2013-2014 LONG SIGNATURE SHEET

Proposal Number: INES 11-07-2013

Proposal Title: Revision of INES Graduate Catalog

Originating Department: Infrastructure and Environmental systems-INES

TYPE OF PROPOSAL: UNDERGRADUATE_____   GRADUATE__X___   UNDERGRADUATE & GRADUATE____

DATE RECEIVED	DATE CONSIDERED	DATE FORWARDED	ACTION	SIGNATURES
		10/25/2013	Approved	**INES Director** *(signature)* Dr. Jy S. Wu
		11/8/2013 11/19/2013	Approved	**INES Program Committee: Dr. John Diemer** *(signature)* **COE CEGC: Dr. Edward Morse** *(signature)*
			Approved	**COLLEGE FACULTY CHAIR (if applicable)** *(signature)* Ari Mukherjee [print name here:]
		11/25/13	Approved	**COLLEGE DEAN** *(signature)* Dr. Robert Johnson
			Approved	**GENERAL EDUCATION** (if applicable; for General Education courses) [print name here:]
			Approved	**UNDERGRADUATE COURSE & CURRICULUM COMMITTEE CHAIR** (for undergraduate courses only)
11/26/13	1/14/14	2/10/14	Approved	**GRADUATE COUNCIL CHAIR** (for graduate courses only) *(signature)* ALAN R. FREITAG
				FACULTY GOVERNANCE ASSISTANT (Faculty Council approval on Consent Calendar)
				FACULTY EXECUTIVE COMMITTEE (if decision is appealed)

Revised 10/11/13
OAA/mjw

UNC CHARLOTTE

LONG FORM
COURSE AND CURRICULUM PROPOSAL

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*To: Dr. Alan Freitag, Chair of Graduate Council

From: Dr. Jy S. Wu, INES Program Director

Date: November 7, 2013

Re: Revision of the INES Graduate Catalog

The Long Form is used for major curriculum changes. Examples of major changes can include: creation of a new major, creation of a new minor, creation of a new area of concentration, or significant changes (more than 50%) to an existing program (Note: changing the name of an academic department does not automatically change the name(s) of the degree(s). The requests must be <u>approved</u> separately by the Board of Governors.)

Submission of this Long Form indicates review and assessment of the proposed curriculum changes at the department and collegiate level either separately or as part of ongoing assessment efforts.

*Proposals for undergraduate courses should be sent to the Undergraduate Course and Curriculum Committee Chair. Proposals related to both undergraduate and graduate courses, (e.g., courses co-listed at both levels) must be sent to both the Undergraduate Course and Curriculum Committee and the Graduate Council.

I. HEADING AND PROPOSAL NUMBER   INES-11-07-2013

    A. HEADING.
        University of North Carolina at Charlotte
        Revised, Graduate
        Proposal from: Infrastructure and Environmental Systems-INES
                Interdisciplinary Doctoral Program
                Dr. Jy S. Wu, INES Program Director (jwu@uncc.edu)

    B. PROPOSAL NUMBER. INES-11-07-2013

    C. TITLE. Revision of the INES graduate catalog to reflect desired revisions for Degree Requirements, Admissions, and related editorial changes.

II. CONTENT OF PROPOSALS

    A. PROPOSAL SUMMARY.

        1. SUMMARY. (A) For the Degree Requirements, the INES program proposes to redistribute the current number of required courses between the core courses (5 courses) and the specialized courses (3 courses). The new requirement will be a balance of course for the core courses (4 courses) and the specialized courses (4 courses). The redistribution will not change the total credit hours required for graduation. (B) For Admissions, we propose to revise the requirements for admitting students with baccalaureate degrees only. The current catalog did not clearly distinguish the requirements for applicants with a MS or BS degree. (C) We need to make editorial changes to reflect these revisions throughout the catalog, together with other editorial changes as highlighted in the attached proposed 2014-2015 INES Catalog.

    B. JUSTIFICATION.

        (SEE ATTACHED JUSTIFICATIONS FOR DETAILS)

        1. Credit hours

        2. Prerequisites/corequisites: N/A

        3. Course numbering: N/A

        4. The changes in the curriculum are designed to improve the interdisciplinary nature of the program.

5. Course(s) offered previously under special topics numbers: N/A

C. IMPACT. Changes to courses and curricula often have impacts both within the proposing department as well as campus-wide. What effect will this proposal have on existing courses and curricula, students, and other departments/units? Submit an Impact Statement that fully addresses how you have assessed potential impacts and what the impacts of this proposal might be. Consider the following:

1. The proposed changes will provide INES students with a more balanced curriculum especially in the core courses and specialize/elective courses as compared to the current catalog.
2. There will be no changes in the total required credit hours for graduation.
3. It provides specific admission requirements for applicants with BS degree only.

III. RESOURCES REQUIRED TO SUPPORT PROPOSAL.

A. PERSONNEL. None

B. PHYSICAL FACILITY. None

C. EQUIPMENT AND SUPPLIES: None

D. COMPUTER. None

E. AUDIO-VISUAL. None

F. OTHER RESOURCES. None

G. SOURCE OF FUNDING. N/A

IV. CONSULTATION WITH THE LIBRARY AND OTHER DEPARTMENTS OR UNITS

A. LIBRARY CONSULTATION. N/A

B. CONSULTATION WITH OTHER DEPARTMENTS OR UNITS. N/A

V. INITIATION, ATTACHMENTS AND CONSIDERATION OF THE PROPOSAL

A. ORIGINATING UNIT. The proposed revisions in Degree Requirements were approved by the INES Advisory Committee in January 2013. This Committee includes representatives/Chairs from seven (7) participating departments. All proposed changes were circulated to INES program faculty. No objections were brought up by the program faculty.

