FOREST SCIENCE, BS

Forests cover one-third of Earth and nearly half of Wisconsin. They provide diverse habitat, wood and fiber, clean water, carbon storage, recreation, beauty, and connections to many cultures. Forest managers and scientists work largely outdoors to conserve and manage forest resources and respond to disturbances from insects, diseases, wildfire, fragmentation, deforestation, and other changes. They also use technology to map and inventory forests.

Students in forest science learn the skills needed for many career paths through a mix of classroom, laboratory, and field instruction. They make frequent visits to forests and engage in professional and student-led trainings and networking. Students have flexibility to customize their learning experience through a variety of different elective options.

The department offers excellent teaching, research, and computing facilities. Classes are sized to ensure that undergraduates receive individual attention. Each student has a faculty adviser, and many students gain experience assisting faculty with research projects.

Students go on to work as foresters, park rangers, conservation scientists, educators, researchers, environmental planners, arborists, and more. Graduates of the program also pursue graduate training in forestry, ecology, natural resource policy, or environmental law. Forest science has an excellent job placement track record.

LEARN THROUGH HANDS-ON, REAL-WORLD EXPERIENCES

Forest science students learn in many field and laboratory courses, putting their knowledge to work in outdoor, everyday circumstances. They also participate in a variety of opportunities beyond campus, including a threeweek introduction to forest ecosystems in northern Wisconsin and summer research opportunities. All forest science undergraduates are required to complete an internship, often with a federal, state, or local government agency, an environmental nonprofit organization, timber industry firm, or environmental consultant.

BUILD COMMUNITY AND NETWORKS

Students can join a competitive quiz bowl team and the Forestry Club (https://www.facebook.com/WUMadisonForestryClub/), UW–Madison's Student Chapter of the Society of American Foresters. Students can attend a national foresters conference and take part in trainings for prescribed burns, chainsaw use, and tree identification. Forest science undergraduates also have opportunities to work with local schools to help kids understand the forests around them.

CUSTOMIZE A PATH OF STUDY

Forest science students select from a large variety of classes to fit their career goals. Students can customize their learning experience and choose electives in focus areas such as forest conservation, forests and the environment, and forest management. In consultation with advisors, students will choose electives in alignment with their unique professional interests. The program meets accreditation standards of the Society of American Foresters, a key credential for many jobs.

MAKE A STRONG START

Students can take introductory courses that focus on forest science and the department's curriculum. One course explores forests of the world, as well as threats to forests, their roles in climate change, and strategies to conserve and manage them.

GAIN GLOBAL PERSPECTIVE

Forest science students are encouraged to complete study abroad experiences. Students can explore studying abroad as a Forest Science major utilizing the Forest Science Major Advising Page (https:// studyabroad.wisc.edu/academics/major-advising-pages-maps/forestscience/). Students work with their advisor and the CALS study abroad office (https://cals.wisc.edu/academics/undergraduate-students/ studyabroad/) to identify appropriate programs. The department also offers an international course focused on the extinction of species.

HOW TO GET IN

HOW TO GET IN

To declare this major, students must be admitted to UW–Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/ #enteringthecollegetext).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed in the Contact Box for the major.

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (http://guide.wisc.edu/undergraduate/ #requirementsforundergraduatestudytext) section of the *Guide*.

General Education

- Educatio
- Breadth–Humanities/Literature/Arts: 6 credits
 - Breadth–Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
 - Breadth–Social Studies: 3 credits
 - Communication Part A & Part B *
 - Ethnic Studies *
 - Quantitative Reasoning Part A & Part B *

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies, Science, and Capstone), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

