

The detailed curriculum structure is shown below.

Table 7. Curriculum Structure for Common First Year (TPB) Stage

1st Semester					2nd Semester				
No.	Code	Course Name	CU	ECTS	No.	Code	Course Name	CU	ECTS
1	4720102178	Digital Literacy	2	3.18	1	3074212017	English for Chemistry	2	3.18
2	0001212009	Indonesian	2	3.18	2	3074212018	Qualitative Chemical Analysis	2	3.18
3	0002213005	English	3	4.77	3	3074213020	Quantum Chemistry	3	4.77
4	3074213012	General Biology	3	4.77	4	3074212021	Conservation of Natural Resources and Environment	2	3.18
5	3074213013	General Physics	3	4.77	5	3074213022	Mathematics for Chemistry	3	4.77
6	3074213014	Basic Chemistry	3	4.77	6	0001212007	Citizenship Education	2	3.18
7	3074213015	Basic Mathematics	3	4.77	7	0001212001	Religion Education	2	3.18
8	0001212008	Pancasila	2	3.18	8	3074213023	Laboratory Organization	3	4.77
Total			21	33.39	Total			19	30.21

Table 8. Curriculum Structure for Bachelor

3rd Semester					4th Semester				
No.	Code	Course Name	CU	ECTS	No.	Code	Course Name	CU	ECTS
1	3074212025	Philosophy of Science	2	3.18	1	3074212033	Basics of Chemical Separations	2	3.18
2	0002212006	Basic Social and Cultural Sciences	2	3.18	2	3074212034	Coordination Chemistry	2	3.18
3	3074213028	Quantitative Chemical Analysis	3	4.77	3	3074213035	Chemical Kinetics	3	4.77
4	3074213029	Basic Theory of Inorganic	3	4.77	5	3074213037	Polyfunction Organic Compound	2	3.18
5	3074213030	Thermodynamics of Chemistry	3	4.77	6	3074212038	Practicum of Organic Chemistry	2	3.18
6	3074213031	Monofunction Organic Compounds	3	4.77	7	3074213039	Basic Statistics	2	3.18
7	0002212008	Entrepreneurship	2	3.18	9	Elective Course		6	9.54
Total			18	28.62	Total			19	30.21

5th Semester					6th Semester				
No.	Code	Course Name	CU	ECTS	No.	Code	Course Name	CU	ECTS
1	3074212040	Structure and Function of Biomolecule	3	4.77	1	3074211048	Practicum of Inorganic Chemistry	2	3.18
2	3074212041	Spectroscopy and Chromatographic Methods	2	3.18	2	3074213049	Metabolism and Pathways of Genetics Information	