

Professional electives for chemistry BS (version 3-11)

This is a list of potential courses that could fulfill the Professional Electives requirement. Other courses may fulfill this requirement particularly 500 level classes that are not required by your option, however you should seek your advisors consent prior to enrolling into such a course and prepare a petition to allow it to count towards this requirement.

Fall Offerings

APM - Applied Mathematics

APM391 INTRO/PROBABILITY&STATS
APM510 STATISTICAL ANALYSIS

BPE - Bioprocess Engineering

BPE420 BIOSEPARATIONS
BPE421 BIOPROCESS KINETICS&SYSTEM ENG

BTC - Biotechnology

BTC401 MOLECULAR BIOL TECHNIQUES
BTC426 PLANT TISSUE CULTURE METHODS

CMN - Communication

CMN420 ADVANCED PUBLIC PRESENTATION SKLS

EFB - Environmental & Forest Biology

EFB200 PHYSICS OF LIFE
EFB220 URBAN ECOLOGY
EFB303 INTRO ENVRN MICROBIOLOGY
4 Sec 01 INTRO ENVRN MICROBIOLOGY (#10030)
EFB307 PRINCIPLES OF GENETICS
EFB308 PRIN OF GENETICS LAB
EFB320 GENERAL ECOLOGY

EFB325 CELL PHYSIOLOGY
EFB334 WOODY PLANTS/NAT&BUILT LAND
EFB336 DENDROLOGY I
EFB352 ELEMENTS OF ENTOMOLOGY
EFB400 TOXIC HEALTH HAZARDS
EFB415 ECOLOGICAL BIOGEOCHEM
EFB416 INTRO/ENV INTERPRETATION
EFB427 PLANT DEVELOPMENTAL BIOL
EFB440 MYCOLOGY
EFB462 ANIMAL PHYSIOL: ENVRN&ECOL
EFB482 ORNITHOLOGY
EFB485 HERPETOLOGY
EFB487 FISHERIES SCIENCE & MGT
EFB493 MGT WILDLIFE HABITAT&POP
EFB496 TOPICS/ENVRN&FOREST BIO
EFB502 ECOLOGY & MGT/INVASIVE SPECIES
EFB518 SYSTEMS ECOLOGY
EFB524 LIMNOLOGY
EFB525 LIMNOLOGY LABORATORY
EFB535 SYSTEMATIC BOTANY
EFB554 AQUATIC ENTOMOLOGY

[ERE](#) - Environmental & Resource Engineering

ERE362 MECHANICS OF MATERIALS
ERE371 SURVEYING FOR ENGINEERS
ERE440 WATER POLLUTION ENGR
ERE441 AIR POLLUTION ENGR
ERE496 SPECIAL TOPICS
ERE501 BIOPROCESS MICROBIOLOGY
ERE502 BIOSEPARATIONS
ERE542 BIOREACTION ENGINEERING
ERE570 PRIN MASS/ENERGY BALANCE
ERE571 FLUID MECHANICS
ERE596 SPECIAL TOPICS

ESC - Environmental Science

ESC325 ENERGY SYSTEMS
ESC422 ENERGY MARKETS AND REGULATION
ESC525 ENERGY SYSTEMS
ESC622 ENERGY MARKETS AND REGULATION

EST - Environmental Studies

EST353 ENVRN PSYCHOLOGY

FCH - Forest Chemistry

FCH511 ENVRN CHEMISTRY II
FCH515 METH/ENVRN CHEM ANALYSIS
FCH530 BIOCHEMISTRY 1
FCH531 BIOCHEMISTRY LAB
FCH551 POLYMER TECHNIQUES
FCH552 POLYMER SCI:PROP&TECH

FEG - Forest Engineering

FEG335 NUMERICAL & COMPUTING METHODS

FOR - Forestry

FOR321 FOREST ECOLOGY & SILVICULTURE
FOR332 FOREST ECOLOGY
FOR340 WATERSHED HYDROLOGY
FOR345 INTRODUCTION TO SOILS
FOR357 PRACTICAL VECTOR GIS
FOR360 PRINCIPLES OF MANAGEMENT
FOR373 FOREST OPERATIONS
FOR430 AGROFORESTRY

Cross Listed with FOR630

FOR442 WATERSHED ECOLOGY & MANAGEMENT
FOR465 NATURAL RESOURCES POLICY
FOR487 ENVIRONMENTAL LAW AND POLICY

PSE - Paper Science & Engineering

PSE300 INTRO TO PAPERMAKING
PSE302 PULP&PAPER LAB SKILLS
PSE370 PRIN MASS/ENERGY BALANCE
PSE371 FLUID MECHANICS
PSE436 PULP & PAPER UNIT OPERATIONS
PSE465 PAPER PROPERTIES
PSE477 PROCESS CONTROL
PSE481 PROC/PLNT DSGN II:SYNTHES