COLLEGE REQUIREMENTS FOR ALL CALS BS DEGREE PROGRAMS

| Code | Title | Credits | |
|---|--|---------|--|
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. | | | |
| Residency: Students r residence at UW–Mac their undergraduate c | nust complete 30 degree credits in lison after earning 86 credits toward legree. | | |
| first year seminar/ (ht agricultural-life-scien calsfirstyearseminarce | tp://guide.wisc.edu/undergraduate/ ces/forest-wildlife-ecology/ purses/) | 1 | |
| international studies/ (http://guide.wisc.edu/ undergraduate/agricultural-life-sciences/forest-wildlife- ecology/calsinternationalstudiescourses/) | | | |
| Physical science fund | amentals | 4-5 | |
| CHEM 103 | General Chemistry I | | |
| or CHEM 108 | Chemistry in Our World | | |
| or CHEM 109 | Advanced General Chemistry | | |
| Biological science | | 5 | |
| Additional science (biological, physical, or natural) | | | |
| Science breadth (biological, physical, natural, or social) | | | |
| cals capstone learning experience: included in the requirements for each cals major (see "major requirements")/ (http://guide.wisc.edu/ undergraduate/agricultural-life-sciences/forest-wildlife- ecology/calscapstonerequirement/) | | | |

MAJOR REQUIREMENTS

| Code | Title | Credits | | | |
|--|---|---------|--|--|--|
| Complete one of the following (or may be satisfied by 5-6 | | | | | |
| placement exam): | | | | | |
| MATH 112 | Algebra | | | | |
| & MATH 113 | and Trigonometry | | | | |
| MATH 114 | Algebra and Trigonometry | | | | |
| Complete one of the | following: | 3 | | | |
| STAT 301 | Introduction to Statistical Methods | | | | |
| STAT 371 | Introductory Applied Statistics for the Life Sciences (recommended) | | | | |
| Chemistry | | | | | |
| Complete one of the | following: | 4-5 | | | |
| CHEM 103 | General Chemistry I | | | | |
| CHEM 108 | Chemistry in Our World | | | | |
| CHEM 109 | Advanced General Chemistry | | | | |
| Biology | | | | | |
| Complete one of the | following options: | 10 | | | |
| Option 1 (recommend | led introduction to biology | | | | |
| sequence): | | | | | |
| BOTANY/ BIOLOGY 130 & ZOOLOGY/ BIOLOGY 101 & ZOOLOGY/ BIOLOGY 102 | General Botany and Animal Biology and Animal Biology Laboratory | | | | |
| Option 2: | | | | | |
| BIOLOGY/ | Introductory Biology | | | | |
| BOTANY/ ZOOLOGY 151 & BIOLOGY/ BOTANY/ ZOOLOGY 152 | and Introductory Biology | | | | |
| Option 3: | | | | | |
| BIOCORE 381 & BIOCORE 382 & BIOCORE 383 & BIOCORE 384 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory | | | | |
| Wildlife Ecology | | | | | |
| Complete one of the | following: ¹ | 3 | | | |
| F&W ECOL 110 | Living with Wildlife - Animals, Habitats, and Human Interactions | | | | |
| F&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species ² | | | | |
| F&W ECOL 379 | Principles of Wildlife Management | | | | |
| F&W ECOL/ AN SCI/ ZOOLOGY 520 | Ornithology | | | | |
| Core | | | | | |
| Complete all of the for required in each core | llowing courses (grade of C or better course): | | | | |
| SOIL SCI 301 | General Soil Science | 3 | | | |

| or SOIL SCI/ ENVIR ST/ GEOG 230 | Soil: Ecosystem and Resource | | |
|---|---|-------|--|
| F&W ECOL 300 | Forest Measurements | 4 | |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 3-4 | |
| or F&W ECOL/ ENVIR ST/G L E/ GEOG/GEOSCI/ LAND ARC 371 | Introduction to Environmental Remote Sensing |] | |
| BOTANY/F&W ECOL 402 | Dendrology: Woody Plant Identification and Ecology | 3 | |
| F&W ECOL 305 | Forest Operations | 2 | |
| F&W ECOL 390 | Learning to Action: Professional Development | 1 | |
| F&W ECOL 410 & F&W ECOL 411 | Principles of Silviculture and Practices of Silviculture | 4 | |
| ENVIR ST/F&W ECOL 515 | Natural Resources Policy (recommended, satisfies Communications B requirement) | 3 | |
| or ENVIR ST/ ECON/POLI SCI/ URB R PL 449 | Government and Natural Resources | | |
| or ENVIR ST/ GEOG 439 | US Environmental Policy and Regulation | | |
| F&W ECOL 448 & F&W ECOL 449 & F&W ECOL 450 | Disturbance Ecology and Disturbance Ecology Lab (I): Herbivores and Fire and Disturbance Ecology Lab (II): Forest Pathogens | 5 | |
| F&W ECOL 550 & F&W ECOL 551 | Forest Ecology and Forest Ecology Lab | 4 | |
| A A E/ F&W ECOL 652 | Decision Methods for Natural Resource Managers | 3 | |
| F&W ECOL 658 | Forest Resources Practicum | 3 | |
| Electives | | | |
| Complete 12 credits fr | om Major Electives (see list below) | 12 | |
| Capstone | | | |
| Grade of C or better required in capstone. | | | |
| F&W ECOL 590 | Integrated Resource Management | 3 | |
| Total Credits | 7 | /8-81 | |

