

**DEGREE/PROGRAM CHANGE
FORM C
Form Number: C1295**

Fields marked with * are required

Name of Initiator: Charles Fleddermann **Email:*** cbf@unm.edu **Date:*** 10-08-13

Phone Number:* 505 277-5521

Initiator's Title* Associate Dean: School of
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Associated Forms exist?* No ▼

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Department* SoE

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Branch

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Proposed effective term:

Semester Fall ▼ Year 2014 ▼

Course Information

Select Appropriate Program Graduate Degree Program ▼

Name of New or Existing Program* School of Engineering Shared-Credit Degrees

Select Category Degree ▼ Degree Type BS/MS

Select Action New ▼

Exact Title and Requirements as they should appear in the catalog. If there is a change, upload current and proposed requirements.

See current catalog for format within the respective college (upload a doc/pdf file)

[SoE Shared Credit Catalog Copy.pdf](#)

Does this change affect other departmental program/branch campuses? If yes, indicate below.

Reason(s) for Request * (enter text below or upload a doc/pdf file)

See attached

[SOE Shared Credit Reasons for Request.pdf](#)

Upload a document that includes justification for the program, impact on long-range planning, detailed budget analysis and faculty workload implications.*

[SoE Shared Credit Program Budget and workload implications.pdf](#)

Catalog Copy: (to be inserted in the general SoE section under the heading Undergraduate Degrees Offered, after subheading Bachelor of Science Degrees)

School of Engineering Shared Credit Program

The School of Engineering offers a Shared Credit Program designed to allow students to complete a BS and MS, or a BS and MEng degree in five years (depending upon the student's mathematics preparation upon entering UNM as a first-year student). To accomplish this, some courses are counted towards both the Bachelors and Masters degrees.

Curriculum SoE courses that can be shared between BS and MS degrees fall into two categories: 1) Courses that are designated variously as technical electives, track electives, engineering electives, management electives, or advanced science electives; in the shared credit program, these courses will be replaced by 500-level graduate courses that will count towards both degrees, and 2) Courses that are cross-listed at both the 400 and 500 levels; students in the shared-credit program would take some of these courses at the 500 level with the course counting towards both the BS and MS degrees.

This program is intended to facilitate both disciplinary and interdisciplinary BS/MS degree programs. The exact curriculum for each student will be determined by the director of undergraduate studies for the student's BS degree and the director of graduate studies for the student's MS degree, and will be approved by the SoE Associate Dean for Academic Affairs.

Students pursuing an interdisciplinary shared-credit program may be required to take pre-requisite courses for the graduate level courses in their MS program. Thus, an interdisciplinary shared-credit program may require more than the nominal five years to complete. Because the mathematics requirements for the BS in Construction Management (CM) do not match those for engineering or computer science degrees, no interdisciplinary shared-credit programs are available to those students who are pursuing a BS in CM.

Admission The BS/MS Shared Credit Program is a special program for which a student will apply during the junior year of the BS program. Students may apply after completing 75 hours applicable to the BS degree. In order to be eligible for the Shared Credit Program, students must have already been admitted to a BS degree program in the School. Admission to the graduate portion of this program is provisional, and is not finalized until the student satisfactorily completes the requirements for the BS degree.

Further rules regarding SOE shared credit programs can be found on the School of Engineering web site (soe.unm.edu) and in the advising manuals for each department.

School of Engineering Shared-Credit BS/MS Program

The School of Engineering is proposing to create an option for students to obtain a BS and an MS degree through a shared-credit program. This program will allow students to pursue a BS/MS combination within one engineering discipline (e.g. a BS and MS in Electrical Engineering) or an interdisciplinary BS/MS program where the BS and MS are in different disciplines offered in SoE.

Initiating shared credit programs in SoE will serve to bolster recruiting efforts at the undergraduate level (a shared BS/MS program achievable in 5 years would be very attractive to potential undergraduate students), and would serve as a pipeline for students into our PhD programs.

Curriculum SoE courses that would be shared between BS and MS degrees would fall into two categories:

- 1) All SoE BS programs require between 9 and 18 hours of credit in courses that are designated variously as technical electives, track electives, engineering electives, management electives, or advanced science electives. In the shared credit program, these courses will be replaced by 500-level graduate courses that will count towards both degrees.
- 2) Most SoE departments offer courses that are cross-listed at both the 400 and 500 levels. As appropriate, students in the shared credit program would take these courses at the 500 level and the course would count towards both the BS and MS degrees.

