

Any Emphasis Graduating Under the New Catalog as a Chemistry Major (Fall 2016 or later)

Required Courses		Possible Substitutions
CHM 115	4	_____
CHM 116	5	_____
CHM 221	4	_____ (may substitute CHM 222)
CHM 325	4	_____ (may substitute CHM 225)
CHM 245	4	_____ (see note below)
CHM 246	1	_____ (see note below)
CHM 247	3	_____ (see note below)
CHM 248	1	_____ (see note below)
CHM 356	3	_____
CHM 358	3	_____ (see note below)
CHM 352	1	_____ (may substitute CHM 353 or CHM 355 or CHM 455)
CHM 273	3	_____ (may substitute CHM 471)
CHM 461	4	_____
CHM 391	1	_____
CHM 491	1	_____

Choose three of the following upper level electives:

CHM 427 [56]	3	_____	} Any combination of CHM 311, CHM 322 [42], CHM 344 [42], CHM 355 [28], CHM 372 [42], CHM 425 [28], CHM 452 [70], CHM 455 [56], CHM 473, and CHM 475 adding up to three or more credits can substitute for an elective course. [lab hours for ACS certification shown in brackets] } No course may count as both an elective and a required course.
CHM 447 [70]	3	_____	
CHM 457 [56]	3	_____	
CHM 462 [84]	3	_____	
CHM 477 [70]	3	_____	
CHM 421	3	_____	
CHM 441	3	_____	
CHM 442	3	_____	
CHM 463	3	_____	
CHM 471	3	_____	
CHM 475	3	_____	

Cognates:

MTH 201	4	_____
MTH 202	4	_____
PHY 230	5	_____ (see note below)
PHY 231	5	_____ (see note below)

Students seeking a degree certified by the American Chemical Society (ACS) must also complete:

- either CHM 372, CHM 462 or CHM 477 as one of their upper-level electives.
- at least 148 lab hours in elective CHM courses above the 200 level.
- CHM 499 lab hours may be used to satisfy the ACS lab hour requirement (42 hours per credit); CHM 490 may also be used with unit head approval.

Students who transfer or change majors may make these substitutions with advisor approval:

- CHM 241 may replace CHM 245 and 246
- CHM 242 may replace CHM 247 and 248
- CHM 351 may replace CHM 358
- PHY 220 may replace PHY 230
- PHY 221 may replace PHY 231