



# PAPER SCIENCE AND ENGINEERING

## BS IN FOREST RESOURCES

### SUGGESTED COURSE SEQUENCING

	AUTUMN	WINTER	SPRING
<b>Freshman Year</b>	CHEM 142 General Chemistry I MATH 124 Calculus I PSE 201 <sup>†</sup> PSE 202 <sup>†</sup>	CHEM 152 General Chemistry II MATH 125 Calculus II ENGL 131 <sup>1</sup>	CHEM 162 General Chemistry III MATH 126 Calculus III HCDE 231 Tech Writing General Elective
<b>Sophomore Year</b>	CHEM 237 Organic Chemistry I PHYS 121 Mechanics Math 307 Differential Equations PSE 248 <sup>†</sup> Paper Structure/Prop	CHEM 238 Organic Chemistry II PHYS 122 Electromag-Oscill ECON 200 Microeconomics Any I & S credit <sup>3</sup>	Q SCI 381 Statistics <sup>2</sup> CHEM E 325 Thermodynamics PHYS 123 Waves General Elective
<b>Junior Year</b>	PSE 406 <sup>†</sup> Natural Products Chem CHEM E 310 Material/Energy Balance Tech/Business Elective Any VLPA Elective	PSE 476 <sup>†</sup> Pulp/Bleaching CHEM E 330 Transport Processes Technical Elective Any VLPA Elective	PSE 478 <sup>†</sup> Pulp/Paper Lab CHEM E 340 Transport II CHEM 455 Physical Chemistry PSE 404 <sup>†</sup> Raw Materials Paper PSE 450 Seminar
<b>Senior Year</b>	Special Elective (see adviser) PSE 477 <sup>†</sup> Papermaking Process PSE 497 <sup>†</sup> Internship Technical Elective CHEM E 436 Chemical Eng Lab	PSE 479 <sup>†</sup> Pulp/Paper Lab II PSE 481 <sup>†</sup> Pulp/Paper Op PSE 480 <sup>†</sup> Pulp/Paper Control Tech/Business Elective General Elective	PSE 487 <sup>†</sup> Pulp/Paper Design PSE 482 <sup>†</sup> Pulp/Paper Des/Econ PSE 450 Seminar General Elective

~ 180 credits minimum required for degree ~

<p><b>TECHNICAL AND BUSINESS OPTION ELECTIVES</b> (12 credits minimum):</p> <p>Six (6) credits must come from the Engineering Topics list. Students may elect to complete remaining credits with a declared Business Option.</p>	<p><b>Engineering Topics (min 6 crs):</b> CSE 142*; CHEM E 220*, 326*, 341, 342, 345, 355, 455, 462, 480, 481; MSE 170, 310, 362, 463, 471, 475; CEE 220, 350, 461, 480, 482, 485, 486, 487, 488, 490, 493, 494; A A 210; E E 215; IND E 337; M E 230; PSE 490, 499</p> <p><small>* Recommended for CHEM E double degree applicants</small></p> <p><b>Business:</b> ESRM 320 (5) (required), ESRM 321 (5) (required), I BUS 300 (5), MKTG 301 (4), MKTG 335 (4), MKTG 450 (4), ESRM 400 (3), MGMT 300 (4), MGMT 401 (4), MGMT 403 (4), ACCTG 215 (5), ACCTG 225 (5), CFR 519 (5), OPMGT 301 (4)</p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Approved Tech/Business Courses</th> <th style="text-align: left;">CR</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Approved Tech/Business Courses	CR																				
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#### Academic Progress Policy

All PSE students are expected to maintain satisfactory progress with the department and the University.

[http://www.cfr.washington.edu/Acad/undergrad/PSE/pse\\_reqs.htm](http://www.cfr.washington.edu/Acad/undergrad/PSE/pse_reqs.htm)

# PAPER SCIENCE AND ENGINEERING MAJOR INFORMATION

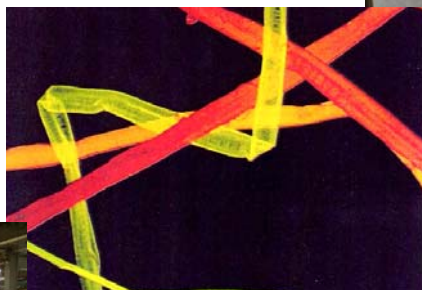
## Accreditation:

The Paper Science and Engineering Program is a rigorous ABET-accredited engineering major based in the School of Forest Resources in the College of the Environment. Accreditation was renewed in 2007.

## Additional Areas of Study:

Students with an interest in chemical engineering may apply for admission to CHEM E during their PSE junior year. Contact the CHEM E department for advising in advance of application and notify the PSE advisers of the intent to pursue a double degree.

Conversion of biomass into fuels and chemicals is also incorporated into the undergraduate curriculum and will be a major feature of a revised curriculum starting 2010.



## Sample Areas of Research:

High-speed chemical analysis of biomass

Use of natural non-wood products to make paper and other bio-products

Bioconversion of lignocellulosic biomass to ethanol

Biofuel and bioenergy options from wood

Surface and colloid science in bioprocessing

Fiber composites

## Admission

PSE is a competitive admission major. Applications will be considered year-round through either the SFR website or through the College of Engineering online application.

## Prospective UW students

[www.admit.washington.edu](http://www.admit.washington.edu)

## Program/study options

Research, internships, honors, scholarships, and graduate study for qualified applicants.

## Career/job information

[www.cfr.washington.edu/Acad/careers.htm](http://www.cfr.washington.edu/Acad/careers.htm)

Washington Pulp and Paper Foundation: [depts.washington.edu/wppf/](http://depts.washington.edu/wppf/)

College of Engineering Career Fair and Co-ops



UNIVERSITY of WASHINGTON

**School of Forest Resources**

Office of Student and Academic Services

Anderson Hall Rooms 116/130

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