## Signature Page to Accompany Regents' Proposals

Institution Submitting Proposal: University of Utah

College, School or Division in Which Program/Administrative Unit Will Be Located: College of Mines & Earth Sciences

Department(s) or Area(s) in Which Program/Administrative Unit Will Be Located: Geology & Geophysics

Program/Administrative Unit Title: Combined BS/MS

Recommended Classification of Instructional Programs (CIP) Code: 13 01

Certificate, and/or Degree(s) to Be Awarded: Combined B.S. and M.S. in Geological Engineering

**Proposed Beginning Date:** 

Institutional Signatures (as appropriate):

Department Chair

Career and Technical Education Director

Chief Academic Officer

Date:

Dean or Division Chair

Graduate School Dean

President

# College of Mines and Earth Sciences Department of Geology and Geophysics Proposal for combined BS/MS Program In Geological Engineering

### Section I: Request

The Department of Geology and Geophysics at the University of Utah requests permission to establish a combined BS/MS degree program in Geological Engineering.

#### Section II: Need

The University of Utah offers unique educational research opportunities for undergraduate students because it is a strong research institution and a technological leader in the mountain west. Many students participate in research at many levels, including undergraduate research and honors projects, participation in graduate student and faculty research projects, in guest lectures, and in discussing forefront research by leaders in their fields.

Current degree requirements (134 credit hours) for a BS degree in geological engineering are stringent and may be one cause for relatively small numbers of undergraduate majors. In recent years, the MS degree has become highly desirable for practicing engineers. A combined BS/MS degree program intended to foster undergraduate research and to accelerate progress toward the MS degree is thus timely and attractive for undergraduate students interested in pursuing employment in the field, or in pursuing research and/or an advanced degree.

#### **Program Description**

The combined degree program described below is designed to be completed by students in five years and to culminate with simultaneous conferral of the Bachelor of Science and Master of Science degrees. The program is adapted from an existing program in the College of Engineering in order to build upon the solid foundation established by that program. Students in the combined program begin their research early and complete advanced level courses during the senior year. These activities can accelerate completion of the combined program by a full year relative to enrollment in sequential BS – MS programs. Students are encouraged to begin research in the summer following their junior year. The following minimum requirements must be met universally:

- 1) Students must complete a minimum of 152 semester credit hours of qualified studies. A minimum of 30 semester credit hours must meet the MS requirements of the University of Utah Graduate School, the College of Mines and Earth Sciences, and the Department of Geology and Geophysics. A minimum of 122 semester credit hours must meet the BS requirements of the geological engineering program.
- 2) Each interested undergraduate student must apply to the program through the Department of Geology & Geophysics by April 1st of his or her Junior year. Recommendations for admission are made by the Department of Geology and Geophysics to the Graduate School by June 1st each year. Entrance criteria for the combined BS/MS program are consistent with criteria for the traditional MS program(s).
- 3) Admitted students must submit a BS/MS program of study to the department within one semester after admission.
- 4) Transfer from undergraduate to graduate status occurs after completion of 122 semester credit hours of qualified studies.

- 5) The BS and MS degrees are conferred simultaneously following completion of the program.
- 6) Students wishing to exit the combined program can apply qualified coursework toward the traditional BS and MS degree requirements without penalty, with recognition that a given course cannot be counted toward both degrees.
- 7) No student will be awarded a separate MS degree in Geological Engineering without satisfying all requirements for the BS degree.

#### **Procedures**

- 1. Application for admission to BS/MS program will be submitted at the end of a student's Junior year. This application is processed and decisions made at the department level. Consistent with University policy, entering students must have at least a 3.0 cumulative GPA.
- 2. Students must be enrolled in the geological engineering program at the time of applying for the BS/MS degree option.
- 3. The student will apply for graduate status during the semester in which 122 credit hours are completed. Students will follow the regular University of Utah Graduate School application process. All university requirements for graduate admissions must be met except posting of undergraduate degree. (Note: On the referral sheet that the department returns to graduate admissions, the department will note that the student has been accepted to the combined BS/MS program. Graduate Admissions will then approve admission without the BS completed.)
- 4. Following admission, a supervisory committee will be established within the department during the first semester of work toward the combined degree. The entering student will select an advisory committee and prepare a program of study for completion of the BS and MS degree during first semester in the combined program.
- 5. A mid-program review will be conducted by the supervisory committee after 2 semesters in the program.
- 6. Each degree will be awarded when all work is completed. A Master's degree will **not** be awarded under this program if all requirements for the BS are not completed.

#### Section III: Institutional Impact

The Department of Geology and Geophysics at the University of Utah is the only institution in the State that offers Geological Engineering degrees. Enrollment has historically been low, but graduates are sought after by governmental and industrial concerns. A combined BS/MS degree will likely result in increased enrollment in the program because it will be attractive to students. Instituting this program will not necessitate changes in existing administrative structures at the University. As other, similar combined BS/MS programs exist within the University, procedures are already established for such programs in reporting by the Registrar and acceptance into the program by the Graduate School prior to completion of the BS degree. No changes in faculty, staff, or physical facilities will be required. Further, no student will be adversely affected by this change as any student can complete his or her BS under the existing program.

## Section IV: Finances

No costs are anticipated to result from this change. If enrollments in Geological Engineering increase as a result of instituting this program, then the cost per degree will decrease.