Kinesiology and Physical Education (KNDN, KNPE, LESM)

Go to information for this department.

Hide programs for this department.

**Major**
- Kinesiology (B.S.)
- Physical Education (B.S.Ed.)
- Sport Management (B.S.)

**Minor**
- Minor in Coaching (22-24)
- Minor in Esports Industry Professions (19-22)
- Minor in Kinesiology and Physical Education
- Minor in Sport Management (18)
- Minor in Sport Sales (18)

**NEW PAGE:**

**Minor in Esports Industry Professions (19-22)**
This minor prepares students for a possible career in the Esports industry. Students wishing to declare for the minor in Esports Industry Management should reach out to the Department of Kinesiology and Physical Education. Students in this minor must receive a grade of C or better in each of the required courses and electives. All university majors, including those housed in the Department of Kinesiology and Physical Education, may declare the minor in Esports Industry.

**Required Coursework**
LESM 202 - Introduction to the Esports Industry (3)
LESM 302 - Strategies and Issues in the Esports Industry (3)

Select one of the following:
- KNPE 151 - Esports: General Gaming (1)
- KNPE 152 - Esports: Real-time Strategy Gaming (1)
- KNPE 153 - Esports: Sports Gaming (1)
- KNPE 154 - Esports: Online Battle Gaming (1)

Select four of the following from at least two different departments (12-15)
- ARTD 273 - Introduction to Time Arts I (3)
ARTD 303 - Video Art (3)
ARTD 373 - 3-D Animation (3)
ARTD 466 - Intermedia Arts (3)
COMD 330 - Neuroscience of Communication and Associated Behaviors (3)
CSCI 240 - Computer Programming in C++ (4)
CSCI 241 - Intermediate Programming Credits (4)
CSCI 360 - Computer Programming in Assembler Language (4)
ETT 211 - Technology in a Diverse Society (3)
KNPE 310 - Psychological Aspects of Sport and Exercise (3)
LESM 360 - Sport Event and Facility Management (3)
LESM 365 - Communication Strategies in Sport (3)
LESM 442 - Promotion and Marketing of Sport Programs (3)
LESM 452 - Advanced Experience in Sport Management (3)
LESM 453 - Advanced Experience in Esports Industry (3)
LESM 492 - Special Topics in Sport Management (1-3)
students must take 3 credits of this course
MGMT 217 - Legal Environment of Business (3)
MGMT 333 - Principles of Management (3)
OR MGMT 335 - Managing Individuals, Teams, and Organizations (3)
MKTG 295 - Principles of Marketing (3)
PHIL 337 - Business Ethics (3)
Other minor-coordinator approved electives

RATIONALE: In 2019, the Esports industry exceeded the billion-dollar revenue mark. As a result, professional opportunities are becoming more prevalent. This minor will introduce students to some of these opportunities and potentially give them a competitive advantage when entering the job market.

With discussions from faculty and administration in the College of Education and University Outreach and Engagement, as well as within our home department, this minor would be a well-aligned and timely complement to majors such as, but not limited to, Communications, Computer Science, Psychology, Sport Management, and those housed in the College of Business. Further, this minor would align with a recent outreach initiative by the university. Additionally, coursework in this minor would better prepare students for job placement in the eSports industry. We are working with other departments beyond the ones listed above to make this as inclusive and interdisciplinary of a minor as possible.

COLLEGE OF HEALTH AND HUMAN SCIENCES

Other Catalog change  LINK 2019-20 Undergraduate Catalog CHHS19.20.06.03

Family and Consumer Sciences (FACS, FSMD, GER0, HDFS, HOSP)
Certificate of Undergraduate Study

• Illinois Family Specialist Credential Certificate-Level 5 (52) (hyperlink-see below)
• Illinois Director Credential Certificate - Level 2 (15)
• Illinois Early Childhood Education (ECE) Credential Certificate-Levels 2-5 (15-42)
• Infant Toddler Credential Certificate - Level 5 (12)
• Leadership in Aging Services (15)

Illinois Family Specialist Credential Certificate-Level 5 (52)

This certificate is designed to meet the standards for the Family Specialist Credential (FSC) of the Illinois Network of Child Care Resource and Referral Agencies (INCCRRA). The Family Specialist Credential is for professionals who are prepared to provide direct services to families, such as Family Case Workers, Parent Educators, or Family Advocates. Upon successful completion of the required credential course work, students will be eligible to apply for FSC Level 5 from INCCRRA.

