SCHOOL OF NATURAL RESOURCES

Applied Climate Science



Imagine a career collecting and interpreting climate data to determine the impacts of climate on society, the role of climate in agriculture and natural systems, or policy implications of climate and natural hazard management. If you are interested in exploring the impacts of weather and climate and using your knowledge of climate science to help people, you can realize your career goals through our applied climate major.

Make an appointment with one of our faculty advisers to learn more about our applied and climate major.

Contact Information

Amanda Bergeron-Bauer Recruitment Coordinator 102A Hardin Hall School of Natural Resources University of Nebraska Lincoln, NE 68583-0981 Phone: 402-472-7471 email: abergeron2@unl.edu snr.unl.edu

College of Agricultural Sciences and Natural Resources

(http://casnr.unl.edu)

snr.unl.edu



Career Path

Environmental consulting firms, Planning Agencies, Non-Governmental Organizations (NGOs) and Governmental Agencies addressing climate issues such as Natural Resources Districts, Water or Irrigation Districts, National Water and Climate Center, Natural Resources Conservation Service (NRCS), Climate Services Division of the National Weather Service, Regional Climate Centers, National Oceanic and Atmospheric Administration, National Climatic Data Center, the Environmental Protection Agency, National Center for Atmospheric Research and State Climate Offices.

Special Emphasis Courses

Basic & Applied Climatology, Microclimate: The Biological Environment, Statistical Analysis of Atmospheric Data, Regional Climatology, Bio-Atmospheric Instrumentation, The Climate System, Global Climate Change, Hydroclimatology, Physical Climatology.

Internships Available

Students have enjoyed internships with the High Plains Regional Climate Center and the National Drought Mitigation Center.



Applied Climate Science Major Requirements

2015-2016 Required Courses

UNL College of Agricultural Sciences and Natural Resources

SPECIFIC MAJOR REQUIREMENTS

METEOROLOGY

REQUIREMENT Hrs ACE METR 100 Weather & Climate 4 METR 205 Intro to Atmospheric Science 4 METR 454 Statistical Analysis of 3 Atmospheric Data METR 470 The Climate System: Analysis ACE 10 3 & Prediction Select one from: METR 483 Global Climate Change, METR 479 3 Hydroclimatology, METR 487 Earth's Climate: Past, Present, Future, METR 475 Physical Climatology

NATURAL RESOURCES & SCIENCES

15 Hours

17 Hours

NRES 370 Basic & Applied Climatology	3
NRES 408 Microclimate: The Biological Environment	3
NRES 469 Bio-Atmospheric Instrumentation	3
NRES 452 Climate & Society (capstone)	3
NRES 478 Regional Climatology	3

Major Requirements: 97-98

Specialization requirements and Electives: 22-23*

Credits Required to Graduate: 120

*Students will work with their adviser to select approximately 15 credits of specialized coursework. The specialization allows students to develop an individualized area of study that reflects their career goals and objectives. Possible areas of specialization include: agroecosystems, geospatial techniques, hazard assessment, human dimensions & environmental policy, livestock and wildlife, and water resources.

ADDITIONAL DEGREE REQUIREMENTS

COLLEGE INTEGRATIVE COURSES

6-7 Hours

REQUIREMENT	ACE	Hrs
NRES 103/AGRI 103 Introduction to		2
Agricultural & Natural Resource Systems		3
NRES 312 Introduction to Geospatial		
Information Sciences, NRES 412		
Introduction to Geographic Information		3-4
Systems, or 418 Introduction to Remote		3-4
Sensing		

COMMUNICATIONS COURSES

6 Hours

Written: Select from: ENGL 150, 151, 254, JGEN 120, 200	ACE 1	3
Oral: ALEC 102, COMM 109, 209, 210, 283 or 286, JGEN 300	ACE 2	3

MATHEMATICS AND STATISTICS

15 Hours

WITH LIVITATION THOU STATISTICS	151	ioui 3
MATH 106 Calculus I (5 cr)	ACE 3	5
MATH 107 Calculus II	ACE 3	4
CSCE 155N Computer Science I: Engineering and Science Focus (3 cr) or CSCE 155T Computer Science I: Informatics Focus (3 cr)	ACE 3	3
STAT 218 Intro to Statistics		3

NATURAL SCIENCE COURSES

15 Hours

BIOS 101 & 101L General Biology/Lab or AGRO 131 &132 Plant Science/Lab	ACE 4	4
NRES 220 & 222 Principles of Ecology/Lab		4
SOIL 153 Soil Resources		4
WATS 281 Introduction to Water Science		3

PHYSICAL SCIENCE COURSES

8 Hours

CHEM 109 General Chemistry I	ACE 4	4
PHYS 211 General Physics I	ACE 4	4

HUMANITIES & SOCIAL SCIENCE COURSES 15 Hours

History and humanities	ACE 5	3
Must choose from ECON 211 or ECON 212 or AECN 141)	ACE 6	3
Arts	ACE 7	3
Ethics and stewardship	ACE 8	3
Global awareness	ACE 9	3