

GEOLOGICAL ENGINEERING

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Dear Geological Engineering Alumni and friends,

As you know roughly 18 year ago, faculty members from the Geology and Geophysics Department and the College of Engineering formed the interdisciplinary Geological Engineering degree program. This was a first experiment in interdisciplinary education at the undergraduate level in the College of Engineering although there were graduate level interdisciplinary programs in the College and the University. We already now have approximately 158 alumni with BS degrees in GLE and 41 alumni with MS and PhD degrees in GLE. Many, if not all of the GLE undergraduates, are double majors with also a degree in Geology and Geophysics.

Half our alumni, based on a 2004 survey, are engaged directly in geological engineering with others in either related fields like civil engineering, environmental engineering, hydrogeology, geology, as well as in diverse careers and life styles such as law, construction, land development, and mothering. Nearly 95%, however, had employment and indicated that they applied their undergraduate education in solving real world problems in their work. Nearly half of them attended graduate school and joined a professional society. Most remarkably, nearly 75% of them participated in continuing education courses and professional meetings and traveled outside of US. They almost uniformly value having a rigorous technical background combining geology and engineering with social sciences, liberal arts and basic sciences. They also enjoy the option of becoming a licensed professional either or both as P.G. and P.E.

GLE faculty also take pride in this one of the earliest approaches to interdisciplinary undergraduate education, which the institutions of higher education are beginning to recognize as a strong future trend in education in our changing world. The core GLE faculty has not changed much. One of the founding faculty members and a past chair of GLE, David Mickelson retired last year although he is still active in research. He and I participated as co-authors with others on a USGS professional paper "Formation, Evolution, and Stability of Coastal Cliffs", which was a culmination of our many years of joint research on the Great Lakes coastal bluffs. Basil Tikoff and Laurel Goodwin joined the GLE Program and Jean Bahr (who is also the current Geology & Geophysics Chair) and Herbert Wang (who is Associate Dean in the College of Letters and Sciences) are still continuing. Mary Anderson was elected recently to the National Academy of Engineering (NAE) as a



Evan Parks, a GLE senior, who is spending this year abroad in Germany, is seen with Rwandan children. He was one of the two team leaders for Engineers Without Borders in Rwanda.

scientist who works at the interface of geology and engineering and brought much honor to G&G and GLE.

We had much more change in our geophysical engineering component. Richard Allen and David Alumbaugh, two young and active geophysics faculty members, left for California but we recently hired Dante Fratta, who holds a joint appointment. Professor Bezalel Haimson, our founding chair, continues to train our students in rock mechanics. Professors Craig Benson, who was named recently the Kellet Fellow by the University, is still actively providing geoenvironmental exposure to our undergraduates and graduates. Professor Benson also provides opportunities to many GLE undergrads to work on research projects and gain experience in the laboratory and the field engineering work. Peter Bosscher's focus evolved towards sustainable growth and other global engineering issues. He is currently serving on the national Board of Governors of Engineers Without Borders. Some of our students participated in teams led by Professor Bosscher for building basic infrastructure systems in the poor, war-torn African country of Rwanda.

Our graduates are much valued by those companies who hire them. Once they hire one of our graduates, then they want to hire more as they find their unique geology–engineering perspective combined with enhanced field savvy particularly attractive. However, we are not able to meet the demand as our enrollments are currently going through a down cycle.

We value your support and donations especially to our scholarship fund. As a young program, we are particularly challenged in this area. We also appreciate hearing from you. Stop by if you are in town or drop an e-mail line. My best wishes to all of you.