¹ Students may take multiple courses in this category. Courses taken beyond the requirement may count as major electives.

² May also fulfill CALS international studies requirement.

MINIMUM GRADE REQUIREMENT

Students will be required to receive a grade of C or higher on all of the forest science core courses and the capstone. Students who receive a grade of D or below will be required to retake the course for graduation.

MAJOR ELECTIVES FOREST SCIENCE MAJOR ELECTIVES

Code

Credits

12

Complete at least 12 credits from the following courses. Students can focus their interests using the categories.

| Sc | Soils and Landscapes: | | | | |
|---------------------------------------|--|---|--|--|--|
| | F&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | | | |
| | GEOG 329 | Landforms and Landscapes of North America | | | |
| | LAND ARC 668 | Restoration Ecology | | | |
| | SOIL SCI 302 | Meet Your Soil: Soil Analysis and Interpretation Laboratory | | | |
| | SOIL SCI/ F&W ECOL 451 | Environmental Biogeochemistry | | | |
| Ec | onomics and Busine | ess: | | | |
| | A A E 101 | Introduction to Agricultural and Applied Economics | | | |
| | A A E/ ENVIR ST 244 | The Environment and the Global Economy | | | |
| | A A E/ECON/ ENVIR ST 343 | Environmental Economics | | | |
| | A A E/ECON 371 | Energy, Resources and Economics | | | |
| | A A E 419 | Agricultural Finance | | | |
| | ECON 101 | Principles of Microeconomics | | | |
| | GEN BUS 310 | Fundamentals of Accounting and Finance for Non-Business Majors | | | |
| | GEN BUS 311 | Fundamentals of Management and Marketing for Non-Business Majors | | | |
| | INTL BUS 200 | International Business | | | |
| | LSC 270 | Marketing Communication for the Sciences | | | |
| | M H R 300 | Managing Organizations | | | |
| | M H R 305 | Human Resource Management | | | |
| | M H R 401 | Leading Teams | | | |
| | OTM 300 | Operations and Supply Chain Management | | | |
| Urban and Wildland Forest Management: | | orest Management: | | | |
| | BOTANY/ F&W ECOL 455 | The Vegetation of Wisconsin | | | |
| | HORT/ LAND ARC 263 | Landscape Plants I | | | |
| | HORT/ AGRONOMY/ SOIL SCI 326 | Plant Nutrition Management | | | |
| GI | S/Remote Sensing: | | | | |
| | ENVIR ST/ CIV ENGR/ LAND ARC 556 | Remote Sensing Digital Image Processing | | | |
| | ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | | | |
| | ENVIR ST/ LAND ARC/ SOIL SCI 695 | Applications of Geographic Information Systems in Natural Resources | | | |
| | F&W ECOL 395 | | | | |
| | GEOG 370 | Introduction to Cartography | | | |
| | GEOG/ CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | | | |
| | GEOG 378 | Introduction to Geocomputing | | | |
| | | | | | |