B. CREDIT **H**OUR. **(Mandatory if new and/or revised course in proposal)**
   N/A

C. ATTACHMENTS.
   1. C**ONSULTATION**: N/A
   2. C**OURSE** O**UTLINE**/S**YLLABUS**: N/A
   3. P**ROPOSED** C**ATALOG** C**OPY**: Copy and paste the current catalog copy and use the Microsoft Word "track changes" feature (or use ~~red text with "strikethrough"~~ formatting for text to be deleted, and adding blue text with "underline" formatting for text to be added).

   (See Attached Catalog Copy)

   a. For a new course or revisions to an existing course, check all the statements that apply:
   ____ This course will be cross listed with another course.
   ____ There are prerequisites for this course.
   ____ There are corequisites for this course.
   ____ This course is repeatable for credit.
   ____ This course will increase/decrease the number of credits hours currently offered by its program.
   ____ This proposal results in the deletion of an existing course(s) from the degree program and/or catalog.

   For all items checked above, applicable statements and content must be reflected in the proposed catalog copy.

   b. If overall proposal is for a new degree program that requires approval from General Administration, please contact the facultygovernance@uncc.edu for consultation on catalog copy. NA.

   4. A**CADEMIC** P**LAN OF** S**TUDY** (**U**NDERGRADUATE **ONLY**): Does the proposed change impact an existing Academic Plan of Study?
   ☐ Yes. If yes, please provide updated Academic Plan of Study in template format.
   X No.

   5. S**TUDENT** L**EARNING** O**UTCOMES** (U**NDERGRADUATE** & G**RADUATE**): Does this course or curricular change require a change in Student Learning Outcomes (SLOs) or assessment for the degree program?
   ☐ Yes. If yes, please provide updated SLOs in template format.
   X No.

   6. T**EXTBOOK COSTS**: It is the policy of the Board of Governors to reduce textbook costs for students whenever possible. Have electronic textbooks, textbook rentals, or the buyback program been considered and adopted? NA.

☐ Yes. Briefly explain below.
☐ No. Briefly explain below.

IMPORTANT NOTE: A Microsoft Word version of the final course and curriculum proposal should be sent to facultygovernance@uncc.edu upon approval by the Undergraduate Course and Curriculum Committee and/or Graduate Council chair.

Justifications for Proposed Revisions
INES-11-07-2013

1. Change on **Degree Requirements**

1.1 In the 2013-2014 catalog, it was stated that "a minimum of 72 post baccalaureate credit hours is required with 15 hours for the core courses, 9 hours for the specialized (focus) electives, 18 dissertation hours, and 30 max from the MS transfer or additional course work for those students without a MS degree".

We believe a balanced coursework between the core and specialized electives is more appropriate and **propose to reduce the core courses from 15 to 12 hours and, at the same time, increase the specialized electives from 9 to 12 hours; without changing the total of 72 hours**. This matter was discussed at the INES Advisory Committee Meeting in January of 2013 and the proposed changes were accepted by the Committee. The INES Advisory Committee consists of representatives or department chairs from the seven participating departments.

To implement this, we will need to eliminate one of the 5 core courses, i.e. INES 8113 Case Study, from the core requirement and make related changes throughout the "Degree Requirement" section. Currently, case studies or projects have been included in other core courses and there is no need to have a separate course for this purpose. Also, by providing students with one more specialized elective will certainly help students to build a solid background for their dissertation research.

1.2 In the 2013-2014 catalog, statements pertaining to specialized electives were written in terms of "Focus areas (specialized electives)" and the electives were grouped into "Focus Area 1 – INES Design; Focus Area 2 – INES Science; and Focus Area 3 – INES Management".

By defining specialized courses as Focus Areas 1, 2 or 3, students were often confused whether they are supposed to be in a certain "track" or "concentration". Since INES is an interdisciplinary program, we do not see the validity of imposing the track or concentration emphasis, particularly when they are only loosely defined as "Design, Science and Management". We **propose to remove the word "focus" and the groupings as "Focus Area 1, Focus Area 2, and Focus Area 3" wherever appropriated**. This does not constitute track/concentration changes because there are essentially not tracks/concentrations in the program.

2. Modification on **Admissions Requirement**

In the 2013-2014 catalog, one of the admissions requirements did not clearly define the GPA for MS and BS entrants. The original statement is:

"The equivalent to a U.S. baccalaureate or master's degree, from a regionally accredited college or university, in Engineering, Earth Science/Geology, Chemistry, Biology or a related field with a minimum undergraduate GPA of 3.2 or a minimum graduate GPA of 3.5 (A = 4.0) in all graduate work."

We propose to provide separate requirements for MS and BS applicants as follows:
- The equivalent to a U.S. baccalaureate or master's degree, from a regionally accredited college or university, in engineering, earth science and geography, management, architecture, business, and chemical and biological sciences or a related field. A minimum undergraduate GPA of 3.2 and a minimum graduate GPA of 3.5 (on a 4.0 scale) in all graduate work.
- Applicants holding baccalaureate degrees with an undergraduate GPA of 3.75 or higher may be considered for admission.

3. We have revised the **Introductory Section** but did not change the basic language of the program objectives.

4. We have also included additional **editorial** changes throughout the Catalog.

5. Finally, we included the approved new courses of INES 8998 and INES 8210 and revisions of INES 8999 into the 2014-2015 catalog.