Applicants for the FSC certificate must major in Family Social Services and must meet INCCRRA FSC credential requirements for Level 5. To earn the credential, students must maintain a good academic standing in the university, achieve a minimum grade of C in each credential course, achieve a GPA of 2.5 in all certificate courses, and complete all certificate coursework within five academic years.

Core Course for Level 5 (52)

HDFS 280- Human Development and the Family Credits: 3
HDFS 284- Introduction to Family Relationships Credits: 3
HDFS 343- Family Financial Planning Credits: 3
HDFS 382- Group Process and Personal and Family Functioning Credits: 3
HDFS 383- Clinical Applications in Family Social Services Credits: 3
HDFS 384- Asian American Families Credits: 3
HDFS 438- Parent Education Credits: 3
HDFS 445- Management of Human & Family Resources Credits: 3
HDFS 477- Domestic Violence and Trauma in the Family Credits: 3
HDFS 478- Child Welfare Fundamentals Credits: 3
HDFS 481- Professional Practices in Family Social Services Credits: 3
HDFS 483- Social Policy: Child and Family Credits: 3
HDFS 484- Family Theories Credits: 3
HDFS 485- Methodology in Family Life Education Credits: 3
HDFS 488- Working with Ethnically Diverse Children and Families in the U.S. Credits: 3
HDFS 491- Internship in Family Social Services Credits: 3

Supervised field experience in a family social service agency.

RATIONALE:
NIU Family Social Service is an entitled program through Gateways Illinois. This document lists the courses required for students to receive level 5 of Family Specialist credential via Gateways. Reflect program’s receiving of the newly approved certificate by Illinois Network of Child Care Resource and Referral Agencies (INCCRRA). All the courses listed were approved by IL.
SECTION B – Recorded, but further approval needed before inclusion in the Undergraduate Catalog

Gateways. Students need to complete all the listed courses in order to be eligible for the certificate at level 5. All courses listed are part of the FSS requirements. No new courses were developed for the credential and no new resources are needed for the credential. Students from HDFS Family Social Services emphasis are eligible for the credential and all the courses are part of the requirements for the completion of FSS program.

College of Engineering and Engineering Technology

New B.S. Proposal attached below
Civil and Environmental Engineering (CEE)

The B.S. in Civil and Environmental Engineering will equip students with the basic competence and job skills needed to design, develop, and construct drinking and wastewater distribution, treatment, and collections systems, and energy and power production systems. Civil and environmental engineers have critical understanding of the consequential impact of engineering designs on society and the environment. As a profession, civil and environmental engineering demands the individual to work with professionals in other engineering and sciences disciplines to achieve common goals. Design is central to the civil and environmental engineering profession and is integrated throughout the curriculum. The curriculum is based on a strong foundation of fundamental courses in sciences and engineering, and discipline-specific courses in civil and environmental engineering. The work of civil and environmental engineers spans many professional careers, providing opportunities in research and development, as well as measurement and analysis tools in investigating natural and built systems. The student is encouraged to approach central technical issues with increased awareness of ethical and social implications. The B.S. in Civil and Environmental Engineering offers two emphases: Water Resource and Energy. The student must choose one of these two emphases. The total number of credit hours required for graduation are 128 and 127, respectively for Water Resource and Energy emphasis.

Civil and Environmental Engineering Program Educational Objectives

A B.S. in Civil and Environmental Engineering will equip students with cross-disciplinary knowledge and training in mathematics, chemistry, physics, earth sciences, engineering sciences, as well as the fundamentals of civil and environmental engineering. Graduates of this program
will be able to identify and solve complex civil and environmental engineering problems using measurement and analysis tools along with experimental data. The program curriculum involves engaged teaching and learning as well as design experience through establishing a synergy between classroom and hands-on laboratory activities. This curriculum has an emphasis on creating, transmitting, expanding, and applying knowledge in the practice of civil and environmental engineering in a professional and ethical way, while preparing our graduates to succeed in the industry as well as preparing them for graduate education.

Program Learning Outcomes

The Civil and Environmental Engineering Program is designed to provide our graduates with:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Program Requirements

All Civil and Environmental Engineering students must have their schedule reviewed, approved, and signed by their adviser each semester. Any deviation from an approved course schedule may delay graduation.

COURSE REQUIREMENTS

Students entering the CEE program must complete the required course work within the program and outside of the program and complete three required courses and three electives from the list of preapproved courses, based on the emphasis they choose.

