementary education}  
Math 3113—Topics in Elementary Mathematics I (4 cr)  
Math 3118—Topics in Elementary Mathematics II (4 cr)

\textit{One course in statistical reasoning, calculus, or logic}  
EPsy 3264—Basic and Applied Statistics (3 cr)  
\textit{or} GC 1454—Statistics (4 cr)  
\textit{or} GC 1456—Functions and Problems of Logic (3 cr)  
\textit{or} Math 1142—Short Calculus (4 cr)  
\textit{or} Math 1271—Calculus I (4 cr)  
\textit{or} Phil 1001—Introduction to Logic (4 cr)  
\textit{or} Stat 1001—Introduction to the Ideas of Statistics (3 cr)  
* Students pursuing a middle-school specialty area in mathematics must complete one course in statistics and one course in calculus from the preceding list.

3. Science (4 courses)  
\textit{Biological science with a lab}  
Biol 1001—Introductory Biology: Evolutionary and Ecological Perspectives (4 cr)  
\textit{or} Biol 1009—General Biology (4 cr)  
\textit{or} GC 1131W—Principles of Biological Science (4 cr)

\textit{Physical science with a lab}  
Phys 3071W—Laboratory-Based Physics for Teachers (4 cr) (recommended course)  
\textit{or} Chem 1011—General Principles of Chemistry (4 cr)  
\textit{or} Chem 1021—Chemical Principles I (4 cr)  
\textit{or} Chem 1022—Chemical Principles II (4 cr)  
\textit{or} Phys 1001W—Energy and Environment (4 cr)  
\textit{or} Phys 1101W—Introductory College Physics I (4 cr)  
\textit{or} Phys 1201W—Introductory College Physics II (4 cr)  
\textit{or} GC 1163—Physical Systems: Principles and Practices (4 cr)

\textit{Earth science with a lab}  
Ast 1001—Exploring the Universe (4 cr)  
\textit{or} Geo 1001—The Dynamic Earth: An Introduction to Geology (4 cr)  
\textit{or} Geo 1002—Earth History (4 cr)  
\textit{or} GC 1171—Physical Geology (4 cr)  
\textit{or} GC 1172—Historical Geology (4 cr)  
\textit{or} GC 1173—Geology of the National Parks (4 cr)

\textit{One science elective with or without a lab}  
Select any one course in biological sciences, physical sciences, earth sciences, or environmental sciences.

\textit{FScN 1112—Principles of Nutrition} (3 cr) (recommended course)

4. Social Studies (4 courses)  
\textit{American history}  
Hist 1302W—U.S. History: 1880 to Present (4 cr)  
\textit{or} Hist 1306—U.S. History: 1880 to Present (3 cr)  
\textit{or} GC 1231W—U.S. Growth of National Power (4 cr)

\textit{Non-U.S. history elective}  
Select any one historical perspective course in world history, European history, western civilization, or the history of another country (other than the United States).

\textit{Human geography}  
Geog 1301W—Introduction to Human Geography (4 cr)  
\textit{or} Geog 3381W—Population in an Interacting World (4 cr)

\textit{Cultural pluralism/diversity in the United States}  
AmSt 3113W—America's Diverse Cultures (3 cr)  
\textit{or} CScL 3979—Issues in Cultural Pluralism (3 cr)  
\textit{or} GC 1851—Multicultural Relations (3 cr)  
\textit{or} Soc 3211W—American Race Relations (3 cr)

5. Communication Arts and Literature (4 courses)  
\textit{First-year writing}  
EngC 1011, 1012, 1013, 1014—University Writing and Critical Reading (4 cr)  
\textit{or} GC 1421 (3 cr) and GC 1422—Writing Laboratory: Basic Writing (3 cr)

