The Interdisciplinary Ph.D. through the School of Science and Engineering allows students to develop their own course of study, tailored to their specific interests. The course of study must meet the basic requirements of a Ph.D. in SSE and be approved by the Associate Dean for Graduate Programs (Example: River-Science & Coastal Engineering).

Note: Students who are interested in interdisciplinary topics that primarily are not in engineering or the sciences should consult the interdisciplinary graduate programs of other schools, such as the School of Liberal Arts (http://tulane.edu/liberal-arts/interdisciplinary-phd.cfm).

Requirements

The following provisions are made for the development, approval, and supervision of Special Interdisciplinary programs leading to the doctoral degree. A Special Interdisciplinary Program is a formal ad hoc interdepartmental program leading toward the Ph.D. It will consist of work taken in two or more departments, one of which has a doctoral program. Although the specific requirements for each ad hoc program will differ, the formal requirements for such a program are: one-year residence, a minimum of 48 semester hours of course work (including up to 24 semester hours transfer credit), a general (preliminary or qualifying) examination, a prospectus, a dissertation, and the final examination.

For such a program to be feasible, there must be at least one member of the Graduate Faculty who is a specialist in the interdisciplinary area of the student’s interest and a sufficient number of faculty in at least two departments who are prepared to supervise work in it. To determine feasibility, an eligible student should consult with the appropriate faculty before making a formal application.

To be eligible for such a program, a student must have a B.S. degree with a major in one of the departmental disciplines which will be a major constituent of the proposed program; or have completed at least one semester of full-time graduate work in such a discipline and be in good standing either at Tulane or at another graduate institution; or have a Master of Science degree in such a discipline from another graduate institution.

Formal application to such a program depends upon the applicant’s Tulane resident status such that:

1. A student not currently registered in the School of Science and Engineering must apply to SSE for admission in the normal way, except that the student must specify the interdisciplinary nature of interest, the professor(s) the student wishes to direct the dissertation, and at least two of the departments to be involved. If an ad hoc committee of that professor (who shall serve as advisor pro tem) and representatives of at least two of the departments involved recommend it, the Associate Dean will offer admission with the understanding that the Graduate Studies Committee has approved the program before the applicant begins work. Funding derives from the contributing departments and/or PIs.

2. A student currently in residence in the School of Science and Engineering need only petition a qualified member of the Graduate Faculty, citing the student’s own interests and qualifications. If the professor considers the student qualified for work in the area of interest, the professor shall become the major advisor-pro term and shall give formal notification to the student, the appropriate department chairs, and the Associate Dean for Graduate Programs. A committee consisting of at least five members of Graduate Faculty is recommended to the Associate Dean by the major advisor. Normally, the major advisor acts as chair of this committee. The committee draws up a study plan setting forth requirements including courses and examinations; probably dissertation topic; and the proposed title of the degree (e.g., Engineering Economics, or Philosophy of Science). The student and/or chair of the committee forwards the study plan and a statement of the student’s qualifications to the Associate Dean for Graduate Programs and to the chairs of those departments concerned. The Associate Dean for Graduate Programs then presents the proposal and any views of departments concerned to the Graduate Studies Committee for its consideration. Approval by the Graduate Studies Committee authorizes the student to follow the special interdepartmental program. The ad hoc committee constitutes the student’s dissertation committee and performs all the functions normally carried out by departmental faculty in a regular doctoral program. The committee chair serves as the chief sponsor of the candidate’s dissertation and performs functions normally carried out by a department chair (identification of funding sources in cooperation with the Associate Dean for Graduate Programs and the chairs of those departments concerned, coordination of faculty, supervision of the student’s academic work, and recommendation for formal admission to candidacy for Doctor of Philosophy degree).