

Bachelor of Science in Chemistry

Concentration in Materials Chemistry

Chemistry (CHEM)

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|--|----------------------------------|----------------------------------|----------------------------------|--|
| General Chemistry lecture and lab | <input type="checkbox"/> 211 (3) | <input type="checkbox"/> 213 (1) | <input type="checkbox"/> 212 (3) | <input type="checkbox"/> 214 (1) (satisfies Natural Science requirement) |
| Organic Chemistry lecture and lab | <input type="checkbox"/> 313 (3) | <input type="checkbox"/> 315(2) | <input type="checkbox"/> 314 (3) | <input type="checkbox"/> 318 (2) |
| Quantitative Chemical Analysis | <input type="checkbox"/> 321 (4) | | | |
| Physical Chemistry lecture and lab | <input type="checkbox"/> 331 (3) | <input type="checkbox"/> 336 (2) | <input type="checkbox"/> 332 (3) | <input type="checkbox"/> 337 (2) |
| Prop. and Bonding of Inorganic Compounds | <input type="checkbox"/> 441 (3) | | | |
| Inorganic Preparations and Techniques | <input type="checkbox"/> 445 (2) | | | |
| Modern Polymer Chemistry | <input type="checkbox"/> 472 (3) | | | |

Electives- 12 credits (choose from the following):

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| Synthetic/Mech. Organic Chemistry | <input type="checkbox"/> CHEM 413 (3) | *General Biochemistry I | <input type="checkbox"/> CHEM 463 (4) |
| Instrumental Methods of Chemical Analysis | <input type="checkbox"/> CHEM 422 (3) | Biochemistry Lab | <input type="checkbox"/> CHEM 465 (2) |
| Instrumental Methods of Chemical Analysis Lab | <input type="checkbox"/> CHEM 423 (2) | *Biomaterials | <input type="checkbox"/> BENG 240 (3) |
| Solid State Chemistry | <input type="checkbox"/> CHEM 471 (3) | Research | <input type="checkbox"/> CHEM 355 or 451 (3) |
| Fundamentals of Nanoscience and Nanomaterials | <input type="checkbox"/> CHEM 480 (3) | | |
| Materials Science | <input type="checkbox"/> ME 313 (3) | | |

*These courses require BIOL 213 as a prerequisite.

Mathematics (MATH)

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| Analytic Geometry and Calculus | <input type="checkbox"/> 113 -or- 123-124 (4) | <input type="checkbox"/> 114 (4) | <input type="checkbox"/> 213 (3) (satisfies Quant. Reasoning req.) |
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Physics (PHYS)

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| University Physics | <input type="checkbox"/> 160 (3) | <input type="checkbox"/> 260 (3) |
| University Physics Lab | <input type="checkbox"/> 161 (1) | <input type="checkbox"/> 261 (1) |

Mason Core (approved courses are listed in the University Catalog)

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| Written Communication | <input type="checkbox"/> ENGH 101 (3) | <input type="checkbox"/> ENGH 302 (3) |
| Oral Communication | <input type="checkbox"/> COMM 100 or 101 (3) | |
| Western Civilization/World History | <input type="checkbox"/> HIST 100 or 125 (3) | |
| Information Technology | <input type="checkbox"/> ____ (3) | |
| Literature | <input type="checkbox"/> ____ (3) | |
| Fine Arts | <input type="checkbox"/> ____ (3) | |
| Social and Behavioral Sciences | <input type="checkbox"/> ____ (3) | |
| Global Understanding | <input type="checkbox"/> ____ (3) | |
| Synthesis | <input type="checkbox"/> ____ (3) | |

General Electives from any area except PRLS/PHED ()

TOTAL CREDITS REQUIRED: 120 Minimum (of which 45 must be upper-division \geq 300 level); overall GPA \geq 2.00; major requirements GPA \geq 2.30; maximum of two courses of CHEM with a "D" grade. All CHEM prerequisite courses require a grade of C or better. See the "Prerequisites for CHEM Courses" document for a complete list.

Effective Fall 2021

Revised 4/2021