

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 Operations and Business

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 (43 credits)

___ ACIS 1004 Accounting Foundations (3 credits) or ACIS 2115 Principles of Accounting (3 credits)

___ CSES 3134 Soils in the Landscape (3 credits) or FREC 4354 Forest Soil and Watershed Management (3 credits)

___ ENGL 3764 Technical Writing or ENGL 3774 Business Writing (3 credits)

___ FIN 3054 Legal and Ethical Environment of Business (3 credits)

___ FREC 2414 Field Experiences in Forest Resources (2 credits)

___ FREC 2514 Wildland Fire: Ecology and 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 Forest Field Studies (1 credit)

___ FREC 3714 Forest Harvesting (3 credits)

___ FREC 3724 Forest Boundaries and Roads (3 credits)

___ FREC 3734 Timber Procurement (2 credits)

___ FREC 4214 Forest Photogrammetry and Spatial Data Processing (3 credits)

___ FREC 4444 Integrated Forest Management Practicum (3 credits)

___ FREC 4714 Harvest Systems Evaluation (3 credits)

Restricted Electives (15 credits from the following courses, substitutions possible with approval)

- ___ AAEC 2104 Personal Financial Planning (3 credits)
- ___ AAEC 3314 Environmental Law (3 credits)
- ___ AAEC 3454 Small Business Management and Entrepreneurship (3 credits)
- ___ AAEC 3504 Marketing Agricultural Products (3 credits) (pre: AAEC 1005)
- ___ AAEC 4424 Agricultural Financial Management (3 credits)
- ___ AAEC 4754 Real Estate Law (3 credits)
- ___ AAEC 4764 Real Estate Appraisal (3 credits)
- ___ ACIS 2116 Principles of Accounting (3 credits)
- ___ COMM 1014 Introduction to Communication Studies (3 credits)
- ___ COMM 2044 Principles of Public Relations (3 credits) (pre: COMM 1014)
- ___ COMM 3124 Interpersonal Communication (3 credits)
- ___ COMM 3064 Persuasion (3 credits) (pre: COMM 1014)
- ___ FIN 3104 Introduction to Finance (3 credits) (pre: ACIS 2115, (BIT 2405 or STAT 3005 or STAT 3604 or STAT 4604 or STAT 4705 or STAT 4714) or (STAT 3615, STAT 3616), (ECON 2005 or ECON 2025H)
- ___ MGT 3064 Cornerstones of Entrepreneurship and Innovation (3 credits)
- ___ MGT 3304 Management Theory and Leadership Practices (3 credits) (junior standing)
- ___ MKTG 3104 Marketing Management (3 credits) (junior standing)
- ___ SBIO 2614 Introduction to Forest Products and Marketing (3 credits)
- ___ SOC 2024 Minority Group Relations (3 credits)
- ___ UAP 4374 Land Use and Environment (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 Econ of the Food & Fiber System or ECON 2005 Principles of Economics (3 credits)

___ AAEC 1006 Econ of the Food & Fiber System or ECON 2006 Principles of Economics (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)

___ CLE Area 7 course: _____ (3 credits)

Free Electives (5 credits)

FOREST OPERATIONS AND BUSINESS 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 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; 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.