
For more info on these minors, prerequisites & course descriptions, please refer to the current JU Academic Catalog

### BIOLOGY
- BIOL 180 Biological Diversity 4 hours
- BIOL 190 Biological Unity 3
- BIOL 280 Methods in Field Biology 3
- or BIOL 290 Basic Lab Techniques
- MATH 206 Statistical Methods Science 4
- BIOL xxx One 300 or 400 level 4-credit
  BIOL lab course
- BIOL xxx One 300 or 400 level 3 or 4 3-4
  credit BIOL course.

**Total: 21-22 hours**

### CHEMISTRY
- CHEM 103 General Chemistry I 4 hours
- CHEM 104 General Chemistry II 4
- CHEM 322 Analytical Chemistry 4
- CHEM xxx Two CHEM courses 8
  numbered above 300
  for minimum of 20 credit hours.

**Total: 20 hours**

### COMPUTING SCIENCE
- CS 158 Application Development I 4 hours
- CS 160 Application Development II 4
- CS 360 Database Design & Devel'int 3
- CS xxx Additional six (6) credit hours
  of CS course electives --
  (three (3) credit hours
  numbered 300 or above)

**Total: 17 hours**

### CYBERSECURITY
- CS 158 Application Development I 4 hours
- CS 160 Application Development II 4
- CS 301 Introduction to Cybersecurity 3
- CS 303 Operating Systems 3
- CS xxx Two CS elective courses from
  CS 345, CS 362, CS 414
  and/or CS 427.

**Total: 20 hours**

### MARINE SCIENCE
- MSC 111 Intro to Oceanography 3 hours
- MSC 112 Intro to Oceanography Lab 3
- MSC 113 Intro to Marine Biology 3
- MSC 114 Intro to Marine Biology Lab 3
- MSC 306 Marine Geology 4
- MSC xxx One 300 or 400 level MSC Lab course

**Total: 20 hours**

### MATHEMATICS
- MATH 220WI Math & Reasoning 3 hours
- MATH 300 Calculus III 4
- MATH 3xx At least six additional credit 6
  hours in mathematics courses
  numbered above 300
- MATH xxx Additional 5 credit hours in
  mathematics courses

**Total: 18 hours**

### APPLIED MATHEMATICS
- MATH 300 Calculus III 4 hours
- MATH 320 Linear Algebra 3
- MATH 331 Differential Equations 3
- MATH 3xx At least three additional 3
  credit hours in mathematics
  courses numbered above 300
- MATH xxx Additional 5 credit hours in
  mathematics courses

**Total: 18 hours**

### PHYSICS
- PHYS 101 Freshman Physics Seminar 1 hour
- PHYS 151 Gen Phys: Mechanics 4
- PHYS 152 Gen Phys: Elec/Magnetism 4
- PHYS 250RI Research Methods in Phys 2
- PHYS xxx Additional six credit hours 6
  of physics courses numbered
  200 or higher for a minimum
  of 17 credit hours.

**Total: 17 hours**