

**Certificate of Departmental Approval
PhD Degree Program
in Chemical and Biomolecular Engineering**

Name: _____ JHU ID: _____

Faculty Advisor: _____

Graduation Date: _____

Degree Requirements:

The Ph.D. degree is awarded for original research performed under the guidance of a thesis advisor. The formal requirements for this degree are:

- Completion of six graduate-level courses including the four required core courses listed below.
- Completion of an annual research evaluation each year.
- Serve as a teaching assistant for at least two required courses.
- Completion in the first semester of 500.401 Research Laboratory Safety
- Attend graduate seminars (540.600/601) every semester. Students are expected to enroll and attend department seminars throughout their tenure in the department.
- Successful completion of the Graduate Board Oral Exam.
- Completion of an original research project, documented in a dissertation that is defended by the candidate in a public presentation.
- Completion of Responsible Conduct of Research training. For complete information, see eng.jhu.edu/wse/page/conduct-of-research-training.
- Application for Graduation submitted to Registrar's office.
- Successful completion of electronic thesis (ETD) to the Johns Hopkins Library <http://guides.library.jhu.edu/content.php?pid=450528&sid=3691622>.

Required Core Courses:

- 540.630 Thermodynamics & Statistical Mechanics
- 540.652 Advanced Transport
- 540.602 Metabolic Systems Biotechnology
- 540.615 Interfacial Science with Applications to Nanoscale Systems

This is to certify that _____ has satisfied all of the academic requirements laid down by the Department for granting a PhD in the Department of Chemical & Biomolecular Engineering.

Advisor's Signature

Date