\textit{Literature of American minorities}  
Afro 3591W/EngL 3591W—Introduction to African American Literature (3 cr)  
\textit{or} Afro 3592/EngL 3592—Introduction to Black Women Writers in the United States (3 cr)  
\textit{or} EngL 1301W—Introduction to Multicultural American Literature (4 cr)  
\textit{or} EngL 3300—Topics in Multicultural American Literatures: Fiction Across Cultures (3 cr)  
\textit{or} GC 1364—Literature of the American Immigrant Experience (3 cr)  
\textit{or} GC 1816—African American Literature (3 cr)  
\textit{or} GC 1836—Asian American Literature (3 cr)

\textit{Contemporary literature: international perspectives}  
Afro 3601—Introduction to African Literature (3 cr)  
\textit{or} EngL 1401W—Introduction to World Literatures in English (4 cr)  
\textit{or} EngL 3171—Modern British Literatures and Cultures (3 cr)  
\textit{or} EngL 3180—Contemporary Literatures and Cultures (3 cr)  
\textit{or} GC 1367W—Contemporary Literature: International Perspectives (4 cr)

\textit{Arts and humanities elective}  
Students must complete one additional elective course in arts and humanities from the following areas: art, creative writing, dance, humanities, literature, theater, philosophy, or speech.

Students pursuing the middle-school specialty area in communication arts and literature are required to take one of the following courses in creative writing to fulfill this requirement.

EngW 1101W—Introduction to Creative Writing (4 cr)  
\textit{or} EngW 1102—Introduction to Fiction Writing (3 cr)  
\textit{or} EngW 1103—Introduction to Poetry Writing (3 cr)  
\textit{or} EngW 1104—Introduction to Literary Nonfiction Writing (3 cr)  
\textit{or} EngW 3102—Intermediate Fiction Writing (3 cr)  
\textit{or} EngW 3104—Intermediate Poetry Writing (3 cr)  
\textit{or} EngW 3106—Intermediate Literary Nonfiction Writing (3 cr)

6. Second Language  
(Completion recommended before admission)  
One year of college-level study in a second spoken language (8 cr)  
\textit{or} one year of college-level study in American Sign Language (8 cr)  
\textit{or} proficiency exam

7. Major Courses (taken after admission to the program)  
\textit{Introduction to elementary education}  
(Must be taken as a block during first semester in the program)  
Cl 5111—Introduction to Elementary School Teaching (3 cr)  
Cl 5183—Applying Instructional Methods in the Elementary Classroom (1 cr)  
EdHD 5001—Learning, Cognition, and Assessment in the Schools (3 cr)

\textit{Special education core}  
(Taken as a block one year after the first block)  
Cl 5183—Applying Instructional Methods in the Elementary Classroom (1 cr)  
EPsy 5613—Foundations of Special Education I (3 cr)  
EPsy 5616—Behavior Analysis and Classroom Management (3 cr)

\textit{Foundations of education courses}  
EdHD 5003—Developmental and Individual Differences in Educational Contexts (3 cr)  
EdHD 5005—School and Society (2 cr) (taken senior year)  
EdHD 5007—Technology for Teaching and Learning (1.5 cr)  
EdHD 5009—Human Relations: Applied Skills for School and Society (1 cr)  
PubHl 3003/5003—Fundamentals of Alcohol and Drug Abuse (2 cr/1 cr)

\textit{Course for middle-school specialty area (grades 5-8)}  
Students selecting a grades 5-8 middle-school specialty in mathematics, science, social studies, or communication arts and literature  
CPsy 4303—Adolescent Psychology (4 cr)

Contact SPS preadmission adviser for more information.
Human Resource Development

Department of Work, Community, and Family Education

B.S.

The B.S. in human resource development prepares students for positions in business, training and development, quality improvement, career development, employee assistance, and other areas. Undergraduate students prepare for entry-level employment in training and development and build the foundation for advanced work in the fields of human resource development or human resources and industrial relations. All students also select a programmatic or thematic supporting program, usually from the fields of business, human resources and industrial relations, speech communications, and rhetoric, though there are no restrictions on what this supporting program might be.

The program core requires all students to develop a baseline understanding of training and development, organization development, and adult education. With an international reputation for excellence, the program also supports the Human Resource Development Research Center and an outstanding student organization providing additional opportunities for students' professional development.