| Wildlife and Fisheries Ecology: | | F&W ECOL/ | Climate Change Ecology | |
|---------------------------------|--|-------------------------------|---|--|
| GEOG/ | Environmental Biogeography | ZOOLOGY 660 | | |
| BOTANY 338 F&W ECOL 306 | BOTANY 338 F&W ECOL 306 Terrestrial Vertebrates: Life History | | Environmental Conservation | |
| | and Ecology | LAND ARC/ | Wetlands Ecology | |
| F&W ECOL 318 | Principles of Wildlife Ecology | ENVIR ST 361 | | |
| F&W ECOL 379 | Principles of Wildlife Management | ZOOLOGY/ | Evolutionary Biology | |
| F&W ECOL 404 | Wildlife Damage Management | ANTHRO/ | | |
| F&W ECOL 655 | Animal Population Dynamics | BUTANY 410 | pagament and Policy | |
| ZOOLOGY/ | Limnology-Conservation of Aquatic | | Natural Deseurce Economics | |
| ENVIR ST 315 | Resources | F&W FCOL 531 | Natural Resource Economics | |
| ZOOLOGY 316 | Laboratory for Limnology- Conservation of Aquatic Resources | ENVIR ST/ | Renewable Energy Systems | |
| ZOOLOGY/ | Ecology of Fishes | BSE 367 | | |
| ENVIR ST 510 | Ecology of Fisher Lab | ENVIR ST/ GEOSCI 411 | Energy Resources | |
| ENVIR ST 511 | | ENVIR ST/ ECON/POLI SCI/ | Government and Natural Resources | |
| ZOOLOGY/ | Ornithology | URB R PL 449 | | |
| F&W ECOL 520 | | ENVIR ST/ | Energy Economics | |
| ZOOLOGY/ | Birds of Southern Wisconsin | A A E/ECON/ | | |
| AN SCI/ | | URB R PL 671 | | |
| F&W ECOL 521 | | F&W ECOL 561 | Wildlife Management Techniques | |
| Ecology and Biologica | al Diversity | LAND ARC/ | Prescribed Fire: Ecology and | |
| AGRONOMY/ | Grassland Ecology | | Introduction to Plant Pathology | |
| BOTANY/ | | Farth and Atmospheric Science | | |
| SUIL SCI 370 | later duction to Enternale au | ATM OCN 100 | Weather and Climate | |
| | Introduction to Entomology | ATM OCN 101 | Weather and Climate | |
| ENTOM/ | Plant-Insect Interactions | ATM OCN/ | Global Change: Atmospheric Issues | |
| BOTANY/ | | ENVIR ST 171 | and Problems | |
| ZOOLOGY 473 | | ATM OCN/ | Global Warming: Science and | |
| BOTANY/ | Fungi | ENVIR ST/ | Impacts | |
| PL PATH 332 | | GEOG 332 | | |
| BOTANY/ PL PATH 333 | Biology of the Fungi | ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | |
| BOTANY 401 | Vascular Flora of Wisconsin | F&W ECOL/ | Environmental Biogeochemistry | |
| BOTANY 422 | Plant Geography | SOIL SCI 451 | | |
| BOTANY/ | General Ecology | GEOG 342 | Geography of Wisconsin | |
| F&W ECOL/ | | MICROBIO 303 | Biology of Microorganisms | |
| | Environmental Data Science | MICROBIO 304 | Biology of Microorganisms | |
| | Principles of Landscape Ecology | | Soils and Environmental Chemistry | |
| F&W ECOL/ | Principles of Landscape Ecology | | Soil Biology | |
| LAND ARC 565 | | PL PATH 323 | Soli Blology | |
| Conservation Biology | | Human and Social Di | mensions of Ecology | |
| F&W ECOL/ | Forests of the World | AMER IND/ | Indigenous Peoples and the | |
| ENVIR ST 100 | | ENVIR ST 306 | Environment | |
| F&W ECOL/ ENVIR ST/ | Extinction of Species | AMER IND/ ENVIR ST 341 | Indigenous Environmental Communicators | |
| ZOOLOGY 360 | | AMER IND/ | Caring for Nature in Native North | |
| F&W ECOL/ | Conservation Biology | ENVIR ST/ | America | |
| BOTANY/ | | GEOG 345 | | |
| | | AMER IND/ | Critical Indigenous Ecological | |
| 2002001 001 | | GEOG 410 | Knowledges | |

| Тс | otal Credits | | 12 |
|----|-------------------------------------|---|----|
| | ENVIR ST/GEOG/ HISTORY 460 | American Environmental History | |
| | ENVIR ST/ PHILOS 441 | Environmental Ethics | |
| | ENVIR ST/ HIST SCI 353 | History of Ecology | |
| | ENVIR ST 307 | Literature of the Environment: Speaking for Nature | |
| | C&E SOC/ SOC 541 | Environmental Stewardship and Social Justice | |
| | C&E SOC/ CURRIC/ ENVIR ST 405 | Education for Sustainable Communities | |
| | C&E SOC/ F&W ECOL/ SOC 248 | Environment, Natural Resources, and Society | |
| | AMER IND/ ANTHRO/ BOTANY 474 | Ethnobotany | |

