

Bachelor of Science in Natural Sciences (Pre-Engineering)

2014-2015 degree plan

GENERAL EDUCATION REQUIREMENTS:

Core Level Courses (11 hours)

____ BIB 121 ____ ENG 113*
____ COM 113 ____ ENG 123

*Students scoring below 18 on the ACT exam in English must pass ENG 103 before enrolling in ENG 113

Artistic Expression & Critical Appreciation

(6 hours, 3 of which must be Literature*)

____ ART 203 OR ____ MUS 203
____ COM 240 ____ ENG 273*

Cultural Perspectives (3 hours)

____ GEO 214 ____ Spanish
____ HST 273 ____ HST 283

Historical Foundation (6 hours; choose 2 courses)

____ HST 213 ____ HST 223
____ HST 253 ____ HST 263

Human Behavior & Social Foundations (3 hours)

____ PSY 113 OR ____ PSY 143

Religious Studies (6 hours; each course is 2hrs)

____ BIB 123 ____ BIB 212 ____ BIB/PHI 223

Scientific Inquiry (7 hours: both courses required for this degree)

Biological Science:

____ BIO 154

Mathematics:

____ MTH 173

Total General Education requirements: 42 hours

INSTITUTIONAL REQUIREMENTS: (5-7 hours)

____ YCS 101 "Freshman Seminar"
____ upper-division Bible course*
____ upper-division Bible course*
(*300 or 400 level courses in BIB, DOC, MIN, or RHS)

DEPARTMENTAL REQUIREMENTS:

Physical Science Core (27-29 hours)

____ PNG 101 Mech or Electrical Engineering Track:
____ CHM 214 ____ CHM 264 ____ CHM 353
____ CHM 224
____ PHY 214 Chemical Engineering Track:
____ PHY 224 ____ CHM 314 ____ CHM 325
____ PHY 313

Other Required Courses (26 hours)

____ NSC 421 ____ MTH 224 ____ MTH 343
____ MTH 214 ____ MTH 334 ____ MTH 353
____ MTH 223

____ Computer Programming Language (C++)

TOTAL DEPARTMENT REQUIREMENTS (53-55 hours)

ELECTIVES (16-20 hours)

This degree plan includes at least 17 hours of upper-division credit. 44 hours of upper-division credit are required for graduation. Students are encouraged to choose upper-division electives to meet the 44-hour graduation requirement. Students who transfer into Schools of Engineering may transfer back upper-division courses to meet this requirement.

TOTAL HOURS: (120 Minimum)

(44 hours must be upper division: 300-400 level)

updated 7-2-14

Bachelor of Science in Natural Sciences Pre-Engineering

(2014-2015 degree plan)

Core Level Courses (11 hours)

BIB 113 History of the New Testament
COM 113 Basic Speech
ENG 113 English Composition I
ENG 123 English Composition II

Artistic Expression and Critical Appreciation (6 hours)

ART 203 Art Appreciation
OR
MUS 203 Music Appreciation
OR
COM 240 Film Appreciation
ENG 273 World Literature

Cultural Perspectives (3 hours)

GEO 214 Cultural Geography
Spanish (taken at YC or transferred)
HST 273 World Civilizations to 1450
HST 283 World Civilizations since 1450

Historical Foundations (6 hours; choose two from this list)

HST 213 History of the U.S. to 1877
HST 223 History of the U.S. since 1877
HST 253 Western Civilization to 1648
HST 263 Western Civilization since 1648

Human Behavior and Social Foundations (3 hours; choose one)

PSY 113 General Psychology
PSY 143 Human Growth & Development

Religious Studies (6 hours; each course is 2 hrs)

BIB 123 History of Old Testament
BIB 212 History of New Testament: Romans-Revelation
BIB/PHI 223 Philosophy of Living

Scientific Inquiry (7 hours; both courses required for degree)

BIO 154 College Biology
MTH 173 College Algebra

INSTITUTIONAL REQUIREMENTS (5 hours)

YCS 101 Freshman Seminar
Two upper-division BIB, or DOC, or MIN, or RHS

DEPARTMENTAL REQUIREMENTS (48-50 hours)

PNG 101 Introduction to Engineering
CHM 214 College Chemistry 1
CHM 224 College Chemistry 2
PHY 214 Introductory Physics 1
PHY 224 Introductory Physics 2
PHY 313 Modern Physics
CHM 264 Analytical Chemistry
CHM 353 Inorganic Chemistry
CHM 314 Organic Chemistry 1
CHM 325 Organic Chemistry 2
NSC 421 Natural Sciences Seminar
MTH 214 Analytical Geometry & Calculus 1
MTH 224 Analytical Geometry & Calculus 2
MTH 223 Elements of Statistics
MTH 334 Analytical Geometry & Calculus 3
MTH 343 Differential Equations
MTH 353 Linear Algebra
Computer Programming (C++)

updated 7-2-14