Doctor of Philosophy (Ph.D.)
Department of Chemical & Biomedical Engineering

Program Description

The Doctor of Philosophy degree is awarded in recognition of demonstrated scholarly competence and ability to conduct and report original and significant research. Unlike the baccalaureate and master's degrees, the Ph.D. degree cannot be earned by an accumulation of course credits over a period of residence alone. After adequate fundamental preparation to gain competence, the student must demonstrate research capability through completion of an authoritative investigation in the chosen engineering field, culminating in a written dissertation. The dissertation must demonstrate that the student possesses the ability to reason logically, the talent for engaging in significant and original research, and the ability to organize and present conclusions in a professional manner.

Program Requirements

1. Supervisory Committee. The chair of the appropriate department or program will appoint an advisor (**Major Professor**) for doctoral students at the University of South Florida in consulattion with the student and faculty of the department. The advisor will help determine the student's area of research interest and will delineate preliminary course assignments. At the earliest possible date a Supervisory committee will be formed. This committee will monitor the student's program of studies and has full responsibility for conducting the student's qualifying examination. The Supervisory Committee consists of a minimum of five members.

For PhD in Chemical Engineering*, the Major Professor or co-Major Professor should be a tenured or tenure-track member of the faculty of Chemical & Biomedical Engineering. Three members of the committee must be tenured or tenure track faculty members in Chemical Engineering. One member of the committee must be outside the College of Engineering. (The requirement may be waived if special reasons exist and prior approval is obtained from the Engineering Associate Dean for Academic Affairs.)

**See graduate advisor on specific guidelines for the PhD in Biomedical Engineering*

A majority of the committee will be from the College of Engineering, with at least two departments of the College represented.

2. Credit Hours. A minimum of 60 hours of coursework beyond the baccalaureate degree plus a minimum of 20 hours of dissertation research is required. Total hours of credit must equal or exceed 90 hours. See course worksheets for details. **Transfer of credits**: If you have a Masters' Degree from another university or program, a maximum of 30 semester hours may be transferred to count towards the doctoral program. See Office of the Registrar for a Transfer of Credit Form and the catalog for policies on course transfer.

3. Learning Focus. Throughout the student's program of study, independent learning is emphasized. For the first time in the participant's career, in most cases, the student will be responsible for mastering a new domain of knowledge without the aid of organized lectures and textbooks. The principal information source will be current literature. Such experience is a necessary preparation for a meaningful career in engineering and other fields where the professional must keep pace with a large, ever-changing body of knowledge.