

New Academic Program: Professional Science Master's (PSM) in Wood Innovation for Sustainability (Ecampus)

Program Proposed Start Date

Summer 2025

Program Description

The Professional Science Master's degree in Wood Innovation for Sustainability will be offered by the Department of Wood Science and Engineering in the College of Forestry. This non-thesis degree provides a foundation in wood science and technology. A technical set of courses provides a background in analysis and project management while another set of courses emphasizes communication and leadership. The program includes a capstone project/internship with an organization of choice. The program caters to students from different backgrounds, and it is designed to fit the needs of global working professionals. It provides an international perspective on the most pressing and contemporary topics in the field, with students collaborating with world-class faculty and industry leaders.

Graduates will be able to work in industry and agencies to advance sustainable practices to optimize resource flows in the wood-product industry. They will gain skills to improve processes, products, systems and businesses for higher resource efficiency. These skills are of paramount importance as society is increasingly invested in reducing its carbon footprint by prioritizing less resource-intensive manufacturing processes, bio-based building materials, as well as reducing and/or reusing waste materials.

Program Context

This degree program will complement the other, thesis-based graduate degrees in Wood Science and Engineering by serving global working professionals interested in working or expanding their knowledge base in the wood products industry.

Program Purpose/Relationship to University Mission/Strategic Plan

Oregon State University (OSU) is a leader in wood engineering education and research, but its timber specific offerings are unavailable online to a wider audience of practitioners and continuing learners. The PSM in Wood Innovation for Sustainability will help meet those needs and support the university's goal to provide transformative education that is accessible to all learners.

Need for the Program

There is no closely related program on this subject at other Oregon colleges or universities. The demand for wood science professionals is increasing due to the growth of the wood products industry and the need for sustainable forestry and wood technology. Ecampus examined the current and future labor market demand for professionals with a degree and/or experience in wood science, mass timber, forest products or a related field, the job opportunities available and the details for these positions. The wood products industry is a vital part of the global economy, with a projected compound annual growth rate of 7% by 2025. As demand for wood products continues to grow, so too does the need for professionals with expertise in wood science and

innovation. This includes individuals who are skilled in sustainable forestry practices, wood technology, and the development of new wood-based products. Fewer than three dozen institutions across the nation offer one or more programs in forest sciences and biology, wood science/products or forest resources production and management.

Program Financials

Enrollment should reach approximately 30 by the third year of the program, and the program can be delivered with current faculty. Interest in the program is expected to be strong, with higher enrollment over time.

RECOMMENDATION

All appropriate university committees and the OSU Faculty Senate have reviewed and support the proposal. The provost recommends that the Academic Strategies Committee approve the Professional Science Master's (PSM) in Wood Innovation for Sustainability effective Summer 2025, pending the approval of the Higher Education Coordinating Commission.