General Education (19 sh)  
ALL CHEM 1110 Principles of Chemistry I (P: CHEM 1120 w/min C- or CHEM 1070 w/min A-)  
F/S ENGR 1100 Intro to Engineering Problem Solving 3  
F/S ENGR 1300 Intro to Engineering Computing (C: MATH 1550) 3  

Math & Basic Science Core (27 sh)  
F/S MATH 2560 Math IV: Differential Equations (P: MATH 2550 & MATH 2555) 3  
ALL CHEM 1120 Principles of Chemistry II (P: ALEKS score ≥ 75 or MPT Level 3 score ≥ 9) 4  
ALL CHEM 1110 Principles of Chemistry I (P: ALEKS score ≥ 55 or MPT Level 2 score ≥ 8) 4  

ChemE Requirements (15 sh)  
ALL CHEM 2210 Organic Chemistry I (P: CHEM 1120 with a minimum grade of C) 4  
F ENGR 2100 Intro to Engineering Problem Solving 3  
F/S ENGR 3100 Intro to Engineering Computing (C: MATH 1550) 3  

ChemE Capstone Design Courses (1 sh)  
F CHEM 4105 Process Dynamics & Control (P: CHEM 2210, CHEM 2220, & CBE 3110) 1  
S CBE 4110 Chemical Engineering Process Design II (P: CHEM 4105; R: CHEM 4105 & CBE 4105) 3  

CHEM Departmental Seminars (1 sh)  
F/S CBE 3000 CBE Professional Seminar (1 sh 4h) (P: CHEM 2210) 4  
S CBE 4195 Senior Enriching Activities Seminar (C: CBE 4110) 0  

Required: Biochemical (3 sh)  
5 over: CBE 5210 Bioseparations 3  

Electives: Advanced Chemistry / Science (29 sh)  
Advanced Chemistry or Biochemistry Course 3  
Recommended: BIOC 3110 3  

Electives: Biochemical (12 sh)  
Electives: Engineering  
ALL CBE 3998 Individual Investigations (usually research) 1-3  
W/TU CHEM 4850 Upstream Biotechnology Processes 2  
ALL CHEM 5199 Contemporary Topics (biochemical eng. topics) 1  
F/S CHEM 5875 Perspectives in Biocatalysis (see Mycc for requirements) 1  
F BME 5430 Biobransport (P: BME 2300) 3  
ALL CHEM 2400 Cell Biology for Engineers (P: BME 2411; C: BIOC:4120 or CHEM 2210) 3  

Electives: Science  
F/S BIOC 3120 Biochemistry and Molecular Biology I (P: two semesters of general chemistry & biology) 3  
F/S BIOC 3130 Biochemistry and Molecular Biology II (P: BIOC 3120 w/min C-) 3  
S BIOC 3140 Experimental Biochemistry (P: BIOC 3120 w/min C-) 2  
ALL BIOL 1411 Introduction to Biology (P: CHEM 1110 w/min C- or CHEM 1070 w/min A-) 4  
ALL BIOL 1412 Diversity and Function (P: BIOC 3120) 4  
F/S MCR 2157 General Microbiology (P: BIOC 1411 & CHEM 1110) 3  
F/S MCR 2158 General Microbiology Laboratory 3  

Total Semester Hours Requirements: 134