## CU Boulder List of STEM Disciplines

As of 09/24/2024.

STEM disciplines are fields of study in the categories of science, technology, engineering, and mathematics.

The specific disciplines included in lists of STEM fields vary across organizations, for which the STEM classification serves different functions. Our list of STEM disciplines relies on two governmental sources...

- Department of Homeland Security (DHS)

- National Science Foundation (NSF)

The DHS list is used by U.S. Immigration and Custom Enforcement (ICE) in immigration policy management, particularly as it relates to international students' opportunities for training through work experience in the U.S. The NSF list is used in the collection and reporting of data on STEM fields and in funding STEM programs and initiatives. Both lists are based on the codes developed by the U.S. Department of Education's National Center for Education Statistics (NCES) to classify instructional programs (CIP codes).

The Colorado Department of Higher Education (CDHE) has a website that lists the CIP codes of disciplines included in the ICE and NSF STEM lists

STEM fields of study offered at CU-Boulder are listed in the table below. They include all areas of Engineering in which a degree is offered, nearly all Natural Sciences areas in which a degree is offered (with the exceptions of psychology and geography), four cross-disciplinary programs, and educational research and evaluation methodology.

| CIP<br>Code | School/College                | Plan<br>Root | Plan Description                | ICE<br>STEM | NSF<br>STEM |
|-------------|-------------------------------|--------------|---------------------------------|-------------|-------------|
| 03.0103     | Arts & Sciences               | ENVR         | Master of the Environment       | Y           | Y           |
| 03.0103     | Arts & Sciences               | ENVS         | Environmental Studies           | Y           | Y           |
| 09.0702     | College of Media, Comm & Info | ETMP         | Emergent Tech&Media Art Prac    | Y           | N           |
| 09.0702     | College of Media, Comm & Info | MDPD         | Media Production                | Y           | N           |
| 11.0102     | Cross-College Programs        | CLSI         | CmpLng,Analytics,Srch&Informat  | Y           | Y           |
| 11.0401     | College of Media, Comm & Info | INFO         | Information Science             | Y           | Y           |
| 11.0701     | Engineering & Applied Sci     | CSAP         | Applied Computer Science        | Y           | Y           |
| 11.0701     | Engineering & Applied Sci     | CSE3         | Computer Science                | Y           | Y           |
| 11.0701     | Engineering & Applied Sci     | CSEN         | Computer Science                | Y           | Y           |
| 14.0101     | Engineering & Applied Sci     | IDEN         | Integrated Design Engineering   | Y           | Y           |
| 14.0102     | Cross-College Programs        | PREE         | Pre-Engineering                 | Y           | Y           |
| 14.0103     | Engineering & Applied Sci     | EME3         | Engineering Management          | Y           | Y           |
| 14.0103     | Engineering & Applied Sci     | EMEN         | Engineering Management          | Y           | Y           |
| 14.0201     | Engineering & Applied Sci     | ASEN         | Aerospace Engineering Sciences  | Y           | Y           |
| 14.0401     | Engineering & Applied Sci     | AREN         | Architectural Engineering       | Y           | Y           |
| 14.0501     | Engineering & Applied Sci     | BMEN         | Biomedical Engineering          | Y           | Y           |
| 14.0701     | Engineering & Applied Sci     | CHEN         | Chemical Engineering            | Y           | Y           |
| 14.0801     | Engineering & Applied Sci     | CVEN         | Civil Engineering               | Y           | Y           |
| 14.1001     | Engineering & Applied Sci     | ECE3         | Electrical Engineering          | Y           | Y           |
| 14.1001     | Engineering & Applied Sci     | EEEN         | Electrical Engineering          | Y           | Y           |
| 14.1004     | Engineering & Applied Sci     | NTEN         | Network Engineering             | Y           | Y           |
| 14.1004     | Engineering & Applied Sci     | TLEN         | Telecommunications              | Y           | Y           |
| 14.1201     | Engineering & Applied Sci     | EPEN         | Engineering Physics             | Y           | Y           |
| 14.1401     | Engineering & Applied Sci     | EVEN         | Environmental Engineering       | Y           | Y           |
| 14.1801     | Engineering & Applied Sci     | MTEN         | Materials Science & Engineering | Y           | Y           |
| 14.1901     | Engineering & Applied Sci     | MCEN         | Mechanical Engineering          | Y           | Y           |
| 14.4201     | Engineering & Applied Sci     | ROBO         | Robotics                        | Y           | Y           |
| 14.4501     | Engineering & Applied Sci     | BIEN         | Biological Engineering          | Y           | Y           |
| 14.4701     | Engineering & Applied Sci     | ECEN         | Electrical & Comp Engineering   | Y           | Y           |
| 14.9999     | Engineering & Applied Sci     | ENED         | Engineering Education           | Y           | Y           |
| 14.9999     | Engineering & Applied Sci     | XXEN         | Engineering - Open Option       | Y           | Y           |
| 15.0000     | Engineering & Applied Sci     | ATLS         | Creative Technology and Design  | Y           | Y           |
| 15.0000     | Engineering & Applied Sci     | TMEN         | Creative Technology and Design  | Y           | Y           |
| 26.0202     | Arts & Sciences               | вснм         | Biochemistry                    | Y           | Y           |

