Master of Science in Chemistry

College of Science

King Faisal University

Program Name	Master of Science in Chemistry

1. Introduction

This program comes within the framework of the system of graduate programs in the College of Science, and the framework of the developmental and scientific dimension of the program on the nature of the region and its proximity to the industrial structure. The department conducted a survey of a number of holders of a bachelor's degree in chemistry, where more than 80% of them expressed interest in the program.

Similar to many reputable universities, there are two plans to earn the master degree:

1. Non-Thesis plan (Courses-only Plan)
2. Thesis plan (Courses and thesis Plan)

2. Program Information

Program Name	Master of Science in Chemistry
College	College of Science
Department	Chemistry Department
Track	Chemistry
Level	Postgraduate
Degree	MSc
Years of Study	2 Years
Credit Hours	42 or 30
Language	English

3. Admission Requirements

- Procedures for admission and registration in accordance with the regulations of graduate studies in the universities of the Kingdom.
- Admission to the Master's level requires that the student obtain a (very good) average at least in the bachelor's degree.
- At least 60 English language TOEFL or an equivalent of 5 in Elites or 83 in the Saudi English proficiency test

4. Study Plan

1- Non-Thesis plan (Courses-only Plan)

In this plan, the requirements for the Master's degree offered by the department of chemistry are 42 credits. (According to the terms stated in the Regulations set by the supreme Saudi higher education council for Graduate Studies in Saudi Arabia Universities). The 42 credits are divided as:

14 credits from theses obligatory courses

Course Code	Course Title	Credit Hours
Chem. 0815521	Advanced Chemical Thermodynamics	3
Chem. 0815531	Advanced Inorganic Chemistry	3
Chem. 0815541	Advanced Analytical Spectroscopy	3
Chem. 0815551	Advanced Organic Reaction Mechanisms	3
Chem. 0815571	Research Methods in Chemistry	2

25 credits from elective courses

(See at the end)

2- Thesis plan (Courses and thesis Plan)

In this plan, the requirements for a Master's degree offered by the department of chemistry are 30 credits (According to the terms stated in the Regulations set by the supreme Saudi higher education council for Graduate Studies in Saudi Arabia Universities. The 30 credits are divided as:

14 credits from obligatory courses

Course Code	Course Title	Credit Hours
Chem. 0815521	Advanced Chemical Thermodynamics	3
Chem. 0815531	Advanced Inorganic Chemistry	3
Chem. 0815541	Advanced Analytical Spectroscopy	3
Chem. 0815551	Advanced Organic Reaction Mechanisms	3
Chem. 0815571	Research Methods	2

10 credits from elective courses

(See at the end)

Six credits for the preparation, presentation and successful defense of thesis

Semester Plan

1- Non-Thesis plan (Courses only plan- 42 credit hours)

Year 1

First Semester

Course Code	Course Title	Credit Hours
Chem. 521	Advanced Chemical Thermodynamics	3
Chem. 541	Advanced Analytical Spectroscopy	3
Chem. 551	Advanced Organic Reaction Mechanisms	3
-	Elective course	2

Second Semester

Course Code	Course Title	Credit Hours
Chem. 531	Advanced Inorganic Chemistry	3
Chem. 571	Research Methods	2
-	Elective course	3
-	Elective course	3

Year 2

First Semester

Course Code	Course Title	Credit Hours
-	Elective course	3
-	Elective course	3
-	Elective course	2

Second Semester

Course Code	Course Title	Credit Hours
-	Elective course	3
-	Elective course	3
-	Elective course	2

After successful completion of 50% of credits

Course Code	Course Title	Credit Hours
Chem. 570	Graduation Project	3

2- Thesis plan (Courses and thesis plan- 30 credit hours)

Year 1

First Semester

Course Code	Course Title	Credit Hours
Chem. 521	Advanced Chemical Thermodynamics	3
Chem. 541	Advanced Analytical Spectroscopy	3
Chem. 551	Advanced Organic Reaction Mechanisms	3

Second Semester

Course Code	Course Title	Credit Hours
Chem. 531	Advanced Inorganic Chemistry	3
Chem. 571	Research Methods	2
-	Elective course	3

Year 2

First Semester

Course Code	Course Title	Credit Hours
-	Elective course	3
-	Elective course	2
-	Elective course	2

After successful completion of 50% of credits

Course Code	Course Title	Credit Hours
Chem. 580	Thesis	6

Elective Courses

Course Code	Course Title	Credit Hours
Chem. 0815522	Advanced Chemical Kinetic	3
Chem. 0815523	Advanced Electrochemistry	3
Chem. 0815524	Special Topics in Physical Chemistry	2
Chem. 0815525	Practical Physical Chemistry*	2
Chem. 0815526	Applied Surface Chemistry and Catalysis	3
Chem. 0815532	Advanced Organometallic Chemistry	3
Chem. 0815533	Bioinorganic Chemistry	3
Chem. 0815534	Special Topics in Inorganic Chemistry	2
Chem. 0815535	Advanced Practical Inorganic Chemistry*	2
Chem. 0815542	Analytical Separation Techniques	3
Chem. 0815543	Advanced Electroanalytical Chemistry	3
Chem. 0815544	Special Topics in Analytical Chemistry	2
Chem. 0815545	Advanced Practical Analytical Chemistry*	2
Chem. 0815552	Advanced Organic Spectroscopy	3
Chem. 0815553	Advanced Heterocyclic Chemistry	3
Chem. 0815554	Special Topics in Organic Chemistry	2
Chem. 0815555	Advanced Practical Organic Chemistry*	2
Chem. 0815556	Advanced Natural Products Chemistry	3
Chem. 0815557	Advanced Photochemistry	3
Chem. 0815560	Industrial Chemistry	3
Chem. 0815561	Advanced Biochemistry	3
Chem. 0815562	Nanochemistry	3

Not all elective courses can be offered simultaneously in every semester.