Since this program is intended to facilitate both disciplinary and interdisciplinary BS/MS degree programs, and since many options exist within the BS programs for students to choose a specialization, the exact shared-credit program will be tailored to the student's interest, but will conform to the UNM rules on shared credit programs. The shared-credit curriculum for each student will be determined by the director of undergraduate studies for the student's BS degree and the director of graduate studies for the student's MS degree, and will be approved by the SoE Associate Dean for Academic Affairs.

Of course, students pursuing an interdisciplinary shared-credit program may be required to take pre-requisite courses for the graduate level courses in their MS program. Thus, an interdisciplinary shared-credit program may require more than five years to complete. Because the mathematics requirements for the BS in Construction Management (CM) do not match those for engineering or computer science degrees, no interdisciplinary shared-credit programs are available to those students who are pursuing a BS in CM.

Accreditation The shared credit program will have no effect on ABET or ACCE accreditation of SoE BS programs. The BS segment of this Shared Credit Program will still meet all ABET requirements. SoE graduate programs are not accredited outside of UNM's accreditation.

Admission The BS/MS Shared Credit Program is a special program for which a student will have to apply during the junior year of the BS program. Students will apply and may be admitted after completing 75 hours applicable to the BS degree. In order to be eligible for the Shared Credit Program, students must have already been admitted to a BS degree program in the School. Students who have a degree GPA of 3.5 on the courses required for semesters 3 thru 5 of their published curriculum will be automatically admitted to the Shared Credit Program upon application. In calculating the GPA, if a student has had multiple attempts at a course, only the highest grade earned will be counted. Students with a GPA between 3.0 and 3.5 will be considered for admission as well; the decision will be made through the normal graduate admission procedure of the proposed MS department. The GRE will be waived for students applying for this program. In addition, the normal application fee for graduate admission will be waived.

Admission to the graduate portion of this program is provisional, and is not finalized until the student satisfactorily completes the requirements for the BS degree, including earning at least a 3.0 GPA in each semester after being admitted to the shared credit program.

Normally, students who were not admitted to the Shared Credit Program as juniors with 75+ hours completed are not eligible for this program. A student who did not apply as described above may petition to be allowed into the program; decisions on these petitions will be made by the SoE Associate Dean for Academic Affairs.

Leaving the Shared Credit Program Students admitted to this BS/MS Shared-Credit Program may choose to not complete the MS degree, terminating with the BS degree. If a student chooses to not complete the MS degree, he/she should inform the department graduate advisor of this as soon as possible. The student will be awarded the BS upon completion of the requirements for the BS degree; the shared-credit courses listed in the student's curriculum for this degree in the senior year will be applicable to the BS degree whether the student completes the MS or not.

Similarly, if the student is not advanced by the department to the MS program due to poor performance on the undergraduate portion of the degree after admission, the student will still be able to complete the BS degree and will be allowed to include the graduate level courses that are part of the Shared Credit curriculum towards the BS degree.

School of Engineering Shared Credit Program: Justification and Implications

Justification:

SoE is seeking to initiate shared credit BS/MS programs for two main reasons, both linked to increasing enrollments. First, we feel this sort of program, unique in New Mexico, will bolster our recruiting efforts at the undergraduate level and lead to increased undergraduate enrollments. Second, encouraging our high-achieving undergraduate students to also pursue a Masters degree at UNM should help us to increase the numbers in both the MS and in our PhD programs; we will encourage those students who are performing well in the shared-credit program to remain at UNM for a PhD. Furthermore, since the engineering/computer science workplace is becoming more interdisciplinary, a shared-credit program at SoE will help us to more effectively prepare students for the future workforce.

Impact on Long-range Planning:

We are currently engaged in numerous initiatives designed to increase our enrollments at all levels. SoE currently believes that our enrollments are somewhat below our capacity. Increases in enrollment stemming from this shared-credit program are accounted for in our current long-range plans for SoE enrollments.

Budget and Faculty Workload Implications:

The shared-credit program in SoE will be made up entirely of existing courses and degree programs. Thus, there will be no need for increased faculty or staff resources; there will be no budget or faculty workload implications stemming from this program.