



# Academic Map: B.S. Chemistry-Professional Chemistry

**Associate of Science (A.S.) | 60 Total Credits | CSN Degree Code: PHYS-AS | Catalog Year: 2023-2024 | For Transfer to NSC**

Biological and Physical Sciences Area of Study

School of Science and Mathematics

Department of Physical Sciences

Jobs and Employment Information: <https://www.csn.edu/sciencearea>

DESCRIPTION: The Associate of Science Degree in Physical Science is a general transfer program for students who are planning to transfer to a baccalaureate or pre-professional institution. A secondary objective may be employment upon completion of the AS degree.

## **TERM 1 – TOTAL CREDIT HOURS: 15**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Min Grade</u></b>	<b><u>Milestones and Notes</u></b>
MATH 181 Calculus I	4	C or up in MATH 126	GE Math	C	NSC Requirement
ENG 100 or ENG 101 or ENG 113	3	ACT/SAT/Place Score	GE ENG Comp	C-	
CHEM 121 General Chemistry	4	CHEM 103 or 110 or CHEM Placement Score	Special Prog	C	NSC Requirement
Social Science Elect-See an advisor/counselor	3	<i>Depends on course chosen</i>	GE Social Science	C	

## **TERM 2 – TOTAL CREDIT HOURS: 15**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Min Grade</u></b>	<b><u>Milestones and Notes</u></b>
ENG 102 or 114	3	ENG 100/101/113 with a C- or up	GE ENG Comp	C	
MATH 182 Calculus II	4	C or up in MATH 181; or ACT/SAT/Place Score	Special Prog	C	NSC Requirement
CHEM 122 General Chemistry II	4	C or up in CHEM 121	Special Prog	C	NSC Requirement
PSC 101 Intro. To American Politics	4	<i>None</i>	GE US/NV Const	C	Mandatory Advising Required

## **TERM 3 – TOTAL CREDIT HOURS: 15**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Min Grade</u></b>	<b><u>Milestones and Notes</u></b>
ENG 231 or ENG 232	3	ENG 100/101/113 with a C- or up; or approval	GE Humanities	C	
MATH 283 Calculus III	4	C or up in MATH 192; or ACT/SAT/Place Score	Special Prog	C	
CHEM 241 Organic Chemistry I	4	CHEM 122	Special Prog	C	NSC Requirement
PHYS 180 and 180L	4	Co-req: PHYS 180L   C or up in MATH 181	GE Natural Sci	C	Mandatory Advising Required

## **TERM 4 – TOTAL CREDIT HOURS: 17**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Min Grade</u></b>	<b><u>Milestones and Notes</u></b>
Fine Arts Elect-See an advisor/counselor	3	<i>Depends on course chosen</i>	GE Fine Arts	C	
MATH 285 Differential Equations	3	C or up in MATH 182	Special Prog Elect	C	
CHEM 242 Organic Chemistry II	4	C or up in CHEN 241	Special Prog Elect	C	NSC Requirement
PHYS 181 and 181L	4	Co-req: PHYS 181L   C or up in MATH 182 & PHYS	Special Prog Elect	C	NSC Requirement
COM 101	3	<i>None</i>	GE Humanities	C	Apply for Graduation



## Academic Map: B.S. Chemistry-Professional Chemistry

**B.S. in Chemistry | 60-61 Total Credits | Catalog Year: 2023-2024 | Transfer from CSN with A.S. in Physical Sciences**

DESCRIPTION: The Chemistry degree offers exciting hands-on laboratory experiences that emphasize real world applications, such as medicinal chemistry. With foundations in organic, physical, inorganic and biochemistry, this degree prepares students for direct employment in the workforce and for graduate or professional programs. Major coursework requires a "C-" or higher.

### **TERM 1 – TOTAL CREDIT HOURS: 15**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Milestones and Notes</u></b>
CHEM 330	4	CHEM 122A/122L, MATH 181	Major	Mandatory Advising
CHEM 421	3	CHEM 122A/122L, MATH 182, PHYS 151 or 180	Major	
CHEM 423	2	Co. Req CHEM 421	Major	
BIOL 190A	3	Placement into MATH 126 or higher/BIOL 190L	Major	
STAT 391	3	MATH 120 or MATH 126	Major	

### **TERM 2 – TOTAL CREDIT HOURS: 17**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Milestones and Notes</u></b>
CHEM 422	3	CHEM 421	Major	Mandatory Advising
CHEM 455	3	CHEM 421	Major	
CHEM 447	2	CHEM 121,122,241,242	Major	
BIOL 209	3	BIOL 190. CHEM 121, CHEM 122, and MATH 126	Major	
SPECIAL TOPICS IN CHEMISTRY	3	Depends on course chosen	Major	
GENERAL ELECTIVE	3	Depends on course chosen	Elective	

### **TERM 3 – TOTAL CREDIT HOURS: 14-15**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Milestones and Notes</u></b>
CHEM 431	3	CHEM 242	Major	Apply For Graduation
CHEM 495	3	Instructor Approval	Major	
CHEM 497 or 498	2-3	Instructor Approval	Major	
BIOL 300A	3	BIOL 190, BIOL 191, BIOL 209, CHEM 121, CHEM 122, MATH 126	Major	
SPECIAL TOPICS IN CHEMISTRY	3	Depends on course chosen	Major	

### **TERM 4 – TOTAL CREDIT HOURS: 14**

	<b><u>Credits</u></b>	<b><u>Pre-Requisite/Co-Requisite</u></b>	<b><u>Area</u></b>	<b><u>Milestones and Notes</u></b>
CHEM 496	3	CHEM 495 Instructor Approval	Major	Mandatory Advising-Cross listed with BIOL 497
CHEM 499	4	Instructor Approval	Major	
CHEM 432	1	CHEM 431	Major	
CHEM 474	3	BIOL 300, CHEM 241 or CHEM 242	Major	
SPECIAL TOPICS IN CHEMISTRY	3	Depends on course chosen	Major	

\* Consult advisor for course sequencing. Some courses may only be offered in specific semesters.

\* Upper Division is 300+ coursework.

\* Link to NSC Catalog for Elective Course options, program information and course pre-requisites: [Nevada State College](https://www.nsc.edu/catalog)