

# CHEMISTRY (PH.D.)

## Doctoral Program in Chemistry Admission Requirements

In addition to the requirements of the Division of Graduate Studies, applicants must have the following:

1. A B.S. degree in chemistry or a closely related field with passing grades 'C' or better for the following courses with labs:
  - 2 semesters of General Chemistry
  - 2 semesters of Organic Chemistry
  - 1 semester of Analytical Chemistry
  - 1 semester of Physical Chemistry
  - 1 semester of Inorganic Chemistry
2. GRE Score
3. Three Letters of Recommendation
4. A Statement of Purpose for Graduate Study

## Retention Requirements

In addition to satisfying the basic requirements of the Division of Graduate Studies, students are required to maintain a chemistry GPA of 3.00 or higher every semester. Seminar courses, dissertation courses, and other non-chemistry elective courses are excluded from the calculation of the chemistry GPA. Students whose chemistry GPA is below 3.00 will be placed on probation for up to one year to fix the deficiencies.

## Repeating a Course

If a student receives a grade of "C" or lower in a chemistry core course or a course in the student's major field of study, that course must be retaken and the student must earn a grade of "B" or better.

## Degree Candidacy Requirements

After completing the lecture and seminar course requirements, students need to take and pass the comprehensive examination and defend an independent research proposal to become an official Ph.D. candidate. The comprehensive examination of 3 subjects must be taken and passed during the second year of study and the written independent research proposal must be prepared and defended during the third year of study or at least one year before graduation.

## Graduation Requirements

The minimum number of credit hours for the Ph.D. degree in Chemistry is 60 credit hours.

- A minimum of 18 credit hours from graduate chemistry lecture courses
- 2 credit hours for Seminars
- 40 credit hours for Dissertation Research
- Teach four semesters of undergraduate courses as a teaching assistant.
- Write and defend a Dissertation Research Proposal.
- Pass Area Comprehensive Examination in three subject areas.
- Write and defend an Independent Research Proposal.
- Defend the dissertation before the Dissertation Committee and public audience.

- Submit an approved dissertation to the Division of Graduate Studies with one copy to the Department and one to the University Library

The 18 credit hours of lecture courses must include at least three out of the following five core courses for a total of at least 9 credit hours:

Code	Title	Hours
CHEM 723	ADVANCE ANALYTICAL CHEMISTRY	3
CHEM 731	ADVANCED BIOCHEMISTRY	3
CHEM 736	PHYSICAL ORGANIC CHEMISTRY	3
CHEM 741	ADVANCED INORGANIC CHEMISTRY	3
CHEM 758	QUANTUM CHEMISTRY	3

## Students Entering the Ph.D. Program With a M.S. Degree in Chemistry

Students, who earned a M.S. degree from another institution, are allowed to transfer up to four (4) lecture courses or 12 credit hours if these courses are equivalent to the JSU chemistry doctoral courses. Students who earned a M.S. degree from JSU will be required to take at least two more approved lecture courses instead of the required six lecture courses. Other requirements are the same as for those entering the Ph.D. program with a B.S. degree.