

**FACULTY MATHEMATICS AND NATURAL SCIENCES**  
**DEPARTMENT CHEMISTRY**  
**PROGRAMME UNDERGRADUATE**

**COURSE STRUCTURE**

No.	Code	Course Title	Credits
<b>SEMESTER I</b>			
1	IG141106	Wawasan Kebangsaan	3
2	IG14110x	Pendidikan Agama	2
3	SM141203	Calculus I	3
4	SK141301	Fundamental Chemistry I	3
5	SK141302	Introduction to Statistical Methods	2
6	SB141303	Biology	2
7	SF141303	Fundamental Physics I	3
Total Credits			18
<b>SEMESTER II</b>			
1	IG141108	Bahasa Inggris	3
2	SM141204	Calculus II	3
3	SK141304	Fundamental Chemistry II	4
4	SF141304	Fundamental Physics II	3
5	SK141305	Modern Physics	2
6	SK141341	Mathematical and Computational Chemistry	3
Total Credits			18
<b>SEMESTER III</b>			
1	IG141107	Wawasan Teknologi dan Komunikasi Ilmiah	3
2	SK141306	Literature of Chemistry	2
3	SK141311	Measurement Methods in Chemistry	4
4	SK141342	Molecular Structures	3
5	SK141343	Chemical Thermodynamics	5
6	SK141351	Basic Organic Chemistry	3
Total Credits			
<b>SEMESTER IV</b>			
1	SK141312	Separation and Purification Methods	4
2	SK141313	Spectrometry	2
3	SK141321	Structure and Reactivity of Inorganic Compounds	4
4	SK141344	Chemical Dynamics	6
5	SK141352	Organic Reactions and Mechanisms	4
Total Credits			20
<b>SEMESTER V</b>			
1	SK141314	Chemometrics	2
2	SK141316	Practical Laboratory Skills	2
3	SK141322	Chemical Elements and Inorganic Compounds	4
4	SK141331	Biochemistry	4
5	SK141345	Atomic and Molecular Spectroscopy	3
6	SK141353	Organic Synthesis	4
Total Credits			
<b>SEMESTER VI</b>			

1	SK141307	Colloquium	2
2	IG141109	Technopreneurship	3
3	SK141315	Electrochemical and Thermal Analysis	2
4	SK141323	Synthesis and Characterization of Inorganic Compounds	5
5	SK141332	Bioprocess	4
6	SK141354	Identification of Organic Compounds	3
Total Credits			19
<b>SEMESTER VII</b>			
1	SK141308	Chemistry Case Study	2
2		Electives	16
Total Credits			
<b>SEMESTER VIII</b>			
1	SK141501	Final Project	8
2		Electives	4
Total Credits			

## LIST OF RELIGION STUDIES

No.	Kode MK	Nama Mata Kuliah (MK)	sks
<b>SEMESTER I</b>			
1	SK141101	Pendidikan Agama Islam	2
2	SK141102	Pendidikan Agama Kristen Protestan	2
3	SK141103	Pendidikan Agama Kristen Katolik	2
4	SK141104	Pendidikan Agama Hindu	2
5	SK141105	Pendidikan Agama Budha	2
6	SK141110	Pendidikan Agama Khonghucu	2

## ELECTIVE COURSES

No.	Code	Course Title	Credits
1	SK141411	Environmental Chemistry	2
2	SK141412	Corrosion Analysis Methods	2
3	SK141413	Applied Analytical Chemistry I	2
4	SK141414	Chemo-Biosensor	2
5	SK141415	Electroanalysis	2
6	SK141416	Applied Analytical Chemistry II	2
7	SK141417	Forensic Chemistry	2
8	SK141418	Radiometry and Its Applications	2
9	SK141421	Complex Compounds	2
10	SK141422	Organometallic Compounds	2
11	SK141423	Catalyst Chemistry	3
12	SK141424	Geochemistry dan Mineralogy	2
13	SK141431	Genetics Engineering	2
14	SK141432	Food Chemistry	2
15	SK141433	Bioremediation	2
16	SK141441	Colloid Chemistry	3

17	SK141442	Solid State Chemistry	2
18	SK141443	Surface Chemistry	3
19	SK141444	Industrial Chemistry	2
20	SK141445	Polymers	2
21	SK141446	Membrane Chemistry	2
22	SK141451	Phytochemistry	3
23	SK141452	Plant Chemosystematics	2
24	SK141453	Chemistry of Flavours and Fragrans	2
25	SK141454	Introduction to Medicinal Chemistry	2
26	SK141455	Organic Stereochemistry	2
27	SK141456	Introduction to Organic Geochemistry	3
28	SK141457	Coal Geochemistry	2
29	SK141458	Biomarker Analysis in Geochemistry	2
30	SK141401	Laboratory Management	2
31	SK141402	Internship	2
32	SK141403	Marine Chemistry	2
33	SK141404	Capita Selecta	2