Interdisciplinary Minor in Bioprocess Engineering  
IMBE

Name (please print):
__________________________________________________________________________

(Student)

Primary Major: ___________________________  Expected Major Completion Term: ______________

There are two tracks to the Bioprocess Engineering Minor, the Engineering Track and the Biological Track (located on the reverse of this page.) Please select one for completion.

Engineering Track

Required Courses (10 Credits)

_____ BL 2100 Principles of Biochemistry (3) OR
   CH 4710 Biomolecular Chemistry 1 (3)

_____ CM 2120 Fund of Chem Engg 2 (3) OR
   CM 2200 Intro to Minerals and Materials (3) OR
   ENVE 3501 Env Engg Fundamentals (3) OR
   ENVE 3503 Environmental Engineering (3)

_____ CM 4125 Bioprocess Engineering Lab (1)

_____ CM 4710 Biochemical Processes (3)

Elective Courses (6 Credits)

_____ BL 3210 General Microbiology (4) OR
   BL 3310 Environmental Microbiology (3)

_____ BL 4000 Research in Biology (1-3)*

_____ BL 4010 Biochemistry I (3)

_____ BL 4020 Biochemistry II (3)

_____ BL 4220 Applied & Industrial Microbiology (3)

_____ BL 4820 Biochemical Laboratory Techniques I (2)

_____ CH 4110 Pharmaceutical Chem: Drug Action (2)

_____ CH 4120 Pharmaceutical Chem: Drug Design (3)

_____ CH 4720 Biomolecular Chemistry II (3)

_____ CM 4040 UG Research in Bioengineering (1-3)

_____ CM 4550 Industrial Chemical Production (3)

_____ CM 4770 Analytical Microdevice Tech (3)

_____ CM 4780 Biomanufacturing & Biosafety (3)

_____ CM 4990 Special Topics in CM (1-3)*

Credits Required = 16
Total Credits _______

*Topic must be approved by the minor program coordinator.
Interdisciplinary Minor in Bioprocess Engineering (continued)

Biological Track

Required Courses (14 Credits)

- BL 2100 Principles of Biochemistry (3)
- BL 3210 Microbiology (4)
- BL 4220 Applied and Industrial Microbiology (3)
- CM 2200 Intro to Minerals and Materials (3) OR
  CM 4710 Biochemical Processes (3) OR
  ENVE 3501 Env Engg Fundamentals (3) OR
  ENVE 3503 Environmental Engineering (3)
- CM 4125 Bioprocess Engineering Lab (1)

Elective Courses (2 Credits)

- BL 4000 Undergrad Research in Biological Sciences (1-3)*
- BL 4010 Biochem I (3)
- BL 4020 Biochem II (3)
- BL 4820 Biochem Lab I (2)
- CM 2200 Intro to Minerals and Materials (3)
- CM 4040 Undergrad Research in Bioengineering (1-3)
- CM 4710 Biochemical Processes (3)
- CM 4770 Analytical Microdevice Technologies (3)
- CM 4780 Biomanufacturing & Biosafety
- CM 4990 Special Topics in CM (1-3)*

*Topic must be approved by the minor program coordinator.

Credits Required = 16
Total Credits _______

Courses listed in this minor have the following prerequisites (shown in parenthesis). Concurrency is illustrated by the letter C:
BL2100 ((BL1020 or BL1040 or BL2400 and CH112 or (CH1150 and CH1151)), BL3210 ((BL1020 or BL1040) and (BL2100 or CH4710)), BL4010 ((BL1020 or BL1040 or BL2010) and BL2100 and (CH2410 and CH2420)), BL4020 (BL4010), BL4820 (BL4010 (C) or CH4710 (C)), CH4110 (BL4010 or CH4710), CH4120 (CH2420), CH4710 (CH2420), CH4720 (BL4010 or CH4710), CM2120 (CM2110), CM4125 (CM4710 (C) or BL3210 or BL3310), CM4550 (CH2410 and CM3510 (C)), CM4710 (CM3110 (C))