CHEMISTRY DEGREE REQUIREMENTS

BASIC REQUIREMENTS
☐ Math 2A ☐ Math 2B ☐ Math 2D
☐ Physics 7C-7D-7E-7LC-7LD
☐ Chem M2A/H2A-M2B/H2B-M3C/H2C
☐ Chem M2LA/H2LA-M2LB/H2LB ☐ Chem M3LC/H2LC
☐ Chem 5
☐ Chem 51A/H52A-51B/H52B-51C/H52C
☐ Chem M/H52LA-M/H52LB-M/H52LC
☐ Chem 107 ☐ Chem 107L
☐ Chem 132A-132B-132C
☐ Chem 152

Electives (5 Courses; at least 3 of the courses must be offered by the Chemistry department, including at least 1 Chemistry lecture course and 1 Chemistry lab course.)

At least two lecture courses chosen from the Lecture list:
Bio Sci 98, 99
Chemistry 125, 127, 128, 133, 137, 138, 141, 145A, 145B, 177,
any from 201-205, any from 201-205, 213-249, 271
ESS 122, 142, 144
Engineering CBEMS 110, 112, 130, 135, 143, 154
Physics 111A, 111B, 112A, 112B

At least two laboratory courses chosen from the Lab list:
Bio Sci M114L, M116L, M118L
Chemistry 128L, 133L, 153, 156, 160, 170, 177L, 180, 197
(180/H180 may be counted only once)
Engineering CBEMS 140A, 140B
Physics 120, 121W

☐ ________________ (chem lecture)
☐ ________________ (chem lab)
☐ ________________ (any chem elective)
☐ ________________ (any elective)
☐ ________________ (any elective)

Concentration courses may be used to fulfill the lecture and lab electives, where overlap exists.

Optional Specialization in Synthetic Chemistry
☐ Chem 125 ☐ Chem 127 ☐ Chem 156 ☐ Chem 160

Optional Specialization in Environmental Chemistry
☐ ESS 144 ☐ Chem 141 ☐ Chem 153
☐ Chem 145A OR ESS 142

Optional Concentration in Chemistry Education
☐ Educ 55 ☐ Phy Sci 5 ☐ Phy Sci 105 ☐ Chem 193

Secondary Teaching Certification Option:
In addition to the Concentration requirements, students can earn a California Single Subject Teaching Credential by completing all of these additional classes:
☐ LPS 60
☐ Educ 109 ☐ Educ 143A ☐ Educ 143B ☐ Educ 148
☐ Educ 158 ☐ Educ 158 (two quarters required)
** Education 143A and 143B plus 148 count as two electives from the elective list. **

Optional Concentration in Theoretical and Computational Chemistry
☐ Math 3A ☐ Math 3D
☐ Chem 150 ☐ Chem 150L
☐ Physics 50 OR Physics 100

Select at least nine courses from the courses below, at least one must be taken from each list, or the chemistry major electives list.

☐ One from List #1:
☐ One from List #2:
Math 105A-LA, 105B-LB
Stats 7, 110, 111, 112
☐ One from List #3:
EECS 12, 20, 22, 22L
** Chem 5, 107L, 152, and all electives under the regular Chemistry Major are not required and are optional for this concentration. **

Optional American Chemical Society Certification
☐ Chem 128 ☐ Chem 128L
Select 3 courses; at least one from each list:
☐ List #1: Chem 153, 156, 160, 180, H180
☐ List #2: Chem 125, 127, 133 & 133L, 138, 141, 150 & 150L, 177 & 177L, 201-205, 213-249
☐ Additional course from List #1 or #2
(If Chem 133 or 150 or 177, then the lecture & lab must both be taken to satisfy one of the elective requirements)
☐ Chem 180W or H181W

Effective Fall 2017