

FOREST RESOURCES TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE (AAS)

Description

The Associate of Applied Science in Forest Resources Technology provides the education and practical skills needed to succeed as a technician in forestry and natural resource fields throughout the western U.S. Job opportunities exist in government agencies (both state and federal) and in private industry (contractors, consultants, and private companies). The U.S. Forest Service is the primary employer for graduates of this program.

Traditional forest technician positions are now often referred to as natural resource technicians. Technicians spend considerable time outdoors. Typical entry-level positions include forest management activities, such as evaluation of reforestation efforts, timber sale layout, tree measurements, forest damage assessment, and other required forest management activities. Additionally, entry-level natural resource technicians may perform noxious weed identification and eradication, plant and wildlife surveys, fire protection and suppression, and stream monitoring and restoration.

The program has the advantage of being located near several national forests. Most program courses include outdoor lab opportunities, which provide hands-on experience and knowledge essential to being an effective natural resource technician. Additionally, students are able to take advantage of opportunities working with local agencies to develop and implement land management plans in the capstone course at the end of their second year.

The program is accredited by the Society of American Foresters.

Program Learning Outcomes

Upon successful completion of the program, students will be able to:

1. Interpret maps for the implementation of natural resource management.
2. Apply the principles of forest protection from fire, insects, and disease for the implementation of forest management.
3. Perform land area, trees, and forest stands measurement for the implementation of natural resource management.
4. Apply ecological concepts of species, communities, succession, and forest structural development for the implementation of natural resource management.
5. Apply the principles of conservation for the implementation of natural resource management.
6. Demonstrate the behaviors of a forestry professional.

Entrance Requirements

Academic Entrance Requirements

Recommended:

- Completion of MTH 060 Beginning Algebra or higher or minimum placement Math Level 10
- Completion of WR 065 Rhetoric and Critical Thinking II or higher or minimum placement Wr/Comm Level 7

Additional Program Costs (Beyond Standard Tuition/Fees and Textbooks)

Material Costs

- Equipment (hardhat, boots, vest, compass, GPS, datum, plant press, hand lens, rain gear, field book, etc.): \$665 to \$915
- Students are expected to provide their own appropriate field clothing and tools.

Enrollment Fees

- Lab fees: approximately \$250

Course Requirements

Course	Title	Credits
Core Courses		
FOR 100	Forestry Program Orientation	1
FOR 110	Wildland Fire Science I	2
FOR 111	Forestry Perspectives	4
FOR 126	Field Studies Pacific NW Forests	1
FOR 127	Plants of the Pacific Northwest	1
FOR 180	Co-op Work Experience Forestry	3
FOR 208	Soils: Sustainable Ecosystems	4
FOR 210	Wildland Fire Science II	2
FOR 211	Supervision and Leadership	3
FOR 215	Forest Resource Capstone	3
FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
FOR 235	Resource Measurements	4
FOR 236	Aerial Photo	3
FOR 237	Resource Sampling	4
FOR 240A	Forest Ecology	3
FOR 240B	Wildlife Ecology	3
FOR 241A	Field Dendrology	3
FOR 241B	Dendrology	3
FOR 260	Conservation of Natural Resources	3
FOR 271	Applied Forest Ecology	3
FOR 272	Forest Entomology/Pathology	3
FOR 273	Silviculture and Harvesting Systems	5
	Forestry Resource Elective ¹	3
FW 218	Survey of Northwest Mammals	2
or FW 212	Survey of Northwest Birds	
GEOG 265	Geographic Information Systems	4
Other Required Courses		
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
HHP 252A	Fitness/First Aid	3
MTH 102	Applied Technical Mathematics (or choose one course from the foundational requirements math list)	4

WR 121	Academic Composition ³	4
Choose one course from the following:		3-4
COMM 111	Fundamentals of Public Speaking	
COMM 115	Introduction to Intercultural Communication	
COMM 218	Interpersonal Communication	
COMM 219	Small Group Communication	
Total Credits		90-95

¹ Choose a minimum of 3 credits of courses not already required, with the following prefixes: BI, CH, FOR, FW, G, or GEOG.

² Students planning to continue education beyond the AAS should consider MTH 111 College Algebra and consult with their advisor for other specific transfer requirements.

³ Students planning to continue education beyond the AAS should also take WR 227 Technical Writing.

⁴ Students planning to attend Oregon State University following completion of the AAS should consider COMM 111 Fundamentals of Public Speaking and consult with their advisor.

Advising Notes

This program can be completed within two years provided the student is adequately prepared to take MTH 102 Applied Technical Mathematics and WR 121 Academic Composition and coursework starts Fall term. Students entering in Winter or Spring term and/or who require developmental writing and/or math courses can complete the program within three years.

This degree is designed for students planning to enter their chosen career upon graduation. As such, only selected credits are considered transferable to public or private baccalaureate institutions. This will vary by institution. Institutions with which COCC has articulation agreements in forest resources technology are Oregon State University and Oregon State University-Cascades.

Students planning to transfer to Humboldt State University, Oregon State University, or the University of Idaho to acquire a Bachelor of Science degree should meet with a forestry program advisor to discuss current transfer requirements. Many of the required undergraduate courses for the Bachelor of Science degrees can be taken at COCC and transferred accordingly.

Students are encouraged to meet with a faculty advisor in the forestry program to discuss a two- or three-year educational plan. Students who have obtained a degree or completed coursework from another institution may be able to transfer some coursework to apply toward the AAS in Forest Resources Technology. A meeting with faculty or their advisor is strongly recommended.

Performance Standards

- Academic Requirements:
 - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
 - All courses in the program must be completed with a grade of C or higher.

Sample Plan

First Year

Fall		Credits
FOR 100	Forestry Program Orientation	1
FOR 230A	Map, Compass and GPS	3
FOR 240A	Forest Ecology	3
FOR 241A	Field Dendrology	3
MTH 102	Applied Technical Mathematics (or choose one course from the foundational requirements math list)	4
Credits		14

Winter

CIS 120	Computer Concepts (or Computer Competency Test)	0-4
FOR 111	Forestry Perspectives	4
FOR 230B	Forest Surveying	3
FOR 235	Resource Measurements	4
FOR 271	Applied Forest Ecology	3
Credits		14-18

Spring

FOR 110	Wildland Fire Science I	2
FOR 126	Field Studies Pacific NW Forests	1
FOR 127	Plants of the Pacific Northwest	1
FOR 236	Aerial Photo	3
FOR 241B	Dendrology	3
FOR 272	Forest Entomology/Pathology	3
WR 121	Academic Composition ³	4
Credits		17

Summer

FOR 180	Co-op Work Experience Forestry	3
Credits		3

Second Year

Fall

FOR 210	Wildland Fire Science II	2
FOR 240B	Wildlife Ecology	3
FOR 273	Silviculture and Harvesting Systems	5
HHP 252A	Fitness/First Aid	3
Choose one of the following:		3-4
COMM 111	Fundamentals of Public Speaking	
COMM 115	Introduction to Intercultural Communication	
COMM 218	Interpersonal Communication	
COMM 219	Small Group Communication	
Credits		16-17

Winter

FOR 211	Supervision and Leadership	3
FOR 237	Resource Sampling	4
Forest Resource Elective ¹		3
GEOG 265	Geographic Information Systems	4
Credits		14

Spring

FOR 208	Soils: Sustainable Ecosystems	4
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FOR 215	Forest Resource Capstone	3
FOR 260	Conservation of Natural Resources	3
FW 218 or FW 212	Survey of Northwest Mammals or Survey of Northwest Birds	2
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	Credits	12
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	Total Credits	90-95