Engineering Chemistry Bachelor of Science Academic Progress Sheet

T= Transfer **IP**=In Progress Note: Meetings should be scheduled periodically to review progress toward fulfilling Dept. requirements.

Name:	**Notes:**
ID:	
Requirements complete:	
Updated by/date:	

Mathematics and Basic Science Courses	Met	Notes
MAT 131, MAT 132 Calculus I, II (see Note 1 for possible substitutions)	☐	
AMS 261 & AMS 361 Engineering Mathematics I, II; or MAT 203 & MAT 303 Calculus III, IV w/ Applications	☐	
ESG 111 Computer Science for Engineers, CHE 358 Computing in Chemistry, or equivalent computer course	☐	
CHE 129/CHE 130, CHE 132 or CHE 131, CHE 132 General Chemistry or CHE 152 Molecular Science I	☐	
CHE 133, CHE 134 General Chemistry Laboratory or CHE 154 Molecular Science Lab I (see Note 3)	☐	
PHY 131/PHY 133, PHY 132/PHY 134 Classical Physics I, II and labs (see Note 4)	☐	
PHY 251/252 Modern Physics and Laboratory or ESG 281 An Engineering Introduction to the Solid State	☐	

Core Program Requirements	Met	Notes
CHE 301, CHE 302 Physical Chemistry I, II	☐	
CHE 303 Solution Chemistry Laboratory	☐	
CHE 304 Chemical Instrumentation Laboratory	☐	
CHE 321 Organic Chemistry I or CHE 331 Molecular Science II	☐	
CHE 378 Materials Chemistry	☐	
ESM 325 Diffraction Techniques and Structure of Solids	☐	
ESG 332 Materials Science I: Structure and Properties of Materials	☐	
ESG 333 Materials Science II: Electronic Properties	☐	

Disclaimer: Academic Progress Sheets are only updated periodically at the student's request for use as an advising tool. The Undergraduate Bulletin supersedes any errors or omissions in the Academic Progress Sheets.

Notes:

1. The following alternate calculus sequences may be substituted for MAT 131, MAT 132: MAT 141, MAT 142 or MAT 171 or MAT 125, MAT 126, MAT 127 or AMS 151, AMS 161.
2. MAT 307 and MAT 308 may be substituted for MAT 203 and MAT 303, but only after consultation with the Mathematics Department.
3. CHE 199 General Chemistry Laboratory for Engineers acceptable with permission
4. PHY 141/133, PHY 142/134 Classical Physics I, II: Honors or PHY 125, PHY 126/PHY 133, PHY 127/PHY 134 Classical Physics A, B, C plus labs may also satisfy this requirement

OPTIONAL: American Chemical Society Certification Requirements for ECM major

Not required for degree completion

The American Chemical Society's Committee on Professional Training has set nationally recognized standards for professional preparation in chemistry. The Chemistry faculty recommends that students intending to pursue careers in the chemical sciences secure ACS certification along with their Bachelor of Science degree.

To obtain ACS certification, students must complete the following courses beyond those required for the major:

Requirements	Met	Notes
CHE 322 or CHE 332 (organic)	☐	
CHE 346 (biological)	☐	
CHE 375 (inorganic)	☐	
laboratories CHE 383 or CHE 327	☐	
laboratories CHE 328 or CHE 384	☐	
One of the following: CHE 487 (6 or more credits), CHE 495-496, CHE 357 and CHE 487 (3 or more credits), or a research experience in the chemical sciences of at least 180 hours at another college, university, or government laboratory (see note)	☐	

***Note**: Students who fulfill ACS requirements with an off-campus research experience must register for CHE 487 (0 credits). All students who use CHE 487 to fulfill ACS requirements must prepare a written research report that will be evaluated by a Stony Brook Chemistry faculty member.*