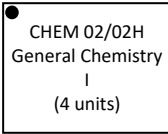

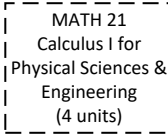
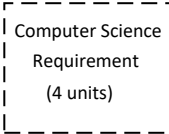
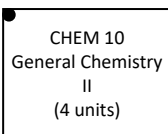
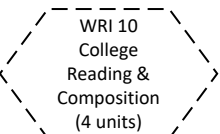
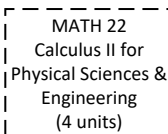
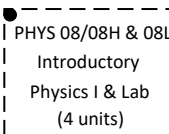
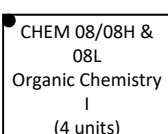
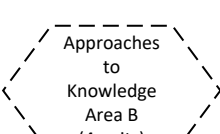
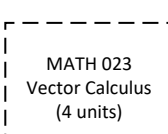
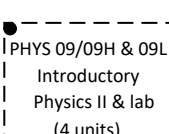
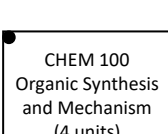
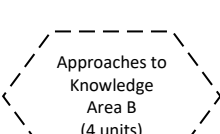
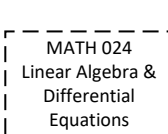
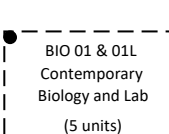
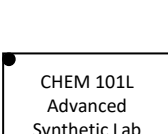
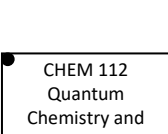
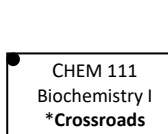
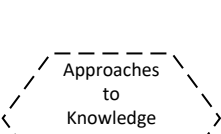
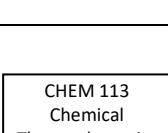
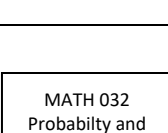
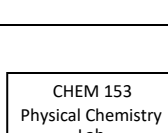
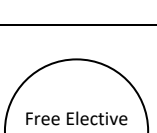
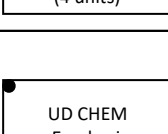
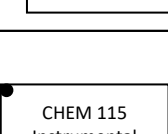
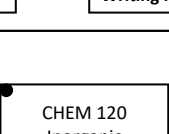
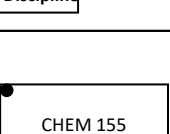
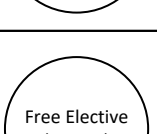
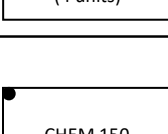
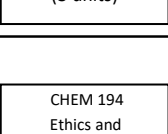
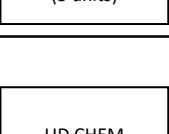

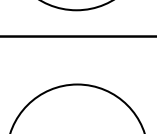
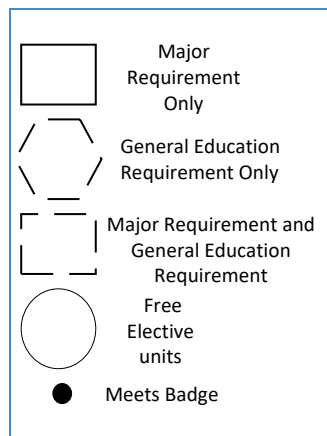


Sample Plan and Course Flow Chart Template – Chem-Chem

Year 1	Semester 1 (16 Units)	 CHEM 02/02H General Chemistry I (4 units)	 SPARK Seminar (4 units)	 MATH 21 Calculus I for Physical Sciences & Engineering (4 units)	 Computer Science Requirement (4 units)	
	Semester 2 (16 Units)	 CHEM 10 General Chemistry II (4 units)	 WRI 10 College Reading & Composition (4 units)	 MATH 22 Calculus II for Physical Sciences & Engineering (4 units)	 ● PHYS 08/08H & 08L Introductory Physics I & Lab (4 units)	
Year 2	Semester 3 (16 Units)	 ● CHEM 08/08H & 08L Organic Chemistry I (4 units)	 Approaches to Knowledge Area B (4 units)	 MATH 023 Vector Calculus (4 units)	 ● PHYS 09/09H & 09L Introductory Physics II & lab (4 units)	
	Semester 4 (17 Units)	 ● CHEM 100 Organic Synthesis and Mechanism (4 units)	 Approaches to Knowledge Area B (4 units)	 MATH 024 Linear Algebra & Differential Equations (4 units)	 ● BIO 01 & 01L Contemporary Biology and Lab (5 units)	
Year 3	Semester 5 (14 Units)	 ● CHEM 101L Advanced Synthetic Lab (2 units)	 ● CHEM 112 Quantum Chemistry and Spectroscopy (4 units)	 ● CHEM 111 Biochemistry I *Crossroads Course (4 units)	 Approaches to Knowledge Area B (4 units)	
	Semester 6 (14 Units)	 CHEM 113 Chemical Thermodynamics and Kinetics (4 units)	 MATH 032 Probability and Statistics (4 units)	 CHEM 153 Physical Chemistry Lab (2 units) *Writing in Discipline	 Free Elective (4 units)	
Year 4	Semester 7 (16 Units)	 ● UD CHEM Emphasis Elective (4 units)	 ● CHEM 115 Instrumental Analysis (3 units)	 ● CHEM 120 Inorganic Chemistry (3 units)	 ● CHEM 155 Instrumental Lab (2 units)	 Free Elective (4 units)
	Semester 8 (15 Units)	 ● CHEM 150 Inorganic Lab (2 units)	 CHEM 194 Ethics and Communications Integrative Culminating Experience (1 unit)	 UD CHEM Emphasis Elective (4 units)	 Free Elective (4 units)	 Free Elective (4 units)



- This sample plan demonstrates the recommended sequencing and timing of the required and elective components within the major.
- In many cases, a student's academic background will require variations in the timing of the coursework listed in the plan.
- All students are expected to work with their academic advisor to find their best pathway through the degree requirements of their chosen program.