

## Forest Operations Management



A New Forestry Degree Program at Oregon State University

## The Need



- ❖ Company Competitive Advantage
  - ❖ Efficient forest practices
  - ❖ Increase value to acre, value to tree
  - ❖ Need for adaptation, innovation, problem solving
- ❖ Government Efficiency
  - ❖ Effective contract oversight
  - ❖ Improved business practices
  - ❖ Better communications

## Career Opportunities



- ❖ Own or manage forest business
- ❖ Companies, agencies
- ❖ Contract or operations management
- ❖ Forest consulting services
- ❖ Graduate school

## High School Prep



- ❖ Math
- ❖ Biology
- ❖ Chemistry
- ❖ Physics
- ❖ Humanities
- ❖ Social Sciences
- ❖ Communications
- ❖ Spanish

## Prep for Active Forest Management



- ❖ Joint Degree Program
  - ❖ Department of Forest Resources
  - ❖ Department of Forest Engineering
  - ❖ College of Business
- ❖ Components
  - ❖ General education: basic sciences, math, soils, communication, forest biology, silviculture
  - ❖ Special skills: surveying, harvest processes, watershed management, operations analysis, economics, supply chain management, computer computation, database management, GPS, GIS, finance, accounting, marketing
  - ❖ Real world: field courses at Mc-Dunn, field trips, 2 3-month internships with company or agency

## Freshman Year



- ❖ Forestry/Forest Engineering
  - ❖ Intro to Forestry
  - ❖ Tree and Shrub ID
  - ❖ Intro to Forest Engineering
  - ❖ FE Problem Solving and Technology
- ❖ Engineering
  - ❖ Engineering Graphics and Design
- ❖ Other
  - ❖ Public Speaking
  - ❖ Micro Econ
  - ❖ Gen Chem
  - ❖ Calculus
  - ❖ Eng Comp
  - ❖ Wood Technology and Utilization
  - ❖ Electives in BAC Core

## Sophomore Year



- ❖ Forestry/Forest Engineering
  - ❖ Soils: Sustainable Ecosystems
  - ❖ Forest Surveying
  - ❖ Forest Photogrammetry
  - ❖ Forest Biology
  - ❖ Forest GIS
- ❖ Business
  - ❖ Financial Accounting
  - ❖ Managerial Accounting
  - ❖ Intro to Entrepreneurship
- ❖ Other
  - ❖ Gen Physics
  - ❖ Intro Stats
  - ❖ Tech Writing
  - ❖ Cultural Diversity Elective
  - ❖ Internship

## Junior Year



- ❖ Forestry/Forest Engineering
  - ❖ Forest Route Surveying
  - ❖ Harvest process Engineering
  - ❖ Forest Operations Analysis
  - ❖ Strategic and Tactical Planning
  - ❖ Harvesting management
  - ❖ Mensuration
  - ❖ Forest Resource Econ I and II
  - ❖ Silviculture Principles
- ❖ Business
  - ❖ Business Law
  - ❖ Marketing
- ❖ Other
  - ❖ Construction Estimating
  - ❖ Internship

## Senior Year



- ❖ Forestry/Forest Engineering
  - ❖ Forest Operations Design I and II
  - ❖ Production Planning
  - ❖ Operations Regulations and Policy
  - ❖ FE Practice and Professionalism
  - ❖ Silviculture Reforestation
- ❖ Business
  - ❖ Managing Individual and Team Performance
  - ❖ Venture Management
- ❖ Other
  - ❖ Science, Technology and Society Elective
  - ❖ Western Culture Elective
  - ❖ Global Crises in Resource Ecology Elective