# BIOSYSTEMS ENGINEERING, PHD

**Requirements for Students Matriculating in or before Academic Year 2023-2024.** 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>
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<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>
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</tbody>
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**Hours Subtotal**: 5

**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
- BAE 6333 Fluvial Hydraulics
- BAE 6343 Ground Water Contaminant Transport
- BAE 6520 Problems in Soil and Water Engineering

**Bioprocessing and Biotechnology**

- BAE 5213 Renewable Energy Engineering
- BAE 5283 Advanced Bioprocess Engineering
- BAE 5413 Advanced Data Acquisition and Control
- CHE 5123 Advanced Chemical Reaction Engineering
- CHE 5373 Process Simulation
- CHE 5743 Chemical Engineering Process Modeling
- STAT 5303 Experimental Designs

**Research and Additional Requirements**

- BAE 6000 Doctoral Research and Dissertation

**Hours Subtotal**: 55

**Total Hours**: 60

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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.

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

Learn more about Graduate College 2023-2024 Doctor of Philosophy (PhD) Degree Program Requirements ([http://catalog.okstate.edu/](http://catalog.okstate.edu/))