HONORS IN THE MAJOR

Students admitted to the university and to the College of Agricultural and Life Sciences are invited to apply to be considered for admission to the CALS Honors Program.

Admission Criteria for New First-Year Students:

Complete program application including essay questions

Admission Criteria for Transfer and Continuing UW-Madison Students:

- UW-Madison cumulative GPA of at least 3.25
- Complete program application including essay questions

HOW TO APPLY

The application is available on the CALS Honors Program website (https:// cals.wisc.edu/academics/undergraduate/current-students/honorsprogram/). Applications are accepted at any time.

New first-year students with accepted applications will automatically be enrolled in Honors in Research. It is possible to switch to Honors in the Major in the student's first semester on campus after receiving approval from the advisor for that major. Transfer and continuing students may apply directly to Honors in Research or Honors in the Major (after approval from the major advisor).

REQUIREMENTS

All CALS Honors programs have the following requirements:

- Earn at least a cumulative 3.25 GPA at UW-Madison (some programs have higher requirements)
- Complete the program-specific requirements listed below
- Submit completed thesis documentation to CALS Academic Affairs

REQUIREMENTS

To earn honors in the major, students are required to take at least 20 honors credits. In addition, students must take F&W ECOL 681 and F&W ECOL 682 when completing their thesis project; please see the

honors program page (https://cals.wisc.edu/academics/undergraduate/ current-students/honors-program/) for more information.

UNIVERSITY DEGREE REQUIREMENTS

| | Total Degree | To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
|--|--------------------|---|
| | Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. "In residence" credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs. |
| | Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

LEARNING OUTCOMES

LEARNING OUTCOMES

- 1. (Ecology) Understanding of taxonomy and ability to identify forest and other tree species, their distribution, and associated vegetation and wildlife.
- 2. (Ecology) Understanding of soil properties and processes, hydrology, water quality, and watershed functions.
- 3. (Ecology) Understanding of ecological concepts and principles including the structure and function of ecosystems, plant and animal communities, competition, diversity, population dynamics, succession, disturbance, and nutrient cycling.
- 4. (Ecology) Ability to make ecosystem, forest, and stand assessments.
- 5. (Ecology) Understanding of tree physiology and the effects of climate, fire, pollutants, moisture, nutrients, genetics, insects and diseases on tree and forest health and productivity.
- 6. (Forest Resources Measurement and Management) Ability to identify and measure land areas and conduct spatial analysis.
- (Forest Resources Measurement and Management) Ability to design and implement comprehensive inventories that meet specific objectives using appropriate sampling methods and units of measurement.
- 8. (Forest Resources Measurement and Management) Ability to analyze inventory data and project future forest, stand, and tree conditions.
- (Forest Resources Measurement and Management) Ability to develop and apply silvicultural prescriptions appropriate to management objectives, including methods of establishing and influencing the composition, growth, and quality of forests, and understand the impacts of those prescriptions.
- (Forest Resources Measurement and Management) Ability to analyze the economic, environmental, and social consequences of forest resource management strategies and decisions.

- 11. (Forest Resources Measurement and Management) Ability to develop management plans with specific multiple objectives and constraints.
- 12. (Forest Resources Measurement and Management) Understanding of the valuation procedures, market forces, processing systems, transportation and harvesting activities that translate human demands for timber-based and other consumable forest products into the availability of those products.
- (Forest Resources Measurement and Management) Understanding of the valuation procedures, market, and non-market forces that avail humans the opportunities to enjoy non-consumptive products and services of forests.
- (Forest Resources Measurement and Management) Understanding of the administration, ownership, and organization of forest management enterprises.
- (Forest Resource Policy, Economics, and Administration) Understanding of forest policy and the processes by which it is developed.
- (Forest Resource Policy, Economics, and Administration) Understanding of how federal, state, and local laws and regulations govern the practice of forestry.
- (Forest Resource Policy, Economics, and Administration) Ability to understand the integration of technical, financial, human resources, and legal aspects of public and private enterprises.

