# B.S. in Biophysics

(120 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>PHYS 111</td>
<td>Physics I</td>
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<td>PHYS 111A</td>
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<td>MATH 111</td>
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<td>CHEM 121 or CHEM 125</td>
<td>Fundamentals of Chemical Principles I or General Chemistry I</td>
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<td>PHYS 114</td>
<td>Introduction to Data Reduction with Applications</td>
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<td>PHYS 121</td>
<td>Physics II</td>
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<td>PHYS 231A</td>
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<td>MATH 213</td>
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<td>Survey of Probability and Statistics or Probability and Statistics</td>
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<td>MATH 222</td>
<td>Differential Equations</td>
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<td>MATH 328</td>
<td>Mathematical Methods for Scientists and Engineers</td>
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<td>PHYS 335 or R750 315</td>
<td>Introductory Thermodynamics or Intro Thermodynamics</td>
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<td>BIOL 200</td>
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<td>PHYS 430</td>
<td>Classical Mechanics I</td>
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<td>PHYS 432</td>
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<td>CHEM 243</td>
<td>Organic Chemistry I</td>
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## 2nd Semester

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<tbody>
<tr>
<td>OPSE 310</td>
<td>Virtual Instrumentation</td>
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<tr>
<td>PHYS 433</td>
<td>Electromagnetism II</td>
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History and Humanities GER 300+ level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level) 3

Humanities and Social Science Senior Seminar GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/hss-capstone) 3

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>R120 201</td>
<td>Foundations Of Biology</td>
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<tr>
<td>R120 202</td>
<td>Foundations Of Biology Lab</td>
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| Term Credits | 16 |

## Fourth Year

### 1st Semester

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<td>PHYS 442 or R750 404</td>
<td>Introduction to Quantum Mechanics or Quantum Mechanics</td>
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<td>PHYS 418</td>
<td>Fundamentals of Optical Imaging</td>
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<td>300 or 400 level Physics Elective</td>
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<td>PHYS 350</td>
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| Term Credits | 15 |

### 2nd Semester

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<td>Biophysics II</td>
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<td>PHYS 450</td>
<td>Advanced Physics Laboratory</td>
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<td>OPSE 410</td>
<td>Biophotonics</td>
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| Term Credits | 13 |

| Total Credits | 120-122 |

## GER Electives

Refer to the General Education Requirement section of this catalog for further information on GER electives.

This curriculum represents the maximum number of credits per semester for which a student is advised to register. A full-time credit load is 12 credits. First-year students are placed in a curriculum that positions them for success which may result in additional time needed to complete curriculum requirements. Continuing students should consult with their academic advisor to determine the appropriate credit load.