

COLLEGE OF NATURAL RESOURCES AND ENVIRONMENT  
Department of Forest Resources and Environmental Conservation  
Bachelor of Science in Forest Resources and Environmental Conservation  
Major: Forestry  
Option: Forest Resource Management  
For Students Graduating in Calendar Year 2019

Minimum credit hours required for graduation is 120.

**Degree Core Requirements (21 credits):**

Forest Science (9 credits)

- \_\_\_ FREC 2214 Introduction to Land and Field Measurements (3 credits)
- \_\_\_ FREC 2314 Forest Biology and Dendrology (2 credits)
- \_\_\_ FREC 2324 Dendrology Laboratory (1 credit)
- \_\_\_ FREC 3314 Forest Ecology and Silvics (3 credits)

Geospatial Analysis (3 credits)

- \_\_\_ FREC 1004 Digital Planet (3 credits)

Environmental Economics (3 credits)

- \_\_\_ FREC 4014 Natural Resources Economics (3 credits)

Policy (3 credits)

- \_\_\_ FREC 4434 Natural Resource Policy (3 credits)

Oral Communication (3 credits – choose one)

- \_\_\_ COMM 2004 Public Speaking (3 credits) or FREC 3524 Environmental Interpretation (3 credits)

**Option Requirements (53 credits)**

- \_\_\_ ACIS 1004 Accounting Foundations (3 credits) or ACIS 2115 Principles of Accounting (3 credits)
- \_\_\_ CHEM 1035 General Chemistry (3 credits)
- \_\_\_ CHEM 1045 General Chemistry lab (1 credit)
- \_\_\_ CSES 3134 Soils in the Landscape (3 credits)
- \_\_\_ FREC 2414 Field Experiences in Forest Resources (2 credits)
- \_\_\_ FREC 2514 Wildland Fire Ecology & Management (3 credits)
- \_\_\_ FREC 3214 Forest Biometrics (3 credits)
- \_\_\_ FREC 3224 Forest Biometrics lab (1 credit)
- \_\_\_ FREC 3324 Silvicultural Principles and Applications (4 credits)
- \_\_\_ FREC 3344 Forestry Field Skills (1 credit)
- \_\_\_ FREC 3544 Outdoor Recreation Management (3 credits) (pre: FREC 2554)
- \_\_\_ FREC 3714 Forest Harvesting (3 credits)
- \_\_\_ FREC 3724 Forest Boundaries & Roads (3 credits)
- \_\_\_ FREC 3734 Timber Procurement (2 credits)
- \_\_\_ FREC 4114 Information Technologies for Natural Resource Management (3 credits)
- \_\_\_ FREC 4214 Forest Photogrammetry and Spatial Data Processing (3 credits)
- \_\_\_ FREC 4354 Forest Soil and Watershed Management (3 credits)
- \_\_\_ FREC 4444 Integrated Forest Management Practicum (3 credits)
- \_\_\_ FREC 4514 Forest & Tree Pest Management (3 credits)
- \_\_\_ Physical Science Elective (3 credits – choose one)
  - \_\_\_ CHEM 1036 General Chemistry (3 credits)
  - \_\_\_ GEOS 1004 Physical Geology (3 credits)
  - \_\_\_ GEOS 1014 The Earth and Life through Time (3 credits)
  - \_\_\_ GEOS 1024 Resources Geology and the Environment (3 credits)
  - \_\_\_ PHYS 1055 Intro to Astronomy (3 credits)
  - \_\_\_ PHYS 2205 General Physics (3 credits)

**CLE Requirements (36 credits)**

**Area 1: Writing and Discourse (6 credits)**

- \_\_\_ ENGL 1105 First-Year Writing (3 credits)
- \_\_\_ ENGL 1106 First-Year Writing (3 credits)

**Area 2: Ideas, Cultural Traditions, and Values (6 credits)**

- \_\_\_ CLE Area 2 course: \_\_\_\_\_ (3 credits)
- \_\_\_ CLE Area 2 course: \_\_\_\_\_ (3 credits)

**Area 3: Society and Human Behavior (6 credits)**

- \_\_\_ AAEC 1005 Economics of the Food & Fiber System (3 credits)
- \_\_\_ AAEC 1006 Economics of Food & Fiber System (3 credits)

**Area 4: Scientific Reasoning and Discovery (8 credits)**

- \_\_\_ BIOL 1105 Principles of Biology (3 credits)
- \_\_\_ BIOL 1115 Principles of Biology Lab (1 credit)
- \_\_\_ BIOL 1106 Principles of Biology (3 credits)
- \_\_\_ BIOL 1116 Principles of Biology Lab (1 credit)

**Area 5: Quantitative and Symbolic Reasoning (6 credits)**

- \_\_\_ MATH 1025 Elementary Calculus (3 credits)
- \_\_\_ MATH 1026 Elementary Calculus (3 credits)

**Area 6: Creativity and Aesthetic Experience (1 credit)**

- \_\_\_ CLE Area 6 course: \_\_\_\_\_ (1 credit)

**Area 7: Critical Issues in a Global Context (3 credits)**

- \_\_\_ FIW 2114 Principles of Fisheries & Wildlife (3 credits)

**Free Electives (10 credits)**

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**IMPORTANT NOTES ON THE FOLLOWING PAGE.**

## FOREST RESOURCE MANAGEMENT NOTES

1. **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 and Environment will include the following minimum criteria:
  - Having an in-major and overall grade point average of at least 2.0
  - 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; CHEM 1035, and MATH 1026
2. **Foreign Language Requirement:** A sequence of two (2) foreign language courses is required for graduation unless two (2) high school units of the same foreign language or six (6) transfer credit hours of foreign language have been earned. These credits do not count toward graduation. See catalog section on "Graduation Requirements".
3. **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.
4. **In-major GPA Computation:** Includes all courses designated as FIW, FREC, GEOG, NR, and SBIO.
5. An in-major and overall GPA of 2.0 is required for graduation.
6. Some of the listed courses have prerequisites. Be sure to consult with the University Catalog or check with your advisor.
7. Some courses must be taken in sequence to satisfy **prerequisites**. Consult your advisor.