MASTER OF SCIENCE IN CHEMISTRY

The Master of Science in Chemistry is designed to train chemists for careers in business, industry, or academics. This degree is also appropriate for those students planning to continue their training in Ph.D. programs at other institutions.

Applicants seeking admission to the graduate program in chemistry must submit the following directly to the Office of Graduate Admissions:

- 1. Graduate Application (http://www.shsu.edu/admissions/apply-texas.html)
- 2. Application fee (http://www.shsu.edu/dept/graduate-studies/application-fee.html)
- 3. Official transcript(s) of all previous college work
- 4. Official GRE scores
- 5. Three letters of recommendation

Applicants must have a major or minor in chemistry (with at least a 2.5 GPA in their undergraduate chemistry courses typically including Analytical or Quantitative Chemistry, Instrumental Methods, one year of calculus-based Physical Chemistry, and Inorganic Chemistry) or commensurate industrial experience.

For a final admissions decision, a holistic review of each student's application file will be completed on a competitive basis. Currently a 3.0 GPA is required for financial support.

The Department of Chemistry offers classes in a wide variety of chemical subjects including analytical, forensic, inorganic, organic, and physical chemistry, toxicology, and biochemistry.

Master of Science, 31 SCH with Minor and Thesis

Course Area

Chemistry	13
Research and Thesis	6
Minor field that logically supports the major (Computing Science, Mathematics, Physics, Biology, etc.)	12
Total Hours	31

Plan 1 - MS in Chemistry (Thesis Option)

Master of Science, 31 Semester Hours with Minor and Thesis

Specified Course		
CHEM 5100	Chemical Literature & Seminar	1
CHEM 6398	Graduate Research In Chemistry ¹	3
Restricted Electives		
Select four of the following	g:	12
CHEM 5361	Physical Organic Chemistry	
CHEM 5362	Organic Reaction Mechanisms	
CHEM 5368	Analytical Spectroscopy	
CHEM 5372	Advanced Biochemistry I	
CHEM 5374	Chem Of Coordination Compounds	
CHEM 5381	Adv Physl Chem Thermodynamics	
CHEM 5385	Selected Topics In Adv Chem	
Secondary Field		
Select four graduate cours	ses in a field that logically supports the major ²	12
Thesis		
CHEM 6099	Thesis ³	3
Total Hours		31

- Usually taken every semester and receives a grade of "IP" until the final semester the research project is completed.
- Courses should be selected in consultation with the Graduate Advisor.
- Once enrolled in CHEM 6099, the student must enroll in this course every semester until graduation.

Master of Science, 30 SCH without Minor and with Thesis

Chemistry	24
Research and Thesis	6
Total Hours	30
Plan 2 - MS in Chemistry (Thesis Option)	
Master of Science, 30 Semester Hours without Minor and with Thesis	

Plan 2 - MS in Chem	nistry (Thesis Option)	
Master of Science, 30 Ser	mester Hours without Minor and with Thesis	
Specified Course		
CHEM 5100	Chemical Literature & Seminar	1
CHEM 6398	Graduate Research In Chemistry ¹	3
Restricted Electives		
Select four of the followin	ng: ²	12
CHEM 5361	Physical Organic Chemistry	
CHEM 5362	Organic Reaction Mechanisms	
CHEM 5368	Analytical Spectroscopy	
CHEM 5372	Advanced Biochemistry I	
CHEM 5374	Chem Of Coordination Compounds	
CHEM 5381	Adv Physl Chem Thermodynamics	
Electives		
Select four graduate cour	ses in CHEM ³	11
Thesis		
CHEM 6099	Thesis ⁴	3

Usually taken every semester and receives a grade of "IP" until the final semester the research project is completed.

One course from 4 different areas (Analytical Chemistry, Biochemistry, Inorganic Chemistry, Organic Chemistry, and Physical Chemistry) is required.

Courses should be selected in consultation with the Graduate Advisor. O The student may take CHEM 5100 two additional times for a total of three credit hours.

30

Once enrolled in CHEM 6099, the student must enroll in this course every semester until graduation.

