CHEMICAL PHYSICS

http://www.chemistry.illinois.edu

Head of the Department of Chemistry: Martin Gruebele
Head of the Department of Physics: Dale Van Harlingen

Students with undergraduate degrees in chemistry should direct inquiries and applications to the Department of Chemistry
106 Noyes Laboratory
505 South Mathews Avenue, Urbana, IL 61801.

Students with undergraduate degrees in physics should direct inquiries and applications to the Graduate Advising Office, Department of Physics
227 Loomis Laboratory of Physics
1110 West Green Street, Urbana, IL 61801-3080

Major: Chemical Physics
Degree Offered: Ph.D.

Graduate Degree Programs
A chemical physics program leading to the Doctor of Philosophy makes it possible for students to gain the necessary background and perform original research in this interdisciplinary field of science. Fundamental research on many properties of molecular and solid-state systems is based on an understanding of chemistry, physics, and mathematics that can best be obtained by training in more than one department. Students may use the facilities in both the School of Chemical Sciences and the Department of Physics.

Admission
Applicants who have fulfilled the usual undergraduate course requirements, including at least 25 semester hours in chemistry (properly distributed) and a grade point average of 3.0 (A = 4.0), may be considered for admission to the graduate programs. Applicants from students with less than the usual preparation in chemistry or with grade point averages below 3.0 may be considered on an individual basis. In addition, applicants must submit results from the Graduate Record Examination general test and the Graduate Record Examination chemistry subject test.

International students whose native language is not English are required to have a minimum paper-based TOEFL score of 580 (237 on the computer-based test). In addition, teaching is a requirement in the Chemistry graduate program and there are special requirements for applicants whose native language is not English. The University requires a minimum TOEFL iBT speaking score of 24 for a contact teaching assistant appointment. Any applicant whose native language is not English is expected to provide TOEFL scores in order to receive full consideration for admission and financial aid.

Please contact chemistry graduate admissions for further information.

Financial Aid
Students may apply for fellowships and assistantships from either the Department of Chemistry or the Department of Physics.

Doctor of Philosophy in Chemical Physics
Students entering through the Department of Chemistry must satisfy the registration examination, literature seminar, preliminary examination, and original research proposal requirements of Physical Chemistry. The guidelines for these requirements are in the Department of Chemistry Graduate Manual. Students entering through the Department of Physics must satisfy the PhD requirements of the Department of Physics. Research for the thesis is performed under the direction of faculty members who are currently active in chemical physics. Many of these faculty members are affiliated with the Materials Research Laboratory (MRL). MRL is a multidisciplinary facility shared by staff and students from the Departments of Physics, Chemistry, Materials Science and Engineering, Electrical and Computer Engineering, and other related departments that have common interests in materials science.

Entering with approved M.S./M.A. degree
Required courses
CHEM 599  Thesis Research (min 0 applied toward degree) 0

Total Hours 64

Other Requirements
Qualifying Exam Required Yes
Preliminary Exam Required Yes
Original Research Proposal Yes
Final Exam/Dissertation Defense Required
Dissertation Deposit Required Yes
Minimum GPA: 3.0

1 For additional details and requirements refer to the department’s Graduate Programs (http://www.chemistry.illinois.edu/research/chemphys) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook).

Entering with approved B.S./B.A. degree
Required courses
CHEM 599  Thesis Research (0 min applied toward degree) 0

Total Hours 96

Other Requirements
Qualifying Exam Required Yes
Preliminary Exam Required Yes
Original Research Proposal Yes
Final Exam/Dissertation Defense Required
Dissertation Deposit Required Yes
Minimum GPA: 3.0

1 For additional details and requirements refer to the department’s Graduate Programs (http://www.chemistry.illinois.edu/research/chemphys) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook).