

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 2021

Minimum credit hours required for graduation is 120. Prerequisites or enrollment restrictions may apply to some courses; consult the undergraduate course catalog, timetable of classes, or your advisor.

Degree Core Requirements (21 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 2614 Human-Environment Systems (3 credits)
- ___ FREC 3524 Environmental Interpretation* (3 credits) **or** COMM 2004 Public Speaking (3 credits)
- ___ FREC 4014 (NR 4014) Natural Resources Economics* (3 credits)
- ___ FREC 4114 Information Technologies for Natural Resources Management* (3 credits)
- ___ FREC 4434 Natural Resource Policy* (3 credits)

Forest Operations and Business Option Requirements (46 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* (3 credits) **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 3314 Forest Ecology and Silvics* (3 credits)
- ___ 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 Harvesting Systems Evaluation* (3 credits)

*Course may have prerequisites, corequisites, or other restrictions. Consult Course Catalog for details.

Forest Operations and Business Restricted Electives (15 credits)

Choose from the following courses, substitutions possible with approval

- ☐ AAEC 2104 Personal Financial Planning (3 credits)
- ☐ AAEC 3314 Environmental Law (3 credits)
- ☐ AAEC 3454 (MGT 3454) Small Business Management and Entrepreneurship* (3 credits)
- ☐ AAEC 3504 Marketing Agricultural Products* (3 credits)
- ☐ 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)
- ☐ COMM 3064 Persuasion* (3 credits)
- ☐ COMM 3124 Interpersonal Communication (3 credits)
- ☐ FIN 3104 Introduction to Finance* (3 credits)
- ☐ MGT 3064 Cornerstones of Entrepreneurship and Innovation (3 credits)
- ☐ MGT 3304 Management Theory and Leadership Practices (3 credits)
- ☐ MKTG 3104 Marketing Management (3 credits)
- ☐ 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)

*Course may have prerequisites, corequisites, or other restrictions. Consult Course Catalog for details.

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 Food Fiber Sys or ECON 2005 Principles of Economics (3 credits)

_____ AAEC 1006 Econ Food Fiber Sys 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 or MATH 1225 Calculus of a Single Variable (3-4 credits)

_____ MATH 1026 Elementary Calculus or MATH 1226 Calculus of a Single Variable (3-4 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 (2 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. In accordance with university guidelines, courses satisfying degree core requirements may not be double counted to satisfy other areas of a degree (e.g. CLE).
7. Some of the listed courses have prerequisites and some courses must be taken in sequence to satisfy prerequisites. Be sure to consult with the University Catalog or check with your advisor.