| CIP     |                           | Plan |  | ICE  | NSF  |
|---------|---------------------------|------|--|------|------|
| Code    | School/College            | Root | Plan Description                                 | STEM | STEM |
| 26.0406 | Arts & Sciences           | MCDB | Biological Sciences-Molecular, Cellular, & Devel | Y    | Y    |
| 26.0901 | Arts & Sciences           | IPHY | Integrative Physiology                           | Y    | Y    |
| 26.1310 | Arts & Sciences           | EBIO | Ecology & Evolutionary Biology                   | Y    | Y    |
| 26.1501 | Cross-College Programs    | NRSC | Neuroscience                                     | Y    | Y    |
| 27.0101 | Arts & Sciences           | MATH | Mathematics                                      | Y    | Y    |
| 27.0301 | Arts & Sciences           | AMAT | Math Dept Majr in Applied Math                   | Y    | Y    |
| 27.0301 | Arts & Sciences           | AMEN | Applied Mathematics                              | Y    | Y    |
| 27.0301 | Engineering & Applied Sci | AMEN | Applied Mathematics                              | Y    | Y    |
| 27.0501 | Arts & Sciences           | STAT | Statistics and Data Science                      | Y    | Y    |
| 30.2501 | Cross-College Programs    | COGS | Cognitive Science                                | Y    | Ν    |
| 30.3001 | Cross-College Programs    | DTS3 | Data Science                                     | Y    | Y    |
| 30.3001 | Cross-College Programs    | DTSC | Data Science                                     | Y    | Y    |
| 40.0201 | Arts & Sciences           | ASTR | Astrophysical & Planetary Sci                    | Y    | Y    |
| 40.0202 | Arts & Sciences           | ASPS | Astrophysical & Planetary Sciences               | Y    | Y    |
| 40.0401 | Arts & Sciences           | ATOC | Atmospheric & Oceanic Sciences                   | Y    | Y    |
| 40.0501 | Arts & Sciences           | CHEM | Chemistry  | Y    | Y    |
| 40.0508 | Cross-College Programs    | CPHY | Chemical Physics                                 | Y    | Y    |
| 40.0601 | Arts & Sciences           | GEOL | Geology  | Y    | Y    |
| 40.0603 | Cross-College Programs    | GEOP | Geophysics                                       | Y    | Y    |
| 40.0801 | Arts & Sciences           | PHYS | Physics  | Y    | Y    |
| 42.2799 | Arts & Sciences           | PSYC | Psychology                                       | Y    | Y    |
| 52.1301 | Business                  | SCMN | Supply Chain Management                          | Y    | Y    |
| 52.1302 | Business                  | BUAN | Business Analytics                               | Y    | Y    |