FOUR-YEAR PLAN

FOUR-YEAR PLAN

The four-year plan is a tool to assist you and your advisor in planning your academic career. Use it along with your DARS report and Course Search & Enroll to determine your program of study. Your program of study will likely look different from this sample four-year plan. Consult with your advisor to determine the best path for you. Courses may not be offered every year, so plan ahead with your advisor. Students must complete at least 120 total credits to be eligible for graduation.

SAMPLE FOREST SCIENCE FOUR-YEAR PLAN

| First Year | | | |
|---|---------------------------------------|---------|--|
| Fall | Credits Spring | Credits | |
| MATH 112 ¹ | 3 MATH 113 ¹ | 3 | |
| F&W ECOL/ ENVIR ST 100 (recommended for CALS International Studies requirement) | 3 CHEM 103, 108 or 109 | , 4-5 | |
| INTER-AG 155 (CALS First Year Seminar) | 1 BIOLOGY/ BOTANY 130 ² | 5 | |
| COMM A Course | 3 Ethnic Studies | 3 | |
| Elective | 3 | | |
| | 13 | 15-16 | |

Second Year

| Fall BIOLOGY/ ZOOLOGY 101 & BIOLOGY/ ZOOLOGY 102 | Credits 5 | Spring F&W ECOL 300 | Credits | Summer F&W ECOL 658 | Credits ³ 3 |
|--|------------------|--|---------|------------------------|----------------------------------|
| SOIL SCI 301 | 3 | GEOG/ CIV ENGR/ ENVIR ST 377 or F&W ECOL 371 | 3-4 | | |
| F&W ECOL/ BOTANY 402 | 3 | Electives | 6-7 | | |
| STAT 371 or 301 | 3 | | | | |
| | 14 | | 13-15 | | 3 |
| Third Year | | | | | |
| Fall | Credits | Spring | Credits | | |
| F&W ECOL/ ENVIR ST 515 | 3 | F&W ECOL 410 & F&W ECOL 4 | 4 11 | | |
| F&W ECOL 550 & F&W ECOL 5 |) 4 51 | F&W ECOL 448 | 3 3 | | |
| Major Electives | 6 | F&W ECOL 449 |) 1 | | |
| Humanities | 3 | Major Elective | 3 | | |
| | | Social Sciences | 3 | | |
| | 16 | | 14 | | |
| Fourth Year | | | | | |
| Fall | Credits | Spring | Credits | | |
| F&W ECOL 390 |) ³ 1 | F&W ECOL/ A A E 652 | 3 | | |
| F&W ECOL 590 |) 3 | F&W ECOL 305 | 5 2 | | |
| F&W ECOL 450 |) 1 | Electives | 9 | | |
| Major Electives | 3 | | | | |
| Humanities | 3 | | | | |
| Electives | 5 | | | | |
| | 16 | | 14 | | |

Total Credits 118-121

¹ MATH course dependent on placement score and transfer credit evaluation.

² BIOLOGY/BOTANY 130, BIOLOGY/ZOOLOGY 101 & BIOLOGY/ ZOOLOGY 102 are strongly recommended to satisfy the introductory biology requirement for forest science, but students may use BIOLOGY/ BOTANY/ZOOLOGY 151 & BIOLOGY/BOTANY/ZOOLOGY 152.

³ Students should plan ahead for this course with their advisor, as it may not be offered every year.

ADVISING AND CAREERS

ADVISING AND CAREERS ADVISING

Students are assigned an academic advisor as well as a faculty advisor. Faculty members lead undergraduate research, advise students on career planning, and help students with critical thinking. Professional academic advisors help students plan their coursework and identify internship opportunities, as well as ways to get involved in department and campus activities.

