COLLEGE OF NATURAL RESOURCES AND ENVIRONMENT
Bachelor of Science in Forestry and Wildlife
Major: Environmental Informatics
For Students Graduating in Calendar Year 2016
Department of Forest Resources and Environmental Conservation

Minimum hours for degree is 120. Prerequisites are indicated. There are no hidden prerequisites.

Core Degree Requirements (21 credits)

- FOR 2214 Introduction to Land and Field Measurements (Pre: MATH 1016) (3)
- FOR 2314 Forest Biology and Dendrology (Pre: BIOL 1006 or BIOL 1106) (2)
- FOR 2324 Dendrology Lab (1)
- FOR 3364 Forest Ecology and Sustainability OR FOR 3314 Forest Ecology and Silvics (Pre: 2324) (3)
- FOR 4014 Natural Resources Economics (Pre: ECON 2005 or AAEC 1005) or FOR 4424 Forest Resource Econ & Management (Pre: FOR 3314) (3)
- FOR 4434 Forest Resource Policy (3)
- COMM 2004 Public Speaking (3) OR AEE 3834 Comm Ag & Life Sc in Speaking (3) CST 100
- FOR 4114 Information Technologies for Natural Resources Management (Pre: 2214 or GEOG 2314) (3)

Other Requirements (33 credits)

- FOR 1004 Digital Planet (3)
- FOR 1044 Introduction to Environmental Informatics (3)
- CS 1124 Introduction to Media Computation OR CS 1044 Intro to Programming in C (3) CSL 210
- BIT 3424 Computer Modeling and Decision Analysis (Pre: BIT 2406 or CS 1054 or CS 1114 or CS 1124 or CS 1705) (3)
- BIT 4524 Systems Analysis (PRE: BIT 3424) (3)
- BIT 4514 Database Technology for Business (Pre: BIT 3424, BIT 4524) (3)
- STAT 3015 Biological Statistics (3) MTH 240 or MTH 241
- FOR 4214 Forest Photogrammetry (3)
- BIOL 2804 Ecology (Pre: (BIOL 1005 or BIOL 1105 or BIOL 1205H), (BIOL 1006 or BIOL 1106 or BIOL 1206H)) (3) BIO 270
- FOR 4444 Integrated Forest Management Practicum (3)
- BSE 2384 Soil & Water Resource Management (3)

Restricted Electives (12 credits)

- Earth Science (Choose 3 credit hours)
  - GEOS 1004 Physical Geology (3) EOL 105
  - GEOS 1024 Resources Geology (3)

- Planning and Law (Choose 3 credit hours)
  - AAEC 3314 Environmental Law (3)
  - AAEC 3604 Agricultural Law (3)

- Environment (Choose 6 credit hours)
  - ENSC 1015 Foundations of Environmental Science (3)
  - ENSC 1016 Foundations of Environmental Science (3)
  - ENSC 3604 Fundamentals of Environmental Science (Pre: BIOL 1105 or CHEM 1035) (3)
  - GEOG 1104 Introduction to Physical Geography (3) GEO 200
GEOG 3114 Introduction to Meteorology (3)
GEOG 3304 (CSES 3304) (Geos 3304) Geomorphology (Pre: 1104 or GEOS 1004 or GEOS 2104) (3)
GEOG 3404 Mountain Geography (Pre: GEOG 1104) (3)
SBIO 2784 Global Forest Sustainability (3)
FOR 2114 Ecology of Appalachian Forests (3)
FOR 2134 Plants & Greenspace in Urban Communities (3)
FOR 2514 Wildland Fire: Ecology and Management (Pre: BIOL 1105 or BIOL 1106) (3)
FIW 2114 Principles of Fisheries and Wildlife (Pre: BIOL 1006 or BIOL 1106) (3)
FIW 3414 Disease Ecology and Ecosystem Management (Pre: BIOL 1105, BIOL 1106) (3)
FIW 4464 Human Dimensions of Fisheries and Wildlife (Pre: FIW 2114) (3)

Free Electives—18 credits

Curriculum for Liberal Education Requirements (36 credits)

Area 1: Writing and Discourse (6 credit hours required)
- ENGL 1105 First-Year Writing
- ENGL 1106 First-Year Writing

Area 2: Ideas, Cultural Traditions, and Values (6 credit hours required)
- FOR 2554 Nature and American Values
- Approved CLE Area 2 course:

Area 3: Society and Human Behavior (6 credit hours required)
- AAEC 1005 or 1006 Economics of Food & Fiber Systems OR Econ 2005 Principles of Economics (3)
- Approved CLE Area 3 course:

Area 4: Scientific Reasoning and Discovery (8 credit hours required)
- BIOL 1105 Principles of Biology (3)
- BIOL 1106 Principles of Biology (3)
- BIOL 1115 Principles of Biology Laboratory (1)
- BIOL 1116 Principles of Biology Laboratory (1)

Area 5: Quantitative and Symbolic Reasoning (6 credit hours required)
- MATH 1205 Calculus
- MATH 1206 Calculus

Area 6: Creativity and Aesthetic Experience (1 credit hour required)
- Approved CLE Area 6 course:

Area 7: Critical Issues in a Global Context (3 credit hours required)
- FOR 2124 Forests, Society, & Climate
Environmental Informatics Notes

Satisfactory Progress
By the end of the semester in which the student has attempted 60 hours (including transfer, advanced placement, advanced standing, and credit by examination), "satisfactory progress" towards a B.S. degree in the College of Natural Resources will include the following minimum criteria:

- Having an in-major and overall grade point average (GPA) of at least 2.0. In-major GPA is calculated based on all courses with prefixes FOR, FIW, and GEOG.
- Passing at least 24 semester credits that apply to the Curriculum for Liberal Education (CLE)
- Passing the following courses, or their equivalents: BIOL 1105, 1106 and 1115, 1116; MATH 1205

Foreign Language Requirement: Students who did not successfully complete at least two (2) units of a single foreign or classical language during high school must successfully complete: a) six (6) semester hours of a single college level foreign or classical language (credits do not count toward graduation) or b) receive credit by examination for six (6) semester hours of a single foreign or classical language (credits do not count toward graduation). This must be accomplished by the end of the academic year in which the student has attempted 60 semester credit hours (including transfer, advanced placement, advanced standing, and credit by examination). For additional information refer to the Language Study Requirement section of the current undergraduate catalog.

Policy on Student Exchanges
Studying overseas or at another U.S. university is a wonderful opportunity to enhance your education. However, planning for an exchange should begin at least 9 months prior to leaving. This will allow time to determine what substitutions, if any, will be allowed and time to arrange your schedule at Virginia Tech to ensure that all requirements for graduation are met. You must complete an Exchange Program checklist (available in 138 Cheatham Hall) and obtain the required signatures before beginning the exchange program.

Curriculum Planning
Students should plan early with their advisors to determine appropriate sequences for their courses.

Degree Requirements
An in-major and overall GPA of 2.0 is required for graduation. Minimum hours for degree is 120.