Surveying and Mapping Minor

The minor in surveying and mapping is principally designed for civil engineering students that would like to sit for the Fundamentals of Surveying (FS) exam. The coursework consists of a minimum of 19 credit hours distributed in the following manner.

### Prerequisites
Mathematics 1172 (3)
CE 2050 (3)

### Required courses (19 credit hours)
CE 2090
CE 5410
CE 5411
CE 5412
CE 5441
CE 5461 or CE 6431

Once the Minor Program Form has been approved by the coordinating adviser in the Department of Civil, Environmental and Geodetic Engineering, the student must file the form with a college/school counselor. For further information about the minor program, contact the department.

### Arts and Sciences minor program guidelines

The following guidelines govern minors:

- **Required for graduation**: No
- **Credit hours required**: A minimum of 19 credit hrs
- **Transfer credit hours allowed**: No more than one half of the credit hours required on the minor.
- **Overlap with the GEC**: Permitted, unless specifically disallowed by an individual minor program.
- **Overlap with the major**: Not allowed and
  - The minor must be in a different subject than the major.
  - The same courses cannot count on the minor and on the major.
- **Overlap between minors**: Each minor completed must contain 12 unique hours.
- **Grades required**
  - Minimum C- for a course to be listed on the minor.
  - Minimum 2.00 cumulative point-hour ratio required for the minor.
  - Coursework graded Pass/Non-Pass cannot count on the minor.
- **Minor Approval**: The minor program description sheet indicates if the minor coursework must be approved by:
  - The academic unit offering the minor, or
  - A college/school counselor.

- **Filing the minor program form**: The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

- **Changing the minor**: Once the minor program is filed in the college office, any changes must be approved by:
  - The academic unit offering the minor, or
  - A college/school counselor (depending on the minor).