Emphases in B.S. in Civil and Environmental Engineering (CEE)

There are two emphases in the CEE degree program

- Emphasis 1: Water Resource (128)
- Emphasis 2: Energy (127)

Requirements in Program (28)

- CEE 330: Material Engineering (3)
• CEE 331: Soil Mechanics Engineering (3)
• CEE 340: Construction Engineering (3)
• CEE 350: Structural Engineering (3)
• CEE 360: Environmental Engineering (3)
• CEE 400: Civil and Environmental Engineering Tools (3)
• CEE 463: Solid and Hazardous Waste Management (3)
• CEE 381: Civil and Environmental Engineering Junior Design Seminar (1)
• CEE 485: Civil and Environmental Engineering Senior Design Project I (3)
• CEE 486: Civil and Environmental Engineering Senior Design Project II (3)

Requirements outside Program (63)
• CHEM 210: General Chemistry I (3)
• CHEM 212: General Chemistry and Laboratory I (1)
• CHEM 211: General Chemistry II (3)
• CHEM 213: General Chemistry Laboratory II (1)
• GEOL 120: Planet Earth (3)
• GEOL 121: Planet Earth Laboratory (1)
• GEOL 425: Geological Engineering (3)
• ISYE 335: Probability and Statistics for Engineers (3)
  OR STAT 300: Introduction to Probability and Statistics (3)
• ISYE 442: Engineering Project Management (3)
• MATH 229: Calculus I (4)
• MATH 230: Calculus II (4)
• MATH 232: Calculus III (4)
• MATH 336: Ordinary Differential Equations (3)
• MEE 210: Engineering Mechanics I (3)
• MEE 211: Engineering Mechanics II (3)
• MEE 212: Mechanics of Materials (3)
• MEE 340: Fluid Mechanics (3)
• MEE 350: Engineering Thermodynamics (3)
• MEE 270: Engineering Graphics (3)
• PHYS 253: Fundamentals of Physics I: Mechanics (4)
• PHYS 273: Fundamentals of Physics II: Electromagnetism (4)
• UEET 101: Introduction to Engineering (1)
  OR UEET 301 Transition to the Profession of Engineering (1)

Emphasis 1: Water Resource (49 16)
Required courses (10)
• CEE 461: Water and Wastewater Systems (3)
• GEOL 490: Hydrogeology (3)
• ENVS 409: Water Quality (4)

Elective Courses (9 6)
Water Resources (6 3): One courses from the followings
• GEOG 403: Soils and Environmental Land Use Planning (3)
• GEOL 468: Geomicrobiology (3)
• GEOG 492: Hydrology (3)
• GEOL 408: HAZWOPER Certification (1)
  AND CEE 497: Independent Study (2)
• GEOL 421: Environmental Geochemistry (3)
• GEOL 425: Geological Engineering (3)
• GEOL 493: Groundwater Geophysics (3)

Environmental Health (3): One courses from the followings
• GEOG 432: GIS for Public and Environmental Health (3)
• PHHE 455: Public Health Epidemiology (3)
• ENVS 304: Environmental Law, Policy, and Economics (3)
• TECH 434: Human Factors in Industrial Accident Prevention (3)
• TECH 435: Legal Aspects of Safety (3)
• TECH 440: Monitoring and Evaluating Exposures to Hazardous Materials (3)
• TECH 485: Risk Management (3)

**Emphasis 2: Energy (18 credits)**

Required courses (9)
• CEE 466: Life Cycle Engineering (3)
• TECH 419: Energy Auditing (3)
• MEE 352: Heat Transfer (3)

Elective Courses (9 credits)

Energy (6 credits): Two courses from the followings
• MEE 351: Applied Thermodynamics (3)
• MEE 451: Refrigeration and Air Conditioning (3)
• MEE 452: Design of Thermal Systems (3)
• MEE 454: Alternative and Renewable Energy (3)
• MEE 455: Energy Conservation and Environmental Sustainability (3)
• TECH 305: Green Technologies (3)
• TECH 411: Environmental Sustainability Practices for Industrial Operations (3)
• TECH 416: Heating, Ventilating, and Air Conditioning (3)
• TECH 445: Industrial Energy Utilization and Environmental Impacts (3)
• TECH 484: Energy Management (3)
• GEOL 425: Engineering Geology (3)

Environmental Health (3): One courses from the followings
• GEOG 432: GIS for Public and Environmental Health (3)
• PHHE 455: Public Health Epidemiology (3)
• ENVS 304: Environmental Law, Policy, and Economics (3)
• TECH 434: Human Factors in Industrial Accident Prevention (3)
• TECH 435: Legal Aspects of Safety (3)
• TECH 440: Monitoring and Evaluating Exposures to Hazardous Materials (3)
• TECH 485: Risk Management (3)
Total Hours for a Major in Civil and Environmental Engineering: 106-107

General Education University Requirements: 21