Bachelor of Science in Paper Engineering
Department of Chemical Engineering

Summary of Changes

Inserting DEISJ as the required general education requirement, replacing the only General Education elective still exist in the program.

Proposed Catalog Description

Bachelor of Science in Paper Engineering

The paper engineering program is a chemical engineering-based curriculum designed to provide greater depth in fiber and paper processing for students preparing for an engineering career in the pulp, paper and allied industries. The pulp and paper industry is at the forefront of the renewable resources industry. It represents the first industry that uses biomass in large quantities to produce commodity and specialized products. Graduates are well prepared to move into assignments in the engineering field and advance quickly to positions of responsibility in the analysis and design of processes and equipment. The paper engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Undergraduate Program Requirements

Lower Division Required Courses (66 credits)

APM	205	Calculus I	G,M	4
APM	206	Calculus II	G,M	4
APM	307	Multivariable Calculus	M	4
APM	485	Differential Equations for Engineers and Scientists	M	3
ECH	132	Orientation and Introduction to Chemical Engineering I	ES	1
ECH	133	Introduction to Chemical Engineering II	ES	1
EWP	190	Writing and the Environment	G	3
EWP	290	Writing, Humanities, and the Environment	G	3
FCH	150	General Chemistry I	G,NS	3
FCH	151	General Chemistry Laboratory I	G,NS	1
FCH	152	General Chemistry II	G,NS	3
FCH	153	General Chemistry Laboratory II	G,NS	1
FCH	221	Organic Chemistry I	NS	3
FCH	222	Organic Chemistry Laboratory I	NS	1
FCH	223	Organic Chemistry II	NS	3
FCH	224	Organic Chemistry Laboratory II	NS	1
		Or PSE 223 Intro to Lignocellulosics, 4 credits	ES	

FOR	207	Introduction to Economics	G	3
GNE	160	Computing Methods	PE	3
PHY	211	General Physics I	G,NS	3
PHY	221	General Physics Laboratory I	NS	1
PHY	212	General Physics II	NS	3
PHY	222	General Physics Laboratory II	NS	1
PSE	201	The Art and Early History of Papermaking	G	3
PSE	200	Intro to Papermaking	ENG	3
PSE	202	Into to Papermaking Lab	ENG	1
ECH	202	Principles of Mass & Energy Balances	ENG	3
ECH	322	Fluid Mechanics	ENG	3
ECH	212	Engineering Thermodynamics	ENG	3
		DEISJ designated course	G	3

~~**Electives (3 credits, choose two from below)**~~

		~~General Education Course: American History~~	~~G~~	~~3~~
		~~General Education Course: Western Civilization~~	~~G~~	~~3~~

Upper Division Required Courses (44 credits)

APM	395	Probability and Statistics for Engineers	ES	3
ECH	322	Fluid Mechanics	ENG	3
ECH	323	Transport Phenomena	ENG	3
ECH	324	Process Operations Laboratory	ENG	3
EWP	444	Writing for Science Professionals		2
ESF	200	Information Literacy		1
PSE	304	Professional Internship	ENG	1
PSE	306	Professional Synthesis	ENG	1
PSE	350	Fiber Processing	ENG	3
PSE	465	Fiber and Paper Properties	ENG	4
PSE	467	Wet End Chemistry	ENG	3
PSE	462	Papermaking Processes I	ENG	3
PSE	478	Papermaking Processes II	ENG	2
PSE	481	Engineering Design	ENG	3
ECH	355	Engineering Design Economics	ENG	3
ECH	371	Process Control	ENG	3
PSE	450	Pulping and Bleaching	ENG	3

Directed Electives (15 credits)

Science Electives	3 - 6
Junior or higher engineering electives	9 – 12

TOTAL MINIMUM CREDITS FOR THE DEGREE **128**