A human resource development certificate is also available. For more information, see the Certificates section on page 125.

Admission Requirements—Admission to this program is competitive due to program capacity; a minimum 2.50 overall GPA is recommended.

Degree Requirements

Students must complete this program with a total of 120 credits including at least 40 credits in the major, with a minimum 2.00 overall GPA. A minimum 2.00 GPA with no grade lower than C- is required for major courses with the following designators: AdEd, BIE, FE, HRD, and WCFE. A minimum grade of C- is also required for general psychology.

Students also must complete the University’s liberal education requirements, including approved writing intensive (W) courses. For more information, see page 31 in this catalog.

All human resource development students must complete a core of 21 credits consisting of courses in training and development, organization development, and adult education; a supporting program of 13 credits (to be selected in conjunction with the student’s adviser); an internship; and liberal education requirements, including some specified courses within those requirements (contact SPS). Students must complete 30 credits of residency in the college with at least 20 credits in the senior year. An overall GPA of 2.00 is required for graduation.

Required Courses

Comm 1101—Fundamentals of Speech Communications (4 cr)

or

Rhet 1223—Public Speaking (4 cr)

Econ 1101—Principles of Microeconomics (4 cr)

or

Econ 1102—Principles of Macroeconomics (4 cr)

Math 1001—Excursions in Mathematics (3 cr)

or

Math 1031—College Algebra and Probability (3 cr)

or

a higher level math course, not statistics

Psy 1001—Introduction to Psychology (4 cr)

or

GC 1281—General Psychology (4 cr)

WCFE 3011W—Introduction to Technology and Public Ethics (3 cr)

Writing intensive (W) requirement, including Rhet 3562—Technical and Professional Writing (4 cr) or other advanced composition course

All students must have basic competence in computer applications. Students lacking such competence at the time of admission must take the following course:

BIE 3011—Introduction to Microcomputer Applications (3 cr)

Students with basic competence must take one advanced course, in consultation with adviser.

Human Resource Development (21 cr min)

BIE 5011—Introduction to Microcomputer Applications (3 cr)

or

AdEd 5101—Strategies for Teaching Adults (3 cr)

HRD 5001W—Survey: Human Resource Development and Adult Education (3 cr) (undergraduate student section registration only)

HRD 5196—Internship: Human Resource Development (4 cr)

HRD 5201—Personnel Training and Development (3 cr)

HRD 5301—Organization Development (3 cr)

Additional courses, to meet the 21-credit total, are to be selected from other HRD courses and the following:

FE 5201—Family and Work Relationships (3 cr)

WCFE 5121—Principles of Supervisory Management (3 cr)

Supporting program (13 cr min)

Students choose at least 13 credits of coursework to fulfill programmatic or thematic requirements.

Kinesiology

School of Kinesiology

B.S.

The bachelor of science program in kinesiology prepares individuals for roles in sports/health clubs or corporate fitness/exercise centers or serves as background for exercise rehabilitation, exercise physiology, biomechanics, social psychology of sport, motor behavior, ergonomics, human factors, and other human performance contexts. Kinesiology is an appropriate major for students seeking careers in the fitness/wellness industries or the allied health sciences, such as physical and occupational therapy, medicine, and nursing. It can be used as preparation for the M.Ed./initial licensure program in physical education.

The curriculum includes two years of liberal education; a core of basic and applied sciences; physical activity skills; courses in kinesiology’s major subdisciplines; and practicum experience in various sport, exercise, educational, or public service, workplace, or clinical settings.

Emphasis areas in the kinesiology major include exercise science/exercise physiology, fitness/wellness/corporate fitness, pre-physical education teaching, pre-physical therapy or pre-occupational therapy, sport psychology, sport sociology, and human factors/ergonomics. Additional offerings include a coaching certificate, a coaching minor, and a sport management certificate.

