

DEPARTMENT OF WOOD SCIENCE & ENGINEERING
RESIDENT INSTRUCTION PROGRAM GOALS
rev January 2004

I. The undergraduate program leading to the ***BS in Wood Science & Technology*** is designed to give students the knowledge, skills, and confidence to become leaders in the wood products industry or to pursue advanced degrees. The typical student that successfully completes the undergraduate degree will have:

- A comprehensive understanding of:
 - ▶ the anatomical, physical, chemical, and mechanical properties of wood,
 - ▶ the opportunities for, and limits on, the use of wood and wood-based products,
 - ▶ the fundamentals of business including finance, marketing, and management,

- A working knowledge of the technologies and practices used for:
 - ▶ mechanical and chemical breakdown of wood,
 - ▶ manufacturing composite and important secondary wood products,
 - ▶ quality and process control,
 - ▶ modifying and improving wood product performance,

- A general familiarity with:
 - ▶ important non-timber forest products,
 - ▶ national and global markets for forest products
 - ▶ global issues involving wood including the environmental issues associated with producing and consuming wood products,

- Strong practical skills in:
 - ▶ oral and written communications,
 - ▶ computational methods and computer applications,
 - ▶ workgroup management including teamwork with people of diverse backgrounds,

- Industrial work experience that relates university instruction to real life.

II. The goals of the **Graduate Programs in Wood Science** are:

- to ensure students understand the fundamentals of wood science and technology and the tools of research,

- to enable students to obtain a deeper understanding of selected areas in the broad disciplinary fields related to forest products and wood science,
- to help students attain a high level of scholarship and enhanced skills in assimilation, interpretation, organization, evaluation and application of knowledge,
- to enhance student written and oral communications skills,
- to help students grow as responsible professionals and informed citizens of the world.

In addition, a goal of the **PhD program in Wood Science** is to enhance the creative abilities of students to become independent leaders in the discovery of new knowledge.