

Proposition Number 14-13/14

Sponsors A. Salim Bawazir (Engr.); Rolfe Sassenfeld (Engr.); and S.H. Munson-McGee (ACES)

Proposed Committee Academic Affairs

Actual Committee

Title A Memorial Approving the Formation of a Joint Doctorate of Philosophy with a specialization in Civil Engineering between NMSU and the University Autonomous of Chihuahua (UACH)

Prior Approvals

Department December 2008

College December 2008

ADAC (Associate Deans Academic Council) to be considered April 14, 2014

ADC (Academic Deans Council) March 25, 2013

Proposal

This memorial documents Faculty Senate approval of the proposed joint Doctorate of Philosophy with a specialization in Civil Engineering between NMSU and UACH as described below.

Program Description

Students are proposed by faculty from UACH. The College of Engineering at NMSU employs a faculty member from UACH who serves as liaison. The Department of Civil Engineering (CE) at NMSU assesses applications in the same way as all PhD applications. Sub-discipline specific CE faculty teams review applications and recommendations.

The agreement requires students to complete 15 graduate (500 level or above) credits at UACH and 15 at NMSU. On completion of all coursework, students are required to take and pass the same PhD Qualifying Examination at NMSU that all other students in the program must pass. The students then proceed to the dissertation part of the program. The NMSU College of Engineering requires PhD students to meet the following Departmental presentation and publication guidelines (which exceed the minimum requirements of NMSU):

1. The student is required to present research results from their PhD research work before the final exam. For this purpose, a paper submitted to an international, national, regional, or local level conference may be considered.
2. The student is required to submit the main results of the PhD research work to a peer reviewed journal. The manuscript has to be published or accepted for publication before the dissertation defense.

These guidelines represent the minimum requirements for the NMSU College of Engineering; however, students must prepare additional presentations and publications: the dissertation, quarterly and final project reports, journal articles, implementation plans,

and research proposals. They have to satisfy the deliverables for the PhD research project and also the standards set by the PhD advisor and doctoral committee.

Students are supervised by a committee co-chaired by a faculty member from NMSU and at least one faculty member from UACH.

UACH students have 4 years of support from the Mexican Government through the National Council of Science and Technology (CONACYT), which is Mexico's equivalent of our NSF. The students' income is supplemented through the award of Teaching Assistantships from NMSU.

Rationale

History

- The agreement emerged about ten years ago in an effort to build more links between the two Universities. The original agreement failed to secure comprehensive approval of NMSU at all levels. It was signed by the President and the then Department Head. We are now ready to graduate our first PhD and need to ensure that the agreement is in place.

Advantages to NMSU

- Strengthen research collaboration – especially in international borderland infrastructure planning initiatives.
- UACH is a pipeline to NMSU for their very best Civil Engineering graduates.
- Students are funded though CONACYT.

Cost to NMSU

- NMSU, through the CE department, supplies only TA support from existing College of Engineering TA allocations. No new resources required. The primary cost for research is grad student support, which comes from CONACYT through UACH. Instrumentation and equipment is already in place, funded through externally sponsored research. So, this initiative provides a steady source of grad student support for the best UACH Civil Engineering graduates.
- Further, UACH has lab facilities that are at the NMSU's disposal for students on the program under consideration, and our own.

Advantages to UACH students

- Access to complementary facilities and resources.
- Exposure to two cultural approaches to research.
- International student mobility.
- Enhanced acquisition of research and transferable skills, such as negotiation skills, use of videoconferencing, adaptability.
- Better networking opportunities for future job prospects.