



# B.S. in Biophysics

## Major Requirements (65 sh)

### SUMMARY OF MAJOR REQUIREMENTS

- 25 sh of Foundational Courses
  - 15 sh of Mid-Level Courses
  - 14 sh of Upper-Level Courses
  - 11 sh of Approved Restricted Electives
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- 65 sh total

### FOUNDATIONAL COURSES

Course #	Course Name	Course Designations / Notes	Sem/Yr	Grade	Credits
PHYS 00 130	Building Momentum as a Physics Student at Rowan and Beyond	Satisfies Rowan Seminar			1
PHYS 00 220	Introductory Mechanics	Satisfies Scientific Literacy			4
PHYS 00 221	Introductory Thermodynamics, Fluids, Waves, & Optics				4
PHYS 00 222	Introductory Electricity & Magnetism				4
MATH 01 230	Calculus III				4
CHEM 07 200	Organic Chemistry I				4
CHEM 07 203	Organic Chemistry II for BMS				4
<b>Subtotal: 25 sh</b>					

### MID-LEVEL COURSES

Course #	Course Name	Course Designations / Notes	Sem/Yr	Grade	Credits
BMS 01 315	Basic Instrumentation for BMS				4
PHYS 00 330	Mathematical Methods for Physics				3
PHYS 00 300	Modern Physics				4
CHEM 07 348 or BMS 01 333	Biochemistry or Cellular Biochemistry				4
<b>Subtotal: 15 sh</b>					

### UPPER-LEVEL COURSES

Course #	Course Name	Course Designations / Notes	Sem/Yr	Grade	Credits
PHYS 00 360	Molecular Biophysics				4
PHYS 00 375	Radiation Physics				3
PHYS 00 371	Biophysics: Fundamentals of Biomaterials				3
PHYS 00 451	Biophysics Research I				2
PHYS 00 452	Biophysics Research II				2
<b>Subtotal: 14 sh</b>					

### APPROVED RESTRICTED ELECTIVES (CHOOSE 11 SH FROM THE FOLLOWING LIST)

- *Physics* — any 300+ course
- *Biology* — any 200+ course
- *Chemical Engineering*: Bioprocess Engineering [CHE 06 462]; Principles of Biomedical Processes [CHE 06 472]; Fundamentals of Particle Technology [CHE 06 474]; or Tissue Engineering Fundamentals [CHE 06 478]
- *Chemistry* — any 300+ level course and: Introduction to Forensic Science [CHEM 05 249]; or Analytical Chemistry [CHEM 09 249]

Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
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<b>Subtotal: 11 sh</b>					

## Free Electives for this Major/Degree (22 sh)

*Students should choose Free Electives that satisfy any Rowan Core or Rowan Experience requirements that are not fulfilled by Major or Non-Program courses.*

Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
<b>Subtotal: 22 sh</b>					

**Total Program Credits Required for this Major / Degree: 120 SH**