

BS in Chemical Physics - Sample Schedule (Fall 2020 and later)

	Fall Semester	Spring Semester	Credits ¹
Year 1	CEM 151 (4) or CEM 181H (4) CEM 161 (1) or CEM 185H (2) ² MTH 132 (3) WRA 101 Tier I Writing (4) ³ Elective or UR ⁴ (3 or 4)	CEM 152 (3) or CEM 182H (4) CEM 162 (1) ² MTH 133 (4) MTH 299 (4) Elective or UR ⁴ (3 or 4)	30-32
Year 2	CEM 351 (3) or CEM 251 (3) CEM 262 (3) ⁵ MTH 234 (4) PHY 173 (5)	CEM 352 (3) or CEM 252 (3) MTH 235 (3) PHY 174 (5) Elective or UR ⁴ (3 or 4)	29-30
Year 3	CEM 483 (3) MTH 309 (3) or MTH 314 (3) ⁶ PHY 215 (3) CMSE 201 (4) CEM 444 (1)	CEM 484 (3) CEM 499 (1) ⁷ CEM 333 (3) or CEM 395 (2) ⁸ PHY 321 (3) BS 161 (3) ⁹ [Elective, UR ⁴ and CEM 400H/420 (1-3)] ¹⁰ (3-4)	30-31
Year 4	PHY 471 (3) PHY 481 (3) Advanced MTH ¹¹ or PHY ¹² elective (3) [Electives, UR ⁴ and CEM 400H/420 (1-3)] ¹⁰ (6-7)	CEM 499 (1) ⁷ Advanced MTH ¹¹ or PHY ¹² elective (3) [Electives, UR ⁴ and CEM 400H/420 (1-3)] ¹⁰ (11-12)	30-32

¹A total of at least 120 credits is required for graduation.

²Chemical Physics majors are required to take either (CEM 161 and CEM 162) or CEM 185H.

³A score of 4 or 5 on an AP English exam will receive credit for WRA 101 (4). A score of 3 will not earn credit, but WRA 101 will be waived. Students who have satisfied the Tier I writing requirement through Advanced Placement could substitute an elective or a course to fulfill a University requirement.

⁴UR = University Requirement [University General Education Requirements: WRA Tier I writing course (4) in Year 1; IAH course below 211 (4), which has a Tier I writing course as a prerequisite; IAH course above 211 (4); ISS 200-level (4); ISS 300-level (4)]

⁵CEM 262 is an explicit prerequisite for CEM 333 and CEM 395. It is an implicit prerequisite for the other advanced chemistry lab options. All Chemical Physics majors are required to take CEM 262.

⁶CMSE 201 is a prerequisite for MTH 314. If CMSE 201 is taken before fall of third year, MTH 314 could be taken during this semester. Enrollment in MTH 314 could also be delayed until spring of third year.

⁷Students must enroll in CEM 499 twice. It is only offered in spring semesters.

⁸This requirement can also be satisfied by CEM 495 (2) in fall semester of Year 4.

⁹BS 161 Cell and Molecular Biology has CEM 151 or CEM 181H as a prerequisite. There are other options for fulfilling the alternative track Biological Sciences requirement (BS 162, BS 181H, BS 182H, ENT 205, IBIO 150, LB 144, LB 145, MMG 141, MMG 201, PLB 105, PSL 250).

¹⁰Students are encouraged to include undergraduate research (CEM 420 or CEM 400H) in their electives. Maximum of 12 credits in CEM 400H/420 are permitted.

¹¹Advanced MTH = One of the following: MTH 310, 320, 327H, 415, 418H, 441, 442, 451.

¹²Advanced PHY = One of the following: PHY 410, 415, 422, 431, 472, 480, 482, 491, 492, 493.