Many students in the kinesiology program prepare for careers and further study in physical or occupational therapy or medical school.
Admission Requirements—Admission is based on the following:

- A 2.50 overall GPA
- Sixty credits, completed or in progress, including the following courses that partially fulfill the University’s liberal education requirements for graduation:
  - One 3-credit speech performance course
  - One course each in biology, chemistry, and physics (all with labs)
  - One course in statistics preferred (college algebra or calculus acceptable if needed for physics prerequisite)
  - Psy 1001—Introduction to Psychology (4 cr) or GC 1281—General Psychology (4 cr) (grade of C- or higher required)

The following courses are strongly recommended, but not required, before admission to the program.

- Kin 3027—Human Anatomy for Kinesiology Students (3 cr) or InMd 3001—Human Anatomy (3 cr) and InMd 3002—Human Anatomy Laboratory (1 cr)
- Kin 1871—Introduction to Kinesiology (2 cr) (recommended prerequisite)
- Five physical activity courses (1 cr each) chosen from at least four of the following categories: aquatics, conditioning and weight training, dance, individual and dual sports/activities, team sports/activities. Students seeking K-12 physical education licensure must complete additional requirements; consult with a faculty adviser.

Degree Requirements

Students must complete this program with a total of 120 credits including 54 credits in the major, with a minimum 2.00 overall GPA. Students pursuing physical education teaching licensure must earn a minimum 2.00 GPA with no grade lower than C- for major courses with the following designators and numbers: CPsy 2301, CPsy 4303, EdHD, and Kin. Students pursuing non-teaching emphasis areas must earn a minimum grade of C- in Kin-designated coursework. A minimum grade of C- is also required for general psychology.

Students seeking to pursue the M.Ed./initial licensure program in physical education and Minnesota state teaching licensure must have a 2.80 GPA in the undergraduate program and meet other requirements.

Students also must complete the University’s liberal education requirements, including approved writing intensive (W) courses. For more information, see page 31 in this catalog.

Required Courses

Kin 1871—Introduction to Kinesiology (2 cr) (recommended prerequisite)
Kin 3027—Human Anatomy for Kinesiology Students (3 cr)
or InMd 3001—Human Anatomy (3 cr) and InMd 3002—Human Anatomy Laboratory (1 cr) (preferred for physical therapy)
Kin 3112—Introduction to Biomechanics (3 cr)
Kin 3126W—Psychology and Sociology of Sport (3 cr)
Kin 3131W—History and Philosophy of Sport (3 cr)
Kin 3133—Motor Control, Learning, and Development (3 cr)
Kin 3151—Measurement, Evaluation, and Research in Kinesiology (3 cr)
Kin 3385—Human Physiology for Kinesiology Students (3 cr) or Phsl 3051—Human Physiology (4 cr)
Kin 4385—Exercise Physiology (4 cr)

Electives

21–28 credits (8–9 credits must be Kin 3xxx/5xxx courses)

Special Requirements

PubH 3004—Basic Concepts in Personal and Community Health (4 cr) or PubH 3001—Personal and Community Health (2 cr) and PubH 3003—Fundamentals of Alcohol and Drug Abuse (2 cr)

First aid and CPR certification at time of graduation

Field Experience or Directed Study

All upper division students are required to complete 10 credits in practical experiences, coaching, or directed study in their selected area of focus. Students select a total of 10 credits from a combination of:

- Kin 3993—Directed Study in Kinesiology (1-10 cr)
- Kin 3696—Supervised Practical Experience (1-10 cr)
- Kin 5097—Student Teaching: Coaching (1-10 cr)
- Kin 5196—Practicum: Developmental/Adapted Physical Education (1-4 cr)

Recreation, Park, and Leisure Studies

School of Kinesiology

B.S.

The undergraduate program in recreation, park, and leisure studies prepares students to assume leadership, supervisory, or beginning administrative responsibilities in various park, recreation, and leisure service agencies and for therapeutic recreation certification and practice. The program also prepares students for graduate study in outdoor recreation/education, park and recreation administration, sport management, and therapeutic recreation. Many students combine recreation, park, and leisure studies with coursework in other disciplines, such as management, social work, physical and occupational therapy, creative arts, human growth and development, special education, and psychology.

