

## **BS: Concentration in Chemistry Education**

The degree leads to state licensure to teach in Virginia. Apply for Undergraduate Path to Teacher Licensure after completing 60 hrs. with a cumulative GPA  $\geq$  3.0.

<b>MAJOR REQUIREMENTS (65 hours)</b>	<b>Credits</b>
General Chemistry I and II	CHEM 211, 212 , 213, 214 (4,4) 8
Organic Chemistry I and II	CHEM 313, 314 (3,3) 6
Organic Chemistry Lab I	CHEM 315 2
Quantitative Chemical Analysis	CHEM 321 4
Physical Chemistry I	CHEM 331 3
Bioinorganic Chemistry	CHEM 446 3
General Biochemistry I	CHEM 463 4
Physical Chem. Lab I or Biochem. Lab	CHEM 336 or 465 2
Laboratory Instructional Methods	CHEM 470 3
CHEM In-depth elective	(see list for B.S. Chem) 3
Analytic Geometry and Calculus I	MATH 113- <i>or</i> - 123-124 4
Analytic Geometry and Calculus II	MATH 114 4
Statistics	STAT 250 3
Physics	PHYS 243-246 or 160-261 8
Cell Structure & Function	BIOL 213 4
Earth Science	GEOL 101 4
<b>LICENSURE REQUIREMENTS* (21 hours)</b>	
Foundations of Secondary Education	EDUC 422 3
Human Development, Learning & Teaching	EDUC 372 <sup>a</sup> 3
Teaching Science in the Secondary School	EDCI 473 3
Advanced Methods of Teaching Science in Secondary School	EDCI 483 3
Literacy in the Content Areas	EDRD 419 3
Student Teaching in Education	EDCI 490 <sup>b</sup> 6
<b>GENERAL EDUCATION (24 hours)</b>	
Written Communication	ENGH 101, 302 (3,3) 6
Oral Communication	COMM 100 or 101 3
Western Civilization/World History	HIST 100 or 125 3
Information Technology	3
Literature	3
Fine Arts	3
Global Understanding	3

### **ELECTIVES (10 Hours)**

\*EDCI 491 (2) is also required for licensure. <sup>a</sup>Meets the general education requirement in Social & Behavioral Sciences. <sup>b</sup>Meets the general education Synthesis requirement. rev. 2/24