

Department of **Chemistry**  
Undergraduate - Chemistry  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
**INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS)**

Smt	Code	Courses	Credits
1	IG1101	Islam Education*	2
1	IG1102	Protestant Education*	2
1	IG1103	Catholic Education*	2
1	IG1104	Hindu Education*	2
1	IG1105	Buddha Education*	2
1	IG1106	Concept of Nationalism	3
1	IG1110	Khonghucu Education*	2
1	SB1202	Biology	2
1	SB1303	Ecology	2
1	SF1203	Physics I	3
1	SK1301	Chemistry I	3
1	SK1302	Introduction to Statistical Method	2
1	SM1203	Calculus I	3
2	IG1108	English	3
2	SF1204	Physics II	3
2	SK1304	Chemistry II	4
2	SK1305	Modern Physics	2
2	SK1341	Mathematical and Computational Chemistry	3
2	SM1204	Calculus II	3
3	IG1107	Concept of Scientific Technology and Communication	3
3	SK1306	Chemistry Literature	2
3	SK1311	Measurements Methods	4
3	SK1342	Molecule Structure	3
3	SK1343	Chemical Thermodynamics	5
3	SK1351	Organic Chemistry	3
4	SK1312	Purification and Separation Method	4
4	SK1313	Spectrometry	2

Smt	Code	Courses	Credits
4	SK1321	Inorganic Reactivity and Structure	4
4	SK1344	Chemical Dynamics	6
4	SK1352	Chemical Reaction	4
5	SK1314	Chemometrics	2
5	SK1315	Analytical Chemistry Skills	2
5	SK1322	Inorganic Compound and Element	4
5	SK1331	Biochemistry	4
5	SK1345	Molecule and Atom Spectroscopy	3
5	SK1353	Chemical Synthesis	4
6	IG1109	Technopreneurship	3
6	SK1307	Colloquium	2
6	SK1316	Electrochemical and Thermal Analysis	2
6	SK1323	Synthesis and Inorganic Material Characterization	5
6	SK1332	Bioprocess	4
6	SK1354	Chemicals Identification	3
7	SK1308	Chemical Case Study	2
7	SK1401	Laboratory Management**	2
7	SK1402	Practical Work**	2
7	SK1411	Environmental Chemistry**	2
7	SK1413	Applied Analysis I**	2
7	SK1415	Electroanalysis**	2
7	SK1421	Complex Compound**	2
7	SK1423	Catalyst Chemical**	3
7	SK1431	Genetic Engineering**	2
7	SK1433	Bioremediation**	2
7	SK1441	Colloid Chemistry**	3
7	SK1443	Surface Chemistry**	3

Smt	Code	Courses	Credits
7	SK1445	Polymers**	2
7	SK1451	Phytochemistry**	3
7	SK1453	Flavor and Fragrance Chemistry**	2
7	SK1455	organic Stereochemistry**	2
7	SK1456	Introduction to Organic Geochemistry**	3
7	SK1457	Coal Geochemistry**	2
8	SK1403	Marine Chemistry**	2
8	SK1404	Capita Selecta**	2
8	SK1412	Corrosion Analysis Methods**	2
8	SK1414	Chemo-Biosensor**	2
8	SK1416	Applied Analysis II**	2
8	SK1417	Forensic Chemistry**	2
8	SK1418	Radiometric and the Application**	2
8	SK1422	Organometal Compound**	2
8	SK1424	Geochemistry and Mineralogy**	2
8	SK1432	Food Material Chemical**	2
8	SK1442	Chemistry of Solids**	2
8	SK1444	Industrial Chemistry**	2
8	SK1446	Membrane Chemistry**	2
8	SK1452	Plant Chemical Systematic**	2
8	SK1454	Medicinal Chemistry**	2
8	SK1458	Biomark Analysis**	2
8	SK1501	Final Project	8

\* Select one of those with stars

\*\* Elective courses