WPE - Wood Products Engineering

WPE487 WOOD CHEMISTRY AND PHYSICS

SPRING Offerings

APM - Applied Mathematics

APM391 INTRO/PROBABILITY&STATS
APM485 DIFF EQUAT/ENGR&SCIENTIST
APM620 ANALYSIS OF VARIANCE
APM630 REGRESSION ANALYSIS
APM696 SPEC TOPICS/QUANT METHODS

BPE - Bioprocess Engineering

BPE305 CO-OP EXP/BIOPROCESS ENG
BPE335 TRANSPORT PHENOMENA
BPE336 TRANSPORT PHENOMENA LAB
BPE421 BIOPROCESS KINETICS&SYSTEM ENG
BPE441 BIOMASS ENERGY

BTC - Biotechnology

BTC425 PLANT BIOTECHNOLOGY

EFB - Environmental & Forest Biology

EFB311 PRINCIPLES OF EVOLUTION
EFB326 DIVERSITY OF PLANTS
EFB340 FOREST/SHADE TREE PATH
EFB355 INVERTEBRATE ZOOLOGY
EFB385 COMPARATIVE VERT ANATOMY
EFB390 WILDLIFE ECOLOGY&MGT
EFB405 LITERATURE OF NATURAL HISTORY
EFB413 INTRO TO CONSERVATION BIO
EFB419 PROB SOLVING/CONSERVATION BIOL
EFB428 MYCORRHIZAL ECOLOGY
EFB445 PLANT ECOLOGY
EFB446 THE ECOLOGY OF MOSSES
EFB480 PRIN OF ANIMAL BEHAVIOR
EFB483 MAMMAL DIVERSITY
EFB484 WINTER MAMMALIAN ECOLOGY
EFB486 ICHTHYOLOGY
EFB491 WILDLIFE ECOL&MGT PRACTM
EFB495 UNDERGRAD EXP/COLL TEACH
EFB516 ECOSYSTEMS
EFB519 GEOGRAPHIC MODELING
EFB523 TROPICAL ECOLOGY
EFB530 PLANT PHYSIOLOGY
EFB531 PLANT PHYSIOLOGY LAB
EFB542 FRESHWATER WETLAND ECOSYS

ERE - Environmental & Resource Engineering

ERE362 MECHANICS OF MATERIALS
ERE503 BIOPROCESS PLANT DESIGN
ERE511 ECOLOGICAL ENGR IN THE TROPICS
ERE519 GREEN ENTREPRENEURSHIP
ERE534 TRANSPORT PHENOMENA
ERE540 ENGR HYDROLOGY&HYDRAULICS
ERE548 OPEN CHANNEL HYDRAULICS
ERE561 ENGR THERMODYNAMICS

ERE565 PRINCIPLES OF REMOTE SENSING

ERE570 PRIN MASS/ENERGY BALANCE

ERE585 MICROSCOPY&PHOTOMICROGRAPHY

ESC - Environmental Science

ESC335 RENEWABLE ENERGY

ESC535 RENEWABLE ENERGY

ESF - Environmental Science and Forestry

ESF300 INTRO/GEOSPATIAL INFO TECH

FCH - Chemistry

FCH390 DRUGS FROM THE WILD

FCH496 SPECIAL PROBLEMS IN CHEM

MEMBRANE SCI & TECH

BIOMASS CHEMISTRY

OCEANOGRAPHY

NUCLEAR & RADIATION CHEM

MARINE BIOGEOCHEMISTRY

FCH510 ENVIRONMENTAL CHEMISTRY I

FCH532 BIOCHEMISTRY II

FCH550 POLYMER SCI: SYNTH&MECH

FCH560 CHROMATOGRAPHY/SEPARATION TECH

FCH571 WOOD CHEMISTRY I

FEG - Forest Engineering

FEG340 ENGR HYDROLOGY&HYDRAULICS

FEG365 PRINCIPLES OF REMOTE SENSING

FEG437 TRANSPORTATION SYSTEMS

FEG448 OPEN CHANNEL HYDRAULICS

FEG454 POWER SYSTEMS

FEG489 FOREST ENGR PLAN&DESIGN

FOR - Forestry

FOR338 METEOROLOGY
FOR488 NAT RESOURCES AGENCIES & ADMIN
FOR489 NATURAL RESOURCES LAW & POLICY
FOR490 INTEGRATED RESOURCE MGT
FOR523 TROPICAL ECOLOGY
FOR533 NATURAL RESRC MANAGERIAL ECON
FOR535 ADVANCED FOREST SOILS
FOR538 METEOROLOGY

PSE - Paper Science & Engineering

PSE350 PULP&BLEACH PROCESSES
PSE351 PULP&BLEACH LABORATORY
PSE361 ENGR THERMODYNAMICS
PSE456 MGT/PAPER INDUSTRY
 Cross Listed with ERE676
PSE466 PAPER COATING/CONVERTING
PSE467 PAPERMAKING WETEND CHEM
PSE468 PAPERMAKING PROCESSES
PSE480 ENGR DESIGN ECONOMICS

WPE - Wood Products Engineering

WPE386 STRUCT & PROP OF WOOD
WPE422 COMPOSITE MATERIALS