Earth and Environmental Sciences/Earth Science Secondary Certification Track (Grades 8-12)

Bachelor of Science Degree CIP 40.0601

University Studies Requirements ........... 44 hrs
(See Academic Degrees and Programs.)

University Studies selections must include:
• Scientific Inquiry, Methodologies, and Quantitative Skills
  EES 101 The Earth and the Environment
  EES 102 Earth through Time
  MAT 150 Algebra and Trigonometry
• Global Awareness, Cultural Diversity and the World’s Artistic Traditions
  EES 110 World Geography
• University Studies Electives
  ARC 150 Introduction to Archaeology
  CSC 101 Introduction to Problem Solving Using Computers

Note: Certification requires a grade of B or better in one English composition course and a B or better in a University Studies math course, and public speaking. Additional requirements for admission to teacher education and student teaching must be met. See advisor and/or Office of Teacher Education Services for details.

Required Courses .................................... 33 hrs
  ARC 320 Human Ecology
  AST 115 Introductory Astronomy
  AST 116 Introductory Astronomy Laboratory
  EES 100T Transitions
  EES 125 Weather and Climate
  EES 202 Intro to Geographic Information Sciences
  EES 301 Understanding Scientific Communication
  EES 303 Introduction to Water Science
  EES 312 Introduction to Remote Sensing
  EES 336 Principles of Geomorphology
  EES 339 Field Geology
  or
  EES 350 Field Techniques in Geosciences

Required Limited Electives .................... 12 hrs
Select upper-level courses from the list of approved electives shown under the Geology Track.

Note: The National Science Teachers Association (NSTA) recommends a minimum of one course from each of the following three areas, with total of recommended supplemental science hours to include no fewer than 16 semester hours.

A. Biology
  BIO 101 Biological Concepts
  BIO 112 Field Biology
  BIO 221 Zoology: Animal Form and Function
  BIO 222 Botany: Plant Form and Function

B. Chemistry
  CHE 101 Consumer Chemistry
  CHE 105 Introductory Chemistry
  CHE 201 General College Chemistry
  CHE 202 General Chemistry and Qualitative Analysis

C. Physics
  PHY 235 Mechanics, Heat and Wave Motion
  PHY 236 Mechanics, Heat and Wave Motion Laboratory
  PHY 255 Electricity, Magnetism and Light
  PHY 256 Electricity, Magnetism and Light Laboratory

Required for Secondary Certification ........ 31 hrs
  EDU 180 Exploring the Teaching Profession
  EDU 280 Educating for Human Development
  EDU 380 Inclusive Teaching of Diverse Learners
  EDU 480 Effective Pedagogy
  EDU 485 Professional Perspectives for Teaching
  SEC 420 Practicum in Secondary Schools
  SEC 421 Student Teaching in the Secondary School
  SEC 422 Extended Practicum

Total Curriculum Requirements ............. 120 hrs

1Must be taken together and two semesters before student teaching.
2With a grade of B or better.
3Must be taken one semester before student teaching.