## **DOCTOR OF PHILOSOPHY IN CHEMISTRY**

Qualifying examination Comprehensive examination Dissertation and oral defense

A minimum of 72 credit hours is required for the Ph.D. in Chemistry. Students who have received an M.S. degree from another university may petition for transfer of up to 32 credit hours, applicable toward the Ph.D. degree.

Students must pass the Ph.D. qualifying examination by the end of their fourth semester in the program.

Next, students should register for 24-36 credit hours of research coursework numbered 691. To pass the comprehensive examination, students need to write a research progress report and proposal and defend it before a faculty committee. Students must pass the comprehensive exam at least a year prior to their thesis defense.

The final phase in the Ph.D. degree program is the successful oral defense of the dissertation and submission of a Ph.D. dissertation approved by the academic adviser and the thesis committee.

## **Curriculum**

Code	Title		<b>Credit Hours</b>
Required Courses			(16)
CHEM 585	Chemistry Colloquium		1
CHEM 684	Graduate Seminars in Chemistry		1
CHEM 685	Chemistry Colloquium		1
CHEM 685	Chemistry Colloquium		1
Select a minimum of four core courses from the following:			12
CHEM 455	Advanced Organic Chemistry	3	
CHEM 503	Survey of Analytical Chemistry	3	
CHEM 520	Advanced Inorganic Chemistry	3	
CHEM 535	Polymer Synthesis	3	
CHEM 550	Theoretical and Computational Quantum Chemistry	3	
BIOL 504	Biochemistry	3	
Elective Courses			(20-32)
Select 20-32 credit hours in consultation with adviser			20-32
Thesis Research			(24-36)
CHEM 691	Research and Thesis Ph.D.		24-36

Minimum degree credits required: 72