



## Department of Chemical and Biological Engineering

### *Graduate Studies for Students with Undergraduate Degrees Not in Chemical Engineering*

Over the years we have had many students with undergraduate degrees in fields other than chemical engineering in our graduate program. For such students to be successful, they must have a satisfactory foundation in mathematics (calculus and ordinary differential equations), chemistry (organic and physical) and physics. In addition, a satisfactory background in chemical engineering is required. These courses may include:

Material and Energy Balances	(CHE 202)	3 credits
Fluid Mechanics	(CHE 301)	3 credits
Heat and Mass Transfer Operations	(CHE 302)	3 credits
Chemical Engineering Thermodynamics	(CHE 351)	3 credits

It is not mandatory for students to take the above deficiency courses. These courses cannot be applied to a graduate degree. At the very least, students are encouraged to obtain textbooks for these courses and study the material in preparation for the advanced coursework.

Once the deficiencies have been overcome, students may begin taking courses towards their advanced degree. Master's and Ph.D. degree students without an undergraduate chemical engineering degree typically take the following courses to prepare for graduate-level courses:

Transport Phenomena	(CHE 406)	3 credits
Chemical Reaction Engineering	(CHE 423)	3 credits
Chemical Process Thermodynamics	(CHE 451)	3 credits
Process Control	(CHE 435)	3 credits

If you have any questions, please contact either Ms. Beatrice Person, Coordinator of Academic Affairs at (312) 567-3533 or [person@iit.edu](mailto:person@iit.edu) or Professor Satish Parulekar, Professor and Graduate Admissions Committee member at (312) 567-3044 or [parulekar@iit.edu](mailto:parulekar@iit.edu). You will also find additional information about IIT, the department and how to submit an electronic application on our website at [www.chbe.iit.edu](http://www.chbe.iit.edu).