EXPE: Exploring Math, Physical Science & Engineering

Your interests may include technology, product design, and understanding how science & math relate to the world around you. Be sure to check out all of the options on the Exploratory Studies website. Major Track: Exploring Math, Physical Science & Engineering

The course registration pyramid – our framework for course selection

FIRST YEAR EXPERIENCE options – choose one:

First year experience options are for first-time, first-year students. They include a first-year seminar course designed to foster connection, academic success, and exploration. Please talk with your advisor about the option best for you.

<table>
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<tr>
<th>Key communities Cluster (seminar + 2 AUCC classes)</th>
<th>Seminar Super-Cluster (IU172 + composition + &amp; AUCC Arts &amp; Humanities class)</th>
<th>Seminar Cluster (IU172 + composition class)</th>
<th>Stand-alone seminar (IU172)</th>
<th>Explorer’s Challenge (independent exploration)</th>
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FOUNDATIONAL course options:

Important note: All majors in this track require calculus. Students should complete all pre-calculus credits (or test out of them) in the first semester so they can take calculus in the second semester. Completing the math placement tool is critical prior to orientation (or first day of classes).
## 1st Semester (ready for algebra / pre-calculus)

| Math: | 1 credit pre-calculus options (MATH117, 118, 124, 125, 126 – depends on placement), OR Pre-Calculus course (MATH127) |
| Science: | Problem Solving in Chemistry (CHEM105) - if tested out of MATH117 and 118 (algebra), OR General Chemistry and lab (CHEM111 / 112) - if tested out of MATH117 & 118 (algebra), OR Biology (LIFE102 or LIFE103) |

## 2nd Semester

| Math: | Calculus 1 (MATH160, 155 or 141) |
| Science: | General Chemistry and lab (CHEM111/112), OR Biology (LIFE102 or LIFE103), OR Computer Programming (CS164) |

## 1st semester (ready for Calculus)

| Math: | Calculus 1 (MATH160, 155 or 141) |
| Science: | General Chemistry and lab (CHEM111 / 112), Biology (LIFE102 or 103), |

## 2nd semester

| Math: | Calculus 2 (MATH161, 255), or no math |
| Science: | General Chemistry 2 and lab (CHEM113/114), OR Biology (LIFE102 or LIFE103), OR Physics (PH141), OR Computer Programming (CS164) |

## COURSES TO EXPLORE and AUCC requirements:

- CON101: Introduction to Construction Management (Must declare pre-CM major for access to course)
- CS150B: Culture and Coding (also satisfies AUCC 3B: Arts & Humanities)
- CS152: Python for STEM
- CS164: Computer Science 1 – Computational Thinking with Java
- CS201 or PHIL201 – Ethical Computing Systems (also satisfies AUCC 3B: Arts & Humanities)
- ECE102: Digital Circuit Logic (override needed)
- ECON202: Principles of Microeconomics (also satisfies AUCC 3C: Social & Behavioral Science)
- ENGR101: Introduction to the Grand Challenges of Engineering (fall only, override needed)
- GES101: Introduction to Sustainability
- GES120: Water Sustainability in the Western US (fall only)
- GES141: Introduction to Sustainable Energy
- GES280A2: Understanding Environmental Pollution
- GR100: Introduction to Geography (also satisfies AUCC 3C: Social & Behavioral Science)
- IU173: Thinking toward a Thriving Planet (also satisfies AUCC categories – varies by topic)
- MECH103: Introduction to Mechanical Engineering
- PHIL110: Logic & Critical Thinking (also satisfies AUCC 3B: Arts & Humanities)
- PSY100: General Psychology (also satisfies AUCC 3C: Social & Behavioral Science)
- PSY152: Science of Learning (also satisfies AUCC 3C: Social & Behavioral Science)

Please visit [https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/](https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/) for AUCC options