

Existing Catalog Text

Doctor of Philosophy in Engineering

- Concentration in Civil Engineering

General requirements for the Doctor of Philosophy (Ph.D.) degree are given in the [Graduate Program](#) section of this Catalog. In addition, students must take a distribution of graduate courses that support their dissertation research.

Emphases and Course Requirements

In addition to the general University doctoral degree general requirements, students pursuing a Ph.D. in Engineering with a concentration in Civil Engineering must meet the following criteria:

1. Choose an emphasis and complete its associated core course requirements.
2. Complete 4 credit hours of CE 691 (seminar).

The areas of emphasis are:

- Construction Engineering and Management: STAT **345, CE 577, MGMT 502 or 503.
- Environmental Engineering: CE 531, 534, 536.
- Geotechnical Engineering: CE 502, 560, 561L, 562, 567.
- Hydraulic and Water Resources Engineering: CE 541, 542, 545, 547.
- Structural Engineering and Mechanics: CE 501, 502, 520, 562.
- Transportation: CE 580, 581, 582, 583, 584.

Equivalent graduate-level courses taken at another institution may be used to satisfy some requirements, but this must be decided on a case-by-case basis by the Graduate Advisor or Graduate Committee in the Civil Engineering department.

Examinations

Candidates for the Doctor of Philosophy degree with a concentration in civil engineering must demonstrate a competence in basic areas of the field by satisfactorily completing the departmental qualifying examination. Doctoral students must take the qualifying exam during their first or second semester as a Ph.D. student. After a student has substantially completed his/her course work, the prospective candidate takes a comprehensive exam to demonstrate an ability to conduct Ph.D.-level research. A student is advanced to candidacy for the Ph.D. degree after satisfactory completion of the comprehensive examination with approval of the doctoral committee, submission of the Application for Candidacy, and approval of the Dean of Graduate Studies. The Application to Candidacy is submitted to Graduate Studies by the end of the semester in which the Comprehensive Exam is passed. The Ph.D. Dissertation must be defended in an oral examination before the student's Dissertation Committee.

Proposed Catalog Text (changes are in red)

Doctor of Philosophy in Engineering

- Concentration in Civil Engineering

General requirements for the Doctor of Philosophy (Ph.D.) degree are given in the [Graduate Program](#) section of this Catalog. In addition, students must take a distribution of graduate courses that support their dissertation research.

Emphases and Course Requirements

In addition to the general University doctoral degree general requirements, students pursuing a Ph.D. in Engineering with a concentration in Civil Engineering must meet the following criteria:

3. Choose an emphasis and complete its associated core course requirements.
4. Complete **2 credit hours** of CE 691 (seminar).

The areas of emphasis are:

- Construction Engineering and Management: STAT **345, CE 577, MGMT 502 or 503.
- Environmental Engineering: CE 531, 534, 536.
- Water Resources Engineering: CE 541, 542, 545, 547.
- Structural Engineering and Mechanics: CE 501, 502, 562.
- Transportation: CE 581, 582.

Equivalent graduate-level courses taken at another institution may be used to satisfy some requirements, but this must be decided on a case-by-case basis by the Graduate Advisor or Graduate Committee in the Civil Engineering department.

Examinations

Candidates for the Doctor of Philosophy degree with a concentration in civil engineering must demonstrate a competence in basic areas of the field by satisfactorily completing the departmental qualifying examination. Doctoral students must take the qualifying exam during their first or second semester as a Ph.D. student. After a student has substantially completed his/her course work, the prospective candidate takes a comprehensive exam to demonstrate an ability to conduct Ph.D.-level research. A student is advanced to candidacy for the Ph.D. degree after satisfactory completion of the comprehensive examination with approval of the doctoral committee, submission of the Application for Candidacy, and approval of the Dean of Graduate Studies. The Application to Candidacy is submitted to Graduate Studies by the end of the semester in which the Comprehensive Exam is passed. The Ph.D. Dissertation must be defended in an oral examination before the student's Dissertation Committee.

Justification for the program

We are proposing two minor revisions to our PhD curriculum. First, we proposed to reduce the number of required seminar credits from two to four. The existing requirement of four terms of seminar is redundant and impedes progress in the students' programs. When a student completes four seminars, the material and speakers are often repeated. This requirement occasionally results in delayed graduations.

The second change involves edits to several of our core area course requirements. These edits reflect the courses that have been offered in recent semesters within our department and remove courses that have been discontinued or are no longer offered.

Impact on long-range planning

The proposed changes are minor in nature and have no significant impacts on long-range planning. The course updates are simply a representation of the current curriculum. The seminar update could reduce time to graduation, which is consistent with the goals of UNM, SOE, and CE.

Detailed budget analysis and faculty workload implications

There will be no budget impacts from the proposed. There will be no impact on faculty workload. The CE seminar is consistently at or over capacity.