BIOSYSTEMS ENGINEERING, PHD

Requirements for Students Matriculating in or before Academic Year 2020-2021. Learn more about Graduate College Academic Regulation 7.0 (http://catalog.okstate.edu/graduate-college/#70).

Total Hours: 60 Hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<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>
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<tr>
<td></td>
<td>Advanced Math (if the student didn't take any advanced math in the Master's program)</td>
<td>3</td>
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Hours Subtotal: 55

Specialization and Dissertation

Combination of Dissertation and Specialization to total 55 hours.

Core Courses (By Specialty Area)

Machine Systems

- BAE 5413 Advanced Instrumentation and Control Systems for Biological Applications

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 Instrumentation and Control Systems for Biological Applications

Chemical Engineering

- 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

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 2020-2021 Doctor of Philosophy (PhD) Degree Program Requirements (http://catalog.okstate.edu/graduate-college/). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.