

FORESTRY

Renewable Materials

Associate of Science

PROGRAM DESCRIPTION

The UCC Forestry Program offers the following AS degrees: 1) Forestry, AS and 2) Renewable Materials, AS. These degrees prepare students for transfer to the bachelor's degree programs at Oregon State University (OSU) College of Forestry. The curriculum is intended to meet the requirements for the first two years of course work necessary for application to the Forestry Professional Program at OSU.

For more information about the UCC Forestry Program see the link at: www.umpqua.edu/forestry.

The following link has additional information about the programs at OSU College of Forestry: www.forestry.oregonstate.edu

Transfer advising guides are listed on the UCC website: <http://www.umpqua.edu/forestry>

Curriculum is listed on the following pages, including program requirements for each of the four options. Students should work closely with the UCC advisors and faculty and representatives of the OSU College of Forestry when developing term x term planners for the degree.

UCC students are encouraged to apply for dual enrollment at OSU through the Degree Partnership Program (DPP). Enrollment in DPP provides UCC students direct access to OSU advisors and other resources such as eligibility to apply for OSU scholarships.

The Renewable Materials, AS degree includes the following four options:

1. **Advanced Wood Manufacturing**
2. **Management & Marketing**
3. **Science & Engineering**
4. **Art & Design**

The **Advanced Wood Manufacturing** option This option focuses on behavior of bio-based materials and adds a strong foundation in advanced manufacturing processes such as automation, scanning and optimization systems, computer numerically controlled (CNC) machining, robotics, and 3D printing.

The **Management & Marketing** option provides the skills to manage organizations to be competitive in the global renewable materials marketplace or develop innovative and effective marketing programs for green products.

The **Science & Engineering** option is a flexible, math- and science-intensive option that allows students to design a personalized curriculum that opens doors to jobs that solve complex problems, create efficiencies, and foster intelligent use of renewable materials.

The **Art & Design** option studies renewable materials on an aesthetic level, whether as interior designers, fine artists, or entrepreneurs. Students will develop a knowledge of renewable materials and how those materials can function visually within the human space. In addition to the aesthetic aspect, students will gain an understanding of green building materials and green architecture.

PROGRAM OUTCOMES

This UCC program aligns with the programs offered through the OSU College of Forestry Program. UCC students that complete the Forestry, AS degree will have the knowledge, skills, and abilities to:

1. Identify, formulate, and solve technical problems
2. Communicate effectively
3. Function as part of a team
4. Demonstrate knowledge of wood and similar renewable materials and utilizing as industrial and building materials.

CAREER CONSIDERATIONS

Wood is a renewable resource that is used to make many products that our society uses every day. Oregon is a leader in the manufacturing and utilization of wood products. There are exciting new technological advances in wood manufacturing that are rapidly expanding the opportunities to utilize wood as a building material. There is a strong job demand for these skills, and there are many scholarship opportunities for students and job opportunities for graduates with this degree.

PROGRAM COURSE REQUIREMENTS

Advanced Wood Manufacturing Management & Marketing Science & Engineering Art & Design

Year One

General Education Requirements

CH 104	Introductory Chemistry	4
or CH 221	General Chemistry	4
SP 112	Fundamentals of Public Speaking	4
WR 121	Academic Composition	4

Core Program Requirements

CH 105	Introductory Chemistry	4
or CH 222	General Chemistry	4
ENGR 111	Engineering Orientation I	3
ENGR 245	Engineering Graphics: SolidWorks	3
FOR 111 ²	Intro to Forestry	3
FOR 112 ³	Problem Solving & Technology	3

Advanced Wood Manufacturing Science & Engineering

Requirements

CH 106	Introductory Chemistry	4
or CH 223	General Chemistry	4
MTH 251 ¹	Calculus I	5
MTH 252	Calculus II	4
MTH 265	Statistics for Scientists & Engineers	4

FORESTRY, continued

Renewable Materials

Associate of Science

Management & Marketing

Requirements

FOR 241	Dendrology	4
MTH 111 ^{1,4}	College Algebra	5
or MTH 112 ⁴	Elementary Functions	
MTH 241 ⁴	Calculus for Management	4
or MTH 251 ⁴	Calculus I	
MTH 243 ⁵	Intro to Probability & Statistics	4

Art & Design

Requirements

ART 115	Art & Design Foundations: 2D	4
MTH 111 ^{1,4}	College Algebra	5
or MTH 112 ⁴	Elementary Functions	5
MTH 241 ⁴	Calculus for Management	4
or MTH 251 ⁴	Calculus I	4
MTH 243 ⁵	Intro to Probability & Statistics	4

Year One Credits (minimum) 45

Year Two

Advanced Wood Manufacturing Management & Marketing Science & Engineering Art & Design

General Education Requirements

Arts & Letter Elective ⁶		3
ECON 201	MicroEconomics	4
WR 227	Technical Writing	4

Core Program Requirements

FOR 240	Forest Biology	4
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Advanced Wood Manufacturing Requirements

BA 211	Principles of Accounting I	3
BA 212	Principles of Accounting II	3
BA 213	Principles of Accounting II	3
ECON 202	MacroEconomics	4
HPE 295	Health & Wellness	3
PH 211	Physics w/Calculus I	5
PH 212	Physics w/Calculus II	5
PH 213	Physics w/Calculus III	5

Management & Marketing

Requirements

Arts & Letter of Social Science Elective ⁶		3
BA 150	Developing a Small Business	4
BA 211	Principles of Accounting I	3
BA 212	Principles of Accounting II	3
BA 213	Principles of Accounting II	3
BA 226	Business Law	4
ECON 202	MacroEconomics	4
HPE 295	Health & Wellness	3
VC 114	Intro to InDesign	3

Science & Engineering

Requirements

BA 226	Business Law	4
ECON 202	MacroEconomics	4
HPE 295	Health & Wellness	3
MTH 254	Vector Calculus	4
PH 211	Physics w/Calculus I	5
PH 212	Physics w/Calculus II	5
PH 213	Physics w/Calculus III	5

Art & Design

Requirements

Arts & Letter or Social Science Elective ⁶		3
ART 117	Art & Design Foundations: 3D	4
ART 131	Intro to Drawing: Line & Gesture	3
ART 234	Figure Drawing	3
ART 261	Digital Photography	3
ART 291	Sculpture	3
DRF 112	CAD I	3
DRF 113	CAD II	3
HPE 295	Health & Wellness	3
VC 114	Intro to InDesign	3

Year Two Credits (minimum) 45

NOTES:

- ¹ General education requirement for AS degree
- ² NR 201 can be substituted for FOR 111.
- ³ ENGR 112 can be substituted for FOR 112.
- ⁴ MTH 111 is pre-req for MTH241 and MTH 112 is pre-req for MTH 251.
- ⁵ MTH 265 can be substituted for MTH 243
- ⁶ One Arts & Letters elective must be Cultural Diversity. See following link for OSU Perspective requirements for General Education <https://main.oregonstate.edu/baccalaureate-core/transfer-students>.