

BACHELOR OF SCIENCE IN RENEWABLE MATERIALS SCIENCE

The renewable materials science program educates students in the science of materials and products made from renewable resources. The program provides an in-depth knowledge of materials such as wood, paper, modern packaging materials, natural fiber materials and advanced materials emphasizing sustainability, environmental consciousness and minimizing environmental footprint.

Students can explore a variety of careers in modern packaging, natural products and renewable materials industries, focused on technical, scientific and managerial tracks. The program will have the following options: paper, wood and polymer science. The third option is conducted with the Department of Chemistry.

Paper Science Option

Lower Division Required Courses

APM 205	Calculus I:Science & Engr	4
APM 206	Calculus II:Science & Engr	4
EFB 336	Dendrology I	3
EWP 190	Writing And The Envrnment	3
EWP 290	Research Writing & Humanities	3
FCH 150	General Chemistry I	3
FCH 151	General Chemistry I Lab	1
FCH 152	General Chemistry II	3
FCH 153	General Chemistry II Lab	1
FCH 221	Organic Chemistry 1	3
FCH 222	Organic Chemistry Lab 1	1
FCH 360	Physical Chemistry I	3
FOR 207	Introduction To Economics	3
GNE 160	Comp Methods/Engrs&Scientists	3
GNE 271	Statics	3
PHY 211	General Physics I	0 - 8

PHY 212	General Physics II	0 - 8
PHY 221	General Physics I Laboratory	0 - 8
PHY 222	General Physics II Laboratory	0 - 8
PSE 201	Art &Early History/Papermaking	3
PSE 223	Intro to Lignocellulosics	4
RMS 132	Intro/Renewable Mat Science I	1
RMS 133	Intro/Renewable Mat Science II	1
RMS 200	Renewable Mat&Comp/Lignocell	3
ECH 202	Prin Mass/Energy Balance	3
ECH 212	Engr Thermodynamics	3

General Education Course

Students are required to take one General Education in the following category as well as taking a total of 30 credit hours of General Education coursework in total.

Course Name	Codes*	Credits
General Education Course in Diversity, Equity, Inclusion and Social Justice	G	3

Upper Division Required Courses

APM 391	Intro/Probability&Stats	3
BPE 310	Colloid and Interface Science	3
ESF 200	Information Literacy	1
EWP 444	Prof Writing/Paper&Bioproc Eng	2
GNE 273	Mechanics of Materials	3
PSE 456	Management in Industry	3
RMS 335	Trsptr Properties of Materials	3

RMS 387	Renewable Mat/Sustainable Cons	3
RMS 388	Wood and Fiber Ident Lab	2
RMS 422	Composite Mat/Sustainable Cons	3
RMS 465	Renewable Materials & Surfaces	3
RMS 468	Product Design:Timber or Paper	3
RMS 481	Capstone Project/Senior Thesis	3

ESF 200 and EWP 444 are to be taken in the same semester in the same time block. Please consult your advisor if you have questions.

Students are required to take 4 Paper Science directed electives (12 credits).

Directed Electives

Course Name	Codes*	Credits
Science electives		3-6
Junior or higher Paper Science engineering electives		12

Total Minimum Credits For Degree: 124

