**Students must meet with their advisor prior to registering for courses. This roadmap is designed for general planning ONLY! Roadmaps for more than 5 years plan may vary please consult with your department.**

**Bold= must take courses & pass before applying**

**Green= Undergraduate courses**

**Orange= Graduate Courses**

**Minimum Units required for Bachelors =120**

**Minimum Units required for Masters = 30**

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### Freshman
- **Fall**: CHEM 115, MATH 227, Area A
- **Spring**: CHEM 233 & 234, CHEM 335 & 336, SF Elective
- **Summer**: PHYS 230 & 232, CHEM 321 & 322, SF Elective
- **Total Units**: 32 (15 total + 16 units + 16 units)

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### Sophomore
- **Fall**: Area C, Area D
- **Spring**: Area A, Area D
- **Summer**: 15 Units, 16 Units (52 total, 68 total)
- **Total Units**: 52 (15 total + 16 units + 6 units)

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### Junior
- **Fall**: CHEM 251, CHEM 353, SF Elective
- **Spring**: CHEM 351, CHEM 426, SF Elective
- **Summer**: Area C, UD-B
- **Total Units**: 52 (15 total + 16 units + 16 units)

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### Senior
- **Fall**: Area C, UD-C
- **Spring**: 15 Units, 14 Units (52 total, 89 total)
- **Total Units**: 89 (15 total + 16 units + 16 units)

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### Graduate
- **Fall**: CHEM 340, CHEM UD Elective, UD-D, CHEM 879, Graduate Elective
- **Spring**: CHEM 451, CHEM UD Elective, UD-D, CHEM 879, Grad (3)
- **Total Units**: 114 (14 units + 6 units + 9 units)

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**Apply to SF Scholars**
- **Completed 60 units**
- **3.0 GPA**

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**Grad (21)**
- **Grad (30)**

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**Grad (3)**
- **Grad (9)**

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**Tentative Chemistry Roadmap**

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**Minimum Units required for Bachelors =120**

**Minimum Units required for Masters = 30**