Chemical Engineering Selectives

Select course for each requirement

Biology Selective (3 credits)

____ (3) BIOL 23000 Biology of the Living Cell (CHM 11600 & MA 16200)
____ (3) BIOL 23100 Biology II: Cell Structure and Function (BIOL 11100 & CHM 11600)
____ (3) CHM 33900: Biochemistry: A Molecular Approach (CHM 26200)
____ (3) CHM 53300 Introductory Biochemistry (Junior Classification, CHM 26200, CHM 32100)
____ (3) BCHM 30700 Biochemistry (CHM 26200)
____ (3) BCHM 56100 General Biochemistry I (Sophomore 45-59 Classification, CHM 26200)

Chemical Engineering Selective (3 credits)

____ (3) ABE 58000 Process Engineering of Renewable Resources
____ (3) CHE 33000 Principles of Molecular Engineering (CHE 21100)
____ (1-3) CHE 41100 ChE Research (Junior Classification, Instructor Permission)
____ (1-3) CHE 41200 ChE Design Research Problems (Junior Classification, Instructor Permission)
____ (3) CHE 44200 Chemistry and Engineering of High Polymers (CHM 26200 & CHM 37000)
____ (3) CHE 46100 Biomedical Engineering
____ (3) CHE 46300 Applications of ChE Principles (CHE 37800)
____ (3) CHE 49700 Course Titles Vary
____ (3) CHE 49800 Undergrad Thesis Research I (Instructor Permission & Admission to CHE Honors Program)
____ (3) CHE 49900 Undergrad Thesis Research II (Instructor Permission & Admission to CHE Honors Program)
____ (3) Any CHE 500 level course

*Students cannot earn credit in both CHE 52500 and ABE 58000

*CHE offers multiple CHE 49700 & 59700 courses which can be identified by course title – refer to the Schedule of Classes for current offerings

*CHE 49700 Chemical Engr Study Abroad does not count for CHE Elective – rather a Technical Selective or General Education Elective

Engineering Selective (6 credits)

____ (3) CHE 40100 Co-Op Seminar II (Co-Op Students only)
____ (3) Any Chemical Engineering Selective
____ (3) Any AAE, ABE, BME, CE, CEM, ECE, IE, MEE, ME AND NUCL course (Must meet pre-req listed in MyPurdue to enroll)

*The following courses DO NOT count in CHE: ABE 20100, 21000, 30800, 37000, IE 23000, 33000 and ME 30900, 35100

Math Selective (6-7 credits)

____ (3) Math Selective I: * MA 26500 Linear Algebra (MA 26100 Minimum Grade of C-)
____ (4) Math Selective II: *MA 36600 Ordinary Differential Equations(MA 26100 & 26500 Minimum Grade of C-)
____ (3) MA 26600 Ordinary Differential Equations (MA 26100 Minimum Grade of C-)

OR

____ (4) Math Selective I: MA 26200 Linear Algebra and Diff Equations (MA 26100 Minimum Grade of C-)
____ (3) Math Selective II: MA 30300 Differential Equations and Partial Differential Equations (MA 26200)
____ (3) MA 30400 Differential Equations and Analysis of Nonlinear Systems (MA 26500 & 26600/36600)
____ (3) MA 51400 Numerical Analysis (Junior Classification)
____ (3) ME 58100 Numerical Methods in Mechanical Engineering (Junior Classification, ME 31500 & 35200)

*Suggested courses for students pursuing a minor or dual major in math

Technical Selective (3 credits)

____ (3) BCHM – Any biochemistry course excluding BCHM 307 & 56100 if used for Biology Selective
____ (3) BIOL – Any biology course excluding 11000, 13500, 14600 and 14700
____ (3) CHE 49700 Chemical Engr Study Abroad
____ (3) CHM 22400 Intro to Quantitative Analysis (CHM 11600)
____ (3) CHM 24100 Intro to Inorganic Chemistry
____ (4) CHM 32100 Analytical Chemistry I (CHM 11600)
____ (4) CHM 32300 Analytical Chemistry I (CHM 11600)
____ (3) CHM 33300 Principles of Biochemistry (CHM 26200)
____ (3) CHM 34200 Inorganic Chemistry
____ (4) CHM 42400 Analytical Chemistry (CHE 21100 & CHM 37000)
____ (3) CHM – Any chemistry course above 42400
____ (3) CS – Any computer science course
____ (3) EAPS – Any Earth and Atmospheric Science course
____ (3) EPCS – Any 3 credit hours of Epics
____ (3) Engineering Selective – Any Engineering Selective
____ (3) GEP – Any 3 credit hours of Global Engineering Programs 20000 and above
____ (3) MGMT 20000 Introductory Accounting or MGMT 20010 Business Accounting
____ (3) MGMT 24300 Minors in Management
____ (3) MATH – MA 30100, 30800, 34100, 35300, 36200, 37000 and any course above 37300
____ (3) IPPH 36200 Basic Pharmaceuticals
____ (3) IPPH 56200 Intro to Pharma Manufacturing Processes
____ (3) PHAD Food and Drug Law I
____ (3) PHYS – Any physics course 30000 or above
____ (3) STAT – Any statistic course 51100 or above

Prerequisites are listed in italics.