# Forest Biomaterials (PhD)

## Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB 701</td>
<td>PhD Research Methods in Forest Biomaterials</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>FB 801</td>
<td>Doctoral Seminar</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select three of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB 516</td>
<td>Forest Products Colloids &amp; Surfaces</td>
</tr>
<tr>
<td>FB 565</td>
<td>Forest Biomaterials Physics</td>
</tr>
<tr>
<td>FB 723</td>
<td>Forest Biomaterials Chemistry</td>
</tr>
<tr>
<td>FB 760</td>
<td>Engineering Unit Operations for Biomass Conversion</td>
</tr>
</tbody>
</table>

### Elective Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB 510</td>
<td>Strategic Business Processes for the Forest Products Industry</td>
</tr>
<tr>
<td>FB 522</td>
<td>Chemical Principles for the Papermaking Process Engineer</td>
</tr>
<tr>
<td>FB 527</td>
<td>Wet-End and Colloidal Chemistry</td>
</tr>
<tr>
<td>FB 576</td>
<td>Environmental Life Cycle Analysis</td>
</tr>
<tr>
<td>FB 580</td>
<td>The Sustainable Bioeconomy</td>
</tr>
</tbody>
</table>

### Additional Courses

“Additional Courses” are approved in conjunction with the academic committee to meet 72 total hours

### Total Hours

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>82</td>
</tr>
</tbody>
</table>

## Faculty

### Full Professors

Dimitris S. Argyropoulos

Marko Hakovirta
Martin A. Hubbe
Hasan Jameel
Stephen S. Kelley
Melissa Pasquinelli
David C. Tilotta
Richard A. Venditti

### Associate Professors

Lucian A. Lucia
Philip H. Mitchell
Lokendra Pal
Sunkyu Park
Joel Justin Pawlak
Perry N. Peralta
Ilona Maria Peszlen
Leah C. Rathbun
Daniel Erique Saloni

### Assistant Professors

Ronalds Wilfredo Gonzalez
Paul Frederik Laleicke
Nathalie Marie Lavoine
Yuan Yao

### Practice/Research/Teaching Professors

Medwick V. Byrd
Elizabeth Kierepka
Rico Ruffino

### Emeritus Faculty

Hou-Min Chang
Ellis B. Cowling
Earl L. Deal
Eric L. Ellwood
Edward T. Funkhouser
Irving S. Goldstein
Adjunct Faculty

Sujit Banerjee
Jesse Daystar
Richard Phillips