

College of Math and Science Minors

A minor is an optional component of a student’s degree (unless otherwise stated) that, upon graduation, will be reflected on the student’s transcript. A student may earn a minor or multiple minors in the same program, provided the minor differ at the major level. Minors may not be earned independently of a bachelor’s degree granted by the University of Central Oklahoma. Minors may not be earned as a part of an associate degree. Minors do not appear on diplomas.

Minimum Requirements for Minors

Minimums for minors unless otherwise specified:

Total Hours	18
Upper Division Hours (3/4000 level)	6
Residency Hours	6
GPA	2.00

Biology

Biology.....**18-19**

Minor Code: 6019

Required courses:..... 12

- BIO 1204 Biology for Majors: Principles
- BIO 1225 Biology for Majors: Diversity
- BIO 2203 Cell Biology

Elective Biology (upper division).....6-7

Select 2 courses from this list:

- BIO 3054 Microbiology for Majors
- BIO 3303 Genetics
- BIO 3543 General Ecology
- BIO 3703 Evolution

A grade of “C” or better is required in each course.

Chemistry

Chemistry

Minor Code: 6079

Required courses..... 14

- CHEM 1103 General Chemistry I
- CHEM 1112 General Chemistry I-Recitation/Lab
- CHEM 1223 General Chemistry II
- CHEM 1232 General Chemistry II-Recitation/Lab
- CHEM 2104 Quantitative Analysis and Lab

Elective Chemistry (3/4000 level) 6

Computer Science

Computer Science

Minor Code: 6119

Required courses..... 15

- CMSC 1613 Programming I
- CMSC 2123 Discrete Structures
- CMSC 2613 Programming II
- CMSC 2833 Computer Organization I
- CMSC 3613 Data Structures and Algorithms

Elective Computer Science (3/4000 level) 3

Engineering Physics

Engineering Physics **18**

Minor Code: 6259

Required courses..... 14-15

- PHY 2014 Physics for Science and Engineering I and Lab
- PHY 2114 Physics for Science and Engineering II and Lab
- PHY 3103 Modern Physics
- ENGR 2033 Statics **OR**
- ENGR 2303 Electrical Science **AND**
- ENGR 2311 Electrical Science Lab

Elective Physics and Engineering 3-4

Any 3000 or 4000 level ENGR course.

Grief, Death, and Dying

Grief, Death, and Dying.....**18-19**

Minor Code: 6139

Required courses..... 9

- FNRL 3483 Psychology of Grief
- FNRL 3623 Thanatology and Unresolved Grief
- FNRL 4183 Natural History of Bereavement

Elective courses 9-10

Selected from the following:

- FNRL 2313 Contemporary Funeral Service
- FNRL 3304 Restorative Art
- FNRL 3383 Funeral Service Statutory Law
- FNRL 3393 Mortuary Jurisprudence
- FNRL 3433 Introduction to Pathology
- FNRL 3493 Funeral Service Communication
- FNRL 3513 History of Funeral Directing

Mathematics

Mathematics

Minor Code: 6179

Required courses..... 12

- MATH 2313 Calculus 1
- MATH 2323 Calculus 2
- MATH 2333 Calculus 3
- MATH 2343 Calculus 4

Elective Mathematics (3/4000 level) 6

(May include three hours from a 3000 or 4000 level statistics course.)

Science Education

Science Education - Secondary Science Education..... **18**

Minor Code: 6059

Required courses..... 18

- PTE 4333 Meeting Secondary Students’ Needs
- PTE 4433 Designing Instruction for Secondary Students
- PTE 4543 Managing Secondary Classrooms
- PTE 4623 Secondary Class Assessment
- BIO 4812 Teaching and Learning in Science Classrooms
- BIO 4853 General Methods of Teaching Science and Lab

College of Math and Science Minors - continued

- * BIO 4930 Individual Study in Biology (1 hour) **OR**
- PHY 4930 Individual Study in Physics (1 hour) **OR**
- CHEM 4930 Individual Study in Chemistry (1 hour)

* Students will take the Individual Study from the Science Education coordinator within their content area.

A grade of "C" or better is required in each course.

Statistics

Statistics 18

Minor Code: 6178

Any 18 hours of Statistics (6 hours at 3/4000 level)