The Advanced CHM Requirement*

**FALL**
CHE 258/458 – ELECTROCHEM BATTERY & FUEL CELLS  
CHE 276/476 – POLYMER SYNTHESIS  
CHE 477 – ADVANCED NUMERICAL METHODS  
CHE 478 – MACHING LEARNING OF MOLECULES & MATERIALS

CHM 211 – INORGANIC CHEMISTRY I  
CHM 231 – CHEMICAL INSTRUMENTATION  
CHM 251 – PHYSICAL CHEMISTRY  
CHM 456 – CHEMICAL BONDS: FROM MOLECULES TO MATERIALS

EES 209 – INTRODUCTION TO GEOCHEMISTRY  
EES 212 – CLIM CHNG PERS CHEM. OCEAN  
EESC 261 - STABLE ISOTOPE GEOCHEMISTRY  
EESC 306 – ATMOSPHERIC RESEARCH (SEMESTER VARIES)

**SPRING**
CHE 213/413 – ENGINEERING OF SOFT MATTER  
CHE 265/465- BIOMASS CONVERSION TO FUELS AND CHEMICALS  
CHE 286/486 – POLYMER PHYSICS  
CHE 461- ADVANCED CHEMICAL KINETICS

EESC 216 – ENVIRONMETAL GEOCHEMISTRY  
EES 218 - ATMOSPHERIC GEOCHEMISTRY  
EESC 233 – MARINE ECOSYSTEMS AND CARBON CYCLE MODELING  
EESC 234 – FUNDAMENTALS OF ATMOSPHERIC MODELING  
EESC 306 – ATMOSPHERIC RESEARCH (SEMESTER VARIES)

BIO 250 – BIOCHEMISTRY

CHM 232 – MOLECULAR SPECTROSCOPY  
CHM 252 – PHYSICAL CHEMISTRY II  
CHM 262 – BIOLOGICAL CHEMISTRY  
CHM 286 – ENERGY: SCIENCE, TECHNOLOGY & SOCIETY

*Course offerings and semesters subject to change, some are not offered every year. Please plan accordingly*