

# Accelerated B.S. in Applied Physics/M.D.

(115 credits)

**First Year**

<b>1st Semester</b>		<b>Term Credits</b>
R120 101	General Biology	4
CHEM 125	General Chemistry I	3
HUM 101	English Composition: Writing, Speaking, Thinking I	3
MATH 111	Calculus I	4
PHYS 111	Physics I	3
PHYS 111A	Physics I Laboratory	1
FRSH SEM	Freshman Seminar	0
<b>Term Credits</b>		<b>18</b>

**2nd Semester**

CHEM 124	General Chemistry Laboratory	1
CHEM 126	General Chemistry II	3
MATH 112	Calculus II	4
PHYS 121	Physics II	3
PHYS 121A	Physics II Laboratory	1
R120 102	General Biology	4
Social Science (lower-level) GUR Elective		3
<b>Term Credits</b>		<b>19</b>

**Summer**

CS 113 or CS 115	Introduction to Computer Science or Intro. to CS I in C++	3
MATH 211	Calculus III A	3
<b>Term Credits</b>		<b>6</b>

**Second Year****1st Semester**

English Composition and Cultural History (lower-level):GUR Elective		3
R120 201	Foundations Of Biology	3
PHYS 234	Physics III	3
PHYS 231A	Physics III Laboratory	1
CHEM 243	Organic Chemistry I	3
English Composition and Cultural History (lower-level):GUR Elective		3
Physical Education:GUR Elective		1
<b>Term Credits</b>		<b>17</b>

**2nd Semester**

MATH 328	Mathematical Methods for Scientists and Engineers	3
MATH 222	Differential Equations	4
Social Science (lower-level):GUR Elective		3
CHEM 244	Organic Chemistry II	3
MATH 225	Survey of Probability and Statistics	1
PHYS 335	Introductory Thermodynamics	3
<b>Term Credits</b>		<b>17</b>

**Summer**

Humanities and Social Sciences (upper-level):GUR Elective		3
Management:GUR Elective		3
<b>Term Credits</b>		<b>6</b>

**Third Year****1st Semester**

Physical Education:GUR Elective		1
PHYS 430	Classical Mechanics I	3
PHYS 432	Electromagnetism I	3
OPSE 301	Introduction to Optical Science and Engineering	3
PHYS 350	Biophysics I	3
PHYS 442	Introduction to Quantum Mechanics	3
<b>Term Credits</b>		<b>16</b>
<b>2nd Semester</b>		
Humanities and Social Sciences (upper-level):GUR Elective		3
PHYS 451	Biophysics II	3
OPSE 410	Biophotonics	3
Capstone Semina Humanities and Social Sciences (upper-level)r:GUR Elective		3
PHYS 433	Electromagnetism II	3
<b>Term Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>114</b>

Refer to the **General University Requirements** for further information on GUR electives

## Co-op

Co-op courses bearing degree credit replace a technical elective or another course approved by the faculty advisor in the students major department. In applied physics, both PHYS 311 Co-op Work Experience I and PHYS 411 Co-op Work Experience II are taken for degree Credit with permission.