



**BACHELOR of SCIENCE in PHYSICS (#754)**

Department of Physics and Astronomy  
 Ogden College of Science and Engineering  
 Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected. Admission to the major is required to register for all 300 and 400 nursing classes. All upper-division nursing courses must be taken in sequence to meet NURS course prerequisite requirements.

**SAMPLE – Finish in Four Plan**

FIRST YEAR			
Fall Semester		Spring Semester	
PHYS 180 & 181 – Introductory Modern Physics & Lab	4	PHYS 255 & 256 – University Physics I & Lab	5
MATH 136 – Calculus I	4	MATH 137 – Calculus II	4
ENG 100 – Introduction to College Writing	3	CHEM 120/121 – College Chemistry & Lab	5
COMM 145 – Fundamentals of Publics Speaking <b>OR</b> COMM 161 – Business/Professional Speaking	3	HIST 119 – Western Civilization to 1648 <b>OR</b> HIST 120 - Western Civilization Since 1648	3
<b>TOTAL CREDIT HOURS</b>	<b>14</b>	<b>TOTAL CREDIT HOURS</b>	<b>17</b>

SECOND YEAR			
Fall Semester		Spring Semester	
PHYS 265 & 266 – University Physics II & Lab	5	PHYS 321 – Introductory Modern Physics II	3
MATH 237 – Multivariable Calculus	4	MATH 331- Differential Equations	3
MATH 307 – Intro to Linear Algebra <b>OR</b> MATH 370 – Applied Techniques in Mathematics	3	PHYS 301 – Electrical Measurements Laboratory	1
ENG 200 - Introduction to Literature	3	ENG 300 – Writing in the Discipline	3
		General Education Course	3
		General Education Course	3
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>

THIRD YEAR			
Fall Semester		Spring Semester	
PHYS 350 – Classical Mechanics I	3	PHYS 480-Quantum Physics or Physics 441/404 - Optics & Lab	3/4
PHYS 470/ 471 – Nuclear Physics & Lab or Physics 460/406 - Solid State Physics & Lab or Physics 425 - Physics of Materials Science	4/3	PHYS 318 – Data Acquisition Using Labview	3
PHYS 302 – Atomic Physics Laboratory	1	PHYS 398 – Junior Seminar	.5
MATH 435 – Partial Differential Equations	3	PHYS 450 – Classical Mechanics II or Physics 445 - Electromagnetism II	3
General Education Course	3	General Education Course	3
PHYS 330 - Thermodynamics	3	MATH 382 – Probability and Statistics I	3
<b>TOTAL CREDIT HOURS</b>	<b>17/16</b>	<b>TOTAL CREDIT HOURS</b>	<b>15.5/16.5</b>

FOURTH YEAR			
Fall Semester		Spring Semester	
General Education Course	3	PHYS 445 – Electromagnetism II or Physics 450 - Classical Mechanics II	4
PHYS 470/ 471 – Nuclear Physics & Lab or Physics 460/406 - Solid State Physics & Lab or Physics 425 - Physics of Materials Science	4/3	MATH 450 – Complex Variables	3
PHYS 440 - Electromagnetism	3	Physics 480 - Quantum Physics or Physics 441/404 - Optics & Lab	3/4
General Education Course	3	General Education Course	3
PHYS 498 – Senior Seminar	.5		
Physics 316 - Computational Physics	3		
<b>TOTAL CREDIT HOURS</b>	<b>16.5/15.5</b>	<b>TOTAL CREDIT HOURS</b>	<b>13/14</b>

**Total Credit Hours: 125**

For more details and courses offered in the Colonnade General Education program visit the [website](#).

**World Language Requirement:** Language Proficiency of novice-high before completing 60 credit hours is required (or completion of 2nd level of a language). Two credits (or equivalent) of a single world language in High School satisfies this WKU requirement.

**For more Information:**

**Department:** Chemistry

**Website:** [www.wku.edu/chemistry](http://www.wku.edu/chemistry)

**Phone:** Chemistry – (270) 745-3457

**Email:** [chemistry@wku.edu](mailto:chemistry@wku.edu)

Course Descriptions: <http://www.wku.edu/undergraduatecatalog/>