Department of Sustainable Bioproducts

Major Advisor: Head Rubin Shmulsky
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The forest products industry is one of the largest economic contributors to Mississippi, as well as in the United States. Employment in the furniture, lumber, wood products, composites, and paper sectors of the economy far exceeds the employment of any other manufacturing sector in the state. Mississippi's forest products industry recognizes the need for well-trained employees to help increase the conversion efficiencies and alter manufacturing processes to allow compatibility with a changing raw material base. The industry is large in terms of employment, both in Mississippi and nationwide.

The mission of the Department of Sustainable Bioproducts is to enhance the intellectual, cultural, social, and professional development of its students by providing them with knowledge and skills needed to utilize and conserve diverse forest resources effectively. In this regard, the Department's primary teaching responsibility is to provide high quality educational opportunities necessary to adequately prepare students for professional and scientific careers in sustainable bioproducts and wood science.

Presently, students interested in a sustainable bioproducts curriculum have the option of the Sustainable Bioproducts undergraduate or graduate program.

The Department of Sustainable Bioproducts' physical plant consists of eighteen buildings, with a combined floor space in excess of 90,000 square feet. These buildings house the analytical and testing equipment, pilot plants, and support facilities required for a comprehensive research program involving wood and other bioproducts.

Forest Products Minor

A Forest Products minor is available to non-majors to provide students with the knowledge of wood, wood products, their use, and importance to employers in many areas including construction, design, marketing and distributing, retail and wholesale management, sales, production, technical services, and scientific fields such as chemistry, engineering and industrial technology. A minor in Forest Products will also provide non-major students an excellent background for entering a graduate degree program in Sustainable Bioproducts. Academic advising is available in the Department of Sustainable Bioproducts located at 201 Locksley Way. A total of 18 hours is required to obtain a Forest Products minor.

English (General Education)		
EN 1103	English Composition I	3
or EN 1163	Accelerated Composition I	
EN 1113	English Composition II	3
or EN 1173	Accelerated Composition II	
Fine Arts (General Education)		
Any General Education course		3
Natural Sciences		
BIO 1134	Biology I	4
BIO 1144	Biology II	4
Additional Science		
CH 1043	Survey of Chemistry I	3
CH 1053	Survey of Chemistry II	3
CH 1051	Experimental Chemistry	1
Math (General Education)		
MA 1313	College Algebra	3
MA 1323	Trigonometry	3
ST 2113	Introduction to Statistics	3
or ST 3123	Introduction to Statistical Inference	
Humanities (General Education)		
Any Gen Ed courses		6
Social/Behavioral Sciences (General Education)		
Any course from Gen Ed list		3
Choose one of the following Economics courses:		3
AEC 2713	Introduction to Food and Resource Economics	
or EC 2113	Principles of Macroeconomics	

or FO 4113	Forest Resource Economics	
Oral Communicaton Requirement		
CO 1003	Fundamentals of Public Speaking	3
Writing Requirement		
AIS 3203	Professional Writing in Agriculture, Natural Resources, and Human Sciences	3
or MGT 3213	Organizational Communications	
or BIO 3013	Professional Writing for Biologists	
Major Core Courses (Required)		
SBP 1103	Introduction to Sustainable Bioproducts	3
SBP 1203	Anatomy of Wood and other Natural Materials	3
SBP 2012	Introduction to Bioproduct Industries	2
SBP 2123	Materials and Processing in Sustainable Bioproducts	3
SBP 3113	Biomaterial Phys Mech	3
SBP 3123	Biomass to Bioproducts	3
SBP 4253	Quantitative Methods in Sustainable Bioproducts	3
SBP 4313	Bioproducts and the Environment	3
SBP 4333	Bioproducts and Environmental Biotechnology	3
SBP 4443	Capstone Sustainable Bioproducts	3
Major Courses Professional Electives		
SBP 3143	Biomass Characteristics and Production	3
SBP 4000	Directed Individual Study	6
SBP 4023	Lignocellulosic Biomass Chemistry	3
SBP 4113	Adhesives and Biocomposites	3
SBP 4133	Biorefinery Processes	3
SBP 4144	Biocomposite Application and Manufacturing	4
SBP 4153	Biological Conversion of Biomass	3
SBP 4213	Deterioration and Preservation of Biomaterials	3
SBP 4243	Sustainable Bioproducts	3
SBP 4450	Undergraduate Research in Sustainable Bioproducts	1-6
Professional Electives		
Choose any class that is 3000 level or above from the following subjects: ABE, AEC, ARC 2713, BCH, BCS, BIO, BIS, BL, CE, CH, EC, EE, EG, EM, EPP, FIN, FO, GR, IE, TKI, LA, MGT, MKT, MA, ME, NREC, PH, PS, PSS, SBP, ST, WFA		18
Free Electives		8
Total Hours		124