CAREER OPPORTUNITIES

Undergraduates in forest science prepare for a variety of career opportunities. They can work as foresters, arborists, park rangers, conservation scientists, environmental educators, geospatial analysts, researchers, and more. They also pursue graduate training in forestry, ecology, natural resource policy, or environmental law. Graduates of the program work for many organizations including the U.S. Forest Service, the Wisconsin Department of Natural Resources, the Society of American Foresters, the Aldo Leopold Foundation, environmental consultants, and private corporations.

PEOPLE

PEOPLE PROFESSORS

Bowe, Scott Burivalova, Zuzana Chen, Min Drake, David Karasov, William Hua, Jessica Kruger, Eric (chair) Ozdogan, Mutlu Pauli, Jonathan Peery, M. Zach Pidgeon, Anna Radeloff, Volker Raynor, Jennifer Rickenbach, Mark Rissman, Adena Townsend, Philip Van Deelen, Timothy Zuckerberg, Benjamin

AFFILIATED FACULTY

Balster, Nick (Soil Science) Marin-Spiotta, Erika (Geography)

INSTRUCTORS AND TEACHING FACULTY

Berkelman, James Nack, Jamie Meindl, George

STUDENT SERVICES

Hochmuth, Allee Laabs, Emily

For faculty and staff profiles, visit https:// forestandwildlifeecology.wisc.edu/people/faculty-and-staff/

WISCONSIN EXPERIENCE

WISCONSIN EXPERIENCE INTERNSHIPS

All forest science undergraduates are required to complete an internship. Students find positions outdoors, as well as laboratory and analytical positions. See the Internship & Job Resources (https://forestandwildlifeecology.wisc.edu/academics/undergraduate-programs/internship-job-resources/) page for more information.

RESEARCH EXPERIENCE

Forest science undergraduates can undertake independent research by joining a professor's field- or lab-based research activities. In their research experiences, students gain skills in a variety of forest science areas including forest structure and function, forest policy, human dimensions of forest management, forest economics, and plant species identification.

STUDENT ORGANIZATIONS

Students can join the Forestry Club, UW–Madison's Student Chapter of the Society of American Foresters. The club organizes the annual holiday tree sale, and students can attend a national foresters conference and take part in trainings for prescribed burns, chainsaw use, and tree identification.

COMPETITIVE TEAMS

Students can join a quiz bowl team that competes at the national Society of American Foresters annual conference.

GLOBAL ENGAGEMENT

Forest science students are encouraged to complete a study abroad experience. The department also offers an international course focused on the extinction of species that meets the CALS International Studies requirement. Students can find more information on the CALS study abroad advising page (https://cals.wisc.edu/academics/undergraduatestudents/international-programs/study-abroad-advising/).

COMMUNITY ENGAGEMENT AND VOLUNTEERING

Students involved in the Forestry Club volunteer at a number of activities including the annual holiday tree sale. Forest science undergraduates also have opportunities to work with local schools to help kids understand the forests around them.

On campus, the Morgridge Center for Public Service (https:// morgridge.wisc.edu/) provides resources to help students connect with volunteer opportunities based on their interests and goals.

RESOURCES AND SCHOLARSHIPS

RESOURCES AND SCHOLARSHIPS

There are five scholarships available to forest science students and fellowships are available for students to conduct research with professors. Students across the College of Agricultural and Life Sciences receive more than \$1.25 million in scholarships annually. Learn more about college

scholarships here (https://cals.wisc.edu/academics/undergraduatestudents/financing-your-education/cals-scholarships/).

UW–Madison offers a special practicum course for majors known as "Forestry Camp." The Forest Resources Practicum is an intensive, threeweek field course at the Kemp Natural Resources Station (https:// kemp.wisc.edu/) in Woodruff, Wisconsin. Students learn firsthand about forest ecosystem structure, function, processes, and services. Subject areas include basic field skills, plant identification, GPS, forest soils, wildlife survey methods, and forest ecology. Students at Forestry Camp work closely with faculty and natural resource professionals.

ACCREDITATION

ACCREDITATION

Society of American Foresters (https://www.eforester.org/)

Accreditation status: Accredited. Next accreditation review: 2027.