Students pursuing a B.S. degree in recreation, park, and leisure studies may choose one of two options:

- leisure services management emphasis areas that include commercial parks and recreation, outdoor recreation/education, or public parks and recreation
- therapeutic recreation emphasis areas that include community-based or clinical-based recreation. (Completion of this program meets the requirements for certification by the National Council on Therapeutic Recreation Certification.)

Additional offerings include a coaching certificate, a coaching minor, and a sport management certificate. For more information, see the Certificates section on page 125.

Admission Requirements—To be admitted to this program, students must complete at least 30 credits of the University’s liberal education requirements, including the writing intensive requirement; have earned a minimum overall GPA of 2.00, with preference given to applicants with a higher average; and have
relevant education- or career-related experience, paid or volunteer. For more information about liberal education requirements, see page 31 in this catalog. Appropriate related and major courses may be applied toward these requirements.

Degree Requirements

Students must have a total of 120 credits with a minimum 2.00 overall GPA to complete this program. A minimum 2.00 GPA with no grade lower than C- is required for Rec-designated courses. A minimum grade of C- is also required for general psychology.

Required Courses

Psy 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr) (grade of C- or higher)
Soc 1001—Introduction to Sociology (3 cr)

Leisure services management courses

Pol 1001—American Democracy in a Changing World (4 cr)
Econ 1101—Principles of Microeconomics (4 cr)

Therapeutic recreation course

CPsy 2301—Introductory Child Psychology (4 cr)

College and curriculum requirements

Comm 1101—Introduction to Public Speaking (3 cr)
or Comm 1313W—Analysis of Argument (3 cr)
or GC 1281—General Psychology (4 cr) (grade of C- or higher)
Poly 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr) (grade of C- or higher)
PubH 3001—Fundamentals of Personal and Community Health (4 cr)
or PubH 3001—Personal and Community Health (2 cr)

College and curriculum requirements

PubH 3003—Fundamentals of Alcohol and Drug Abuse (2 cr)
Rec 1501—Orientation to Leisure and Recreation (3 cr)
Rec 3281—Research and Evaluation in Recreation, Park, and Leisure Studies (4 cr)
Rec 3514W—Recreation Programming (3 cr)
Rec 3551—Administration and Finance of Leisure Services (4 cr)
Rec 3601—Leisure and Human Development (3 cr)
Rec 5271—Community Leisure Services for Persons with Disabilities (3 cr)
Rec 3796—Senior Internship in Recreation, Park, and Leisure Studies (12 cr)

16 credits in recreation courses related to an emphasis area, selected in consultation with a major adviser.

24 credits related to the selected emphasis area (no more than three 1xxx courses), selected in consultation with an appropriate academic adviser. To become professionally certified as a therapeutic recreation specialist, certain specific courses also are required in the therapeutic recreation option, including abnormal psychology, anatomy, and physiology.

Electives—Any course for which a student has appropriate prerequisites and has been approved by the adviser relative to programmatic focus can be used toward this degree.

Final Project

After meeting eligibility requirements, students complete an intensive 12-credit senior internship (Rec 3796). Students should see their adviser and the internship coordinator no later than the early part of the semester preceding registration for Rec 3796. An internship manual may be obtained from the division office or from the internship coordinator.

Sport Studies

School of Kinesiology

B.S.

The sport studies major focuses on contemporary sport as a product of social, psychological, and economic phenomena. Because of its prominent role in our culture, economy, and societal behavior, sport is a popular subject for academic inquiry. While open to all who meet the admission requirements, the sport studies major addresses in part the need of those students who have a primary interest in sport as an activity that has been and continues to be a major force in their lives. Graduates may find employment in sport or other fitness-related occupations. The program also prepares students for graduate study in sport management.

Coursework in sport studies addresses such topics as ethics and sport, psychology of sport performance, sport as a sociocultural phenomenon, sport management, sport facilities, event management, and sport marketing and promotion.

Features of the program include an 8-credit experiential course, a senior seminar, and a set of focused electives. Each student selects electives from one of the following three emphasis areas: coaching, sport management, or youth services/development.