Master of Science, 36 SCH with Minor, Non-Thesis

Jou	rse	Ar	ea	

Total Hours

Chemistry	24
Minor field that logically supports the major (Computing Science, Mathematics, Physics, Biology, etc.)	12
Total Hours	36

Plan 3 - MS in Chemistry (Non-Thesis Option)

Master of Science, 36 Semester Hours with Minor, Non-Thesis

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Specified Courses		
CHEM 5100	Chemical Literature & Seminar ¹	3
CHEM 6398	Graduate Research In Chemistry	3
Restricted Electives		
Select four of the following:		12
CHEM 5361	Physical Organic Chemistry	
CHEM 5362	Organic Reaction Mechanisms	
CHEM 5368	Analytical Spectroscopy	
CHEM 5372	Advanced Biochemistry I	
CHEM 5374	Chem Of Coordination Compounds	
CHEM 5381	Adv Physl Chem Thermodynamics	
CHEM 5385	Selected Topics In Adv Chem	
Electives		
Select two graduate courses in (CHEM	6
Secondary Field		

CHEM 5100 must be taken three times for a total of three credit hours. Courses should be selected in consultation with the Graduate Advisor. Master of Science, 36 SCH without Minor, Non-Thesis ourse Area hemistry otal Hours Man 4 - MS in Chemistry (Non-Thesis Option) Haster of Science, 36 Semester Hours without Minor, Non-Thesis pecified Courses HEM 5100 Chemical Literature & Seminar 1 HEM 6398 Graduate Research In Chemistry estricted Electives elect four of the following: CHEM 5361 Physical Organic Chemistry CHEM 5362 Organic Reaction Mechanisms CHEM 5372 Advanced Biochemistry I CHEM 5374 Chem Of Coordination Compounds CHEM 5381 Adv Physl Chem Thermodynamics CHEM 5385 Selected Topics In Adv Chem lectives elect six graduate courses in CHEM	Select four graduate courses in PHYS, BIOL, or MATH ²		1
Courses should be selected in consultation with the Graduate Advisor. Master of Science, 36 SCH without Minor, Non-Thesis Durse Area hemistry otal Hours lan 4 - MS in Chemistry (Non-Thesis Option) laster of Science, 36 Semester Hours without Minor, Non-Thesis pecified Courses HEM 5100 Chemical Literature & Seminar 1 HEM 6398 Graduate Research In Chemistry estricted Electives elect four of the following: CHEM 5361 Physical Organic Chemistry CHEM 5362 Organic Reaction Mechanisms CHEM 5368 Analytical Spectroscopy CHEM 5372 Advanced Biochemistry I CHEM 5374 Chem Of Coordination Compounds CHEM 5381 Adv Physl Chem Thermodynamics CHEM 5385 Selected Topics In Adv Chem lectives elect six graduate courses in CHEM	Total Hours		3
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CHEM 5372 Advanced Biochemistry I CHEM 5374 Chem Of Coordination Compounds CHEM 5381 Adv Physl Chem Thermodynamics CHEM 5385 Selected Topics In Adv Chem lectives elect six graduate courses in CHEM	CHEM 5362	Organic Reaction Mechanisms	
CHEM 5374 Chem Of Coordination Compounds CHEM 5381 Adv Physl Chem Thermodynamics CHEM 5385 Selected Topics In Adv Chem lectives elect six graduate courses in CHEM	CHEM 5368	Analytical Spectroscopy	
CHEM 5381 Adv Physl Chem Thermodynamics CHEM 5385 Selected Topics In Adv Chem lectives elect six graduate courses in CHEM	CHEM 5372	Advanced Biochemistry I	
CHEM 5385 Selected Topics In Adv Chem lectives elect six graduate courses in CHEM	CHEM 5374	Chem Of Coordination Compounds	
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elect six graduate courses in CHEM	CHEM 5385	Selected Topics In Adv Chem	
	Electives		
otal Hours	Select six graduate cours	ses in CHEM	1
	Total Hours		3

CHEM 5100 must be taken three times for a total of three credit hours.