

**UNCP Department of Chemistry and Physics  
Requirements for a Bachelor of Science in Applied Physics  
(120 total credit hours)**

<b>Freshman Seminar (1 credit hour)</b>							
<b>General Education (44 credit hours)</b>							
<b>CORE MATH &amp; SCIENCE COURSES – 62 total credit hours</b>							
<b>Physics - 33 credit hours</b>							
	<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>		<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
	PHY 2000	University Physics I	3		PHY 3000	Classical Mechanics	3
	PHY 2010	University Physics II	3		PHY 3200	Electricity & Magnetism I	3
	PHY 2060	University Physics Lab I	1		PHY 3260	Heat & Temperature	3
	PHY 2070	University Physics Lab II	1		PHY 3560	Modern Electronics	3
	PHY 2180	Optics	3		PHY 4200	Advanced Laboratory I - WD	3
	PHY 2560	Modern Physics - WE	4		PHY 4990	Independent Study	3
<b>Mathematics – 18 credit hours</b>				<b>Chemistry - 8 credit hours</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>		<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
	MAT 2210	Calculus I	4		CHM 1100	General Chemistry Lab I	1
	MAT 2220	Calculus II	4		CHM 1110	General Chemistry Lab II	1
	MAT 3150	Linear Algebra I	3		CHM 1300	General Chemistry I	3
	MAT 3310	Calculus III	4		CHM 1310	General Chemistry II	3
	MAT 3320	Differential Equations	3				
<b>Computer Science – 3 credit hours</b>				*An equivalent programming course can be substituted			
	CSC 2050*	Into. to Programming	3		for CSC 2050		
<b>ELECTIVES</b>							
<b>ELECTIVES** – 18 (32) credit hours</b>							
Electives can be from any area. However, the following is a <i>strongly recommended</i> list of subject related courses.							
	PHS 1560	Astronomy	3				
	PHS 1570	Astronomy Lab	1				
	PHY 3210	Electricity & Magnetism II	3				
	PHY 3360	Mathematical Physics	3				
	PHY 4000	Quantum Mechanics	3				
**The total number of elective credit hours is dependent on the distribution of General Education courses.							

**WE/WD: 9 CREDIT HOURS ARE REQUIRED AS PART OF THIS PROGRAM.**