Additional offerings include a coaching certificate, a coaching minor, and a sport management certificate. For more information, see the Certificates section on page 125.

Admission Requirements—To be admitted to this program, students must have 60 credits completed or in progress. Admission preference is given to students who have completed liberal education requirements and have an overall GPA of 2.00 before the March 1 admission deadline. For more information about liberal education requirements, see page 31 in this catalog.

Degree Requirements

Students must have a total of 120 credits with a minimum 2.00 overall GPA to complete this program. A minimum 2.00 GPA with no grade lower than C- is required for SpSt-designated courses. A minimum grade of C- is also required for general psychology.

Required Courses

Social science course requirements (12 cr min)
Psy 1001—Introduction to Psychology (4 cr)
or GC 1281—General Psychology (4 cr) (grade of C- or better)
Soc 1001—Introduction to Sociology (3 cr)

Recommended for the sport management focused elective:
Econ 1101—Principles of Microeconomics (4 cr)
5 additional credits including historical perspective liberal education requirement

Major Courses (27 cr)
SpSt 1701—Introduction to Sport Studies (2 cr) (recommended before admission to the program)
SpSt/Kin 3143—Organization and Management of Sport (3 cr)
SpSt 3501—Sport in a Diverse Society (3 cr)
SpSt 3611—Sport Psychology (2 cr)
SpSt 3601—Ethics and Values in Sport (2 cr)
SpSt 3861—Legal Aspects of Sport (2 cr)
SpSt 3881W—Senior Seminar in Sport Studies (3 cr)
SpSt 3996—Practicum: The Sport Experience (10 cr)

College and Curriculum Requirements (16 cr min)
Comm 1101—Introduction to Public Speaking (3 cr)
or Comm 1313—Analysis of Argument (3 cr)
or GC 1461—Oral Communication in the Public Sphere (3 cr)
or Rhet 1223—Oral Presentations in Professional Settings (3 cr)
Psy 1001—Introduction to Psychology (4 cr)

or GC 1281—General Psychology (4 cr)

PubH 3004—Basic Concepts in Personal and Community Health (4 cr)

or PubH 3001—Personal and Community Health (2 cr)

and PubH 3003—Fundamentals of Alcohol and Drug Abuse (2 cr)

Soc 1001—Introduction to Sociology (3 cr)

Education and human development electives (not including Kin, Rec, or SpSt courses) (6 cr)

Physical education activity courses (3 courses, 1 cr each)

**Focused Elective (20 cr min)**

In consultation with the sport studies major adviser, each student selects at least 20 credits from one of the following three sets of focused electives:

### Coaching

FScN 1112—Principles of Nutrition (3 cr)

GC 1571—Introduction to Microcomputer Applications (4 cr)

SpSt 3111—Sports Facilities (2 cr)

SpSt 3112—Applied Sport Science (2 cr)

SpSt 3621—Applied Sport Psychology (2 cr)

SpSt 3641—Training and Conditioning for Sport (2 cr)

**Students also may choose courses from the following list to meet requirements for coaching certification or the coaching focused elective. For more information, contact SPS advisers:**

Kin 3111—Human Anatomy (2 cr)

or CBN 1027—Human Anatomy for Kinesiology Students (3 cr)

or CBN 5058—Human Anatomy for Physical Therapy (5 cr)

Kin 3113—First Responder for Coaches and Athletic Trainers (3 cr)

Kin 3114—Prevention and Care of Athletic Injuries (3 cr)

Kin 3133—Motor Control, Learning, and Development (3 cr)

Kin 5697—Student Teaching: Coaching (1–10 cr)

**Two of the following courses:**

Kin 3112, 4385, 5126, 5136, SpSt 3621, 3641

**Two of the following courses:**

Kin 3168, 3169, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3181, 5720

### Sport Management

BLaw 3058—The Law of Contracts and Agency (4 cr)

BLaw 5078—Partnerships and Corporations (2 cr)

Comm 3201—Introduction to Electronic Media Production (3 cr)

