# BIOSYSTEMS ENGINEERING, PHD

**Requirements for Students Matriculating in or before Academic Year 2022-2023.** Learn more about Graduate College Academic Regulation 7.0 ([http://catalog.okstate.edu/graduate-college/#70](http://catalog.okstate.edu/graduate-college/#70)).

**Total Hours:** 60

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAE 5501</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BAE 6101</td>
<td>Teaching Practicum in Biosystems Engineering</td>
<td>1</td>
</tr>
<tr>
<td>Advanced Math (if advanced math was not completed in Master’s program)</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Hours Subtotal</strong></td>
<td></td>
<td><strong>5</strong></td>
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## Specialization and Dissertation
Combination of Dissertation and Specialization to total 55 hours. 55

## Core Courses (By Specialty Area)

### Machine Systems
- BAE 5413 Advanced Data Acquisition and Control

### Environment and Natural Resources
- BAE 6313 Stochastic Methods in Hydrology ¹
- BAE 6333 Fluvial Hydraulics ²
- BAE 6343 Ground Water Contaminant Transport ³
- BAE 6520 Problems in Soil and Water Engineering ⁴

### Bioprocessing and Biotechnology
- BAE 5213 Renewable Energy Engineering
- BAE 5283 Advanced Bioprocess Engineering
- BAE 5413 Advanced Data Acquisition and Control

###CHE
- CHE 5123 Advanced Chemical Reaction Engineering
- CHE 5373 Process Simulation
- CHE 5743 Chemical Engineering Process Modeling

###STAT
- STAT 5303 Experimental Designs

## Research and Additional Requirements
- BAE 6000 Doctoral Research and Dissertation

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<thead>
<tr>
<th><strong>Hours Subtotal</strong></th>
<th>55</th>
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</table>

**Total Hours** 60

1 Prerequisites: BAE 4313 or CIVEN 5843 and STAT 4053.

2 Prerequisites: ENGSC 3233 or equivalent.

3 Prerequisites: AGRON 5583 or CIVEN 5913.

4 Prerequisites: CHEM 1515, BAE 4313 or equivalent.

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**Graduate College Doctor of Philosophy (PhD) Requirements**

Learn more about Graduate College 2022-2023 Doctor of Philosophy (PhD) Degree Program Requirements ([http://catalog.okstate.edu/](http://catalog.okstate.edu/))