Comm 3441—Introduction to Organizational Communication (3 cr)

Econ 1102—Principles of Macroeconomics (4 cr)

GC 1540—Accounting Fundamentals 1 (3 cr)

or Acct 2050—Introduction to Financial Reporting (4 cr)

GC 1571—Introduction to Microcomputer Applications (4 cr)

or BIE 5011—Introduction to Microcomputer Applications (3 cr)

HRD 5201—Personnel Training and Development (4 cr)

HRIR 3021—Human Resource Management and Industrial Relations (3 cr)

Kin 5115—Event Management in Sport (3 cr)

Mktg 3001—Principles of Marketing (3 cr)

Mgmt 3001—Fundamentals of Management (3 cr)

SpSt 3111—Sports Facilities (2 cr)

SpSt 3421—The Business of Sport (2 cr)

SpSt 3631—Sport Promotion and Programming (2 cr)

### Youth Services/Development

CPsy 3301—Introductory Child Psychology for Social Sciences (4 cr)

CPsy 4303—Adolescent Psychology (4 cr)

CPsy 4331—Social and Personality Development (4 cr)

CPsy 4334W—Children, Youth in Society (4 cr)

EdJA 5372—Youth in Modern Society (3 cr)

FSoS 1101—Intimate Relationships (3 cr)

GC 1571—Introduction to Microcomputer Applications (4 cr)

or BIE 5011—Introduction to Microcomputer Applications (3 cr)

Kin 1989—Health and Society (3 cr)

Kin 5115—Event Management in Sport (3 cr)

Kin 5375—Competitive Sport for Children and Youth (3 cr)

Rec 2151—Outdoor and Camp Leadership (3 cr)

Rec 3541W—Recreation Programming (3 cr)

SpSt 3112—Applied Sport Science (2 cr)

SpSt 3631—Sport Promotion and Programming (2 cr)

SW 2001—Introduction to Social Welfare and Community Services (4 cr)

Soc 3111—Introduction to Crime and Criminal Justice (3 cr)

YoSt 5031—Youth in the World (3 cr)

YoSt 5401—Youth Policy: Enhancing Healthy Development in Everyday Life (3 cr)

Other courses may be included with the adviser’s approval.

### Technology Education

**Department of Work, Community, and Family Education**

**B.S.**

This program prepares students to meet Minnesota state licensure requirements for teaching technology education to grades 5-12. The curriculum surveys the broad range of technology use and application in the areas of manufacturing, construction, transportation, communication, energy, and power. Coursework includes liberal education, technology education, and professional/clinical experiences and student teaching.

Graduate study in this field is available. A career and technical education certificate is also available; see the following page for more information.

**Admission Requirements**—Applicants may be admitted to this program with a 2.50 minimum overall GPA and completion of at least 60 credits, including credits in progress at the time of application.

**Degree Requirements**

Students must complete the University’s liberal education requirements, including the writing intensive (W) requirement. Courses that meet these requirements may be found in the current Class Schedule or on the Web at <www.onestop.umn.edu/schedule/html/tc.html>. Students may complete their degree in four years by completing 15 credits each semester.

Students must have a total of 120 credits with a minimum 2.00 overall GPA to complete this program. A minimum 2.00 GPA with no grade lower than C- is required for major courses with the following designators: BIE, EdHD, HRD, and WCFE. A minimum grade of C- is also required for general psychology.

**Required Courses**

Comm 1101—Introduction to Public Speaking (3 cr)

or Rhet 1223—Oral Presentations in Professional Settings (3 cr)

Math 1031—College Algebra and Probability (3 cr)

Psy 1001—Introduction to Psychology (4 cr)

or GC 1281—General Psychology (4 cr)

Rhet 1101—Writing to Inform, Convince, and Persuade (4 cr)

Rhet 3562W—Technical and Professional Writing (4 cr)

or BA 3033W—Business Communication (4 cr)*

* Required course for students who are also completing a business minor through the University’s Carlson School of Management

**Technology Education (47 cr)**

### Technical Skills (36 cr)

BIE 3111—Exploring Technology Systems (3 cr)

BIE/AFEE 3112—Technical Drawing and Production Technologies (3 cr)

BIE 3113—Manufacturing Technology (3 cr)

BIE 3114—Construction Technology (3 cr)

BIE/AFEE 3121—Communication, Power and Energy, Transportation and Machinery Technologies (3 cr)

BIE 3122—Communication and Information Technology (3 cr)

BIE 3123—Energy, Power, and Transportation Technologies (3 cr)

BIE 3151—Technical Development: Advanced (1-30 cr)

BIE 5101—Technological Problem Solving (3 cr)

BIE 5151—Technical Development: Specialized (1-12 cr)

BIE 5341—Facilities Management in Business and Industry (3 cr)

BIE 5596—Occupational Experience in Business and Industry (1-10 cr)

Note: A limited number of technical college credits can be applied to BIE 3151 or BIE 5151.
Undergraduate Leadership Minor

Interdisciplinary Minor Only

The undergraduate leadership minor is a 16-credit interdisciplinary program that helps students gain understanding and experience in multiple frameworks of leadership. The program develops the leadership and social change skills of undergraduates for their roles as citizens on the University campus and in the larger global community. This minor is a collaborative effort of the college’s department of Educational Policy and Administration (EdPA), the University’s Hubert H. Humphrey Institute, and the Office for Student Affairs.

**Admission Requirements**—To be admitted to this minor, students must complete EdPA 1301/PA 1961 with a grade of at least S (or C- or higher).

**Minor Requirements**

Students must complete at least 16 credits in the following areas:

- **Core Courses (9 cr)**
  - EdPA 1301W/PA 1961W—Personal Leadership in the University (3 cr)
  - EdPA 3302W—Leadership in the Community
  - or PA 3961W—Leadership, You, and Your Community (3 cr)
  - EdPA 4303W—Leadership in the World
  - or PA 4961W—Self-Developed Leadership in the World (3 cr)

- **Field Experience (2 cr)**
  These credits are designed with a leadership program adviser.

- **Electives (5 cr min)**
  Courses from other departments that have been approved by the leadership program’s advisory team.

For more program information, contact June Nobbe in the Office for Student Affairs, 612-625-6531.

**Certificates**

**Coaching**

This program prepares students to coach sports in public schools and youth organizations. It also meets the certification requirements needed to be a head coach in Minnesota high schools. Admission is open to all University students. For more information, call the School of Kinesiology at 612-625-3500.

**Disability Policy and Services**

This program offers an interdisciplinary study of contemporary theories and practices of service delivery for people with disabilities. While focusing on the needs of people with all types of disabilities, the program emphasizes the needs of people with developmental disabilities.

Admission is open to individuals from the community as well as students enrolled in the graduate programs (Graduate School or professional studies) at the University of Minnesota. For more information, contact Marijo McBride, 612-624-6830 at the Institute on Community Integration (ICI).

**Human Resource Development**

Coursework includes study of adult education, personnel training, and organization development. Admission to this certificate program is open to degree-seeking or non-degree-seeking students or to individuals working in the HRD field who are seeking additional credentials. For more information about the program and monthly introduction sessions, contact Gary McLean (612-624-4901) at the Department of Work, Community, and Family Education (WCFE).

**Sport Management**

This interdisciplinary program offers specialized educational and professional preparation for careers in sport management. The program complements a student’s academic program in business/management, kinesiology, recreation, or journalism.

Typical careers in sport management include sport organization management (budgeting, accounting, facility management), sport information management (marketing, promotion, advertising), and exercise and sport science or the “fitness/wellness” industry (testing, evaluating, and monitoring exercise and fitness programs). For more information, contact Bruce Anderson (612-625-4380) in the School of Kinesiology.

**Career and Technical Education**

This program prepares students to become instructors in technical and community colleges, allows current instructors to upgrade their teaching skills, or offers a credential for workplace advancement. Students may be either degree-seeking or non-degree-seeking students. For more information on this program, contact the WCYE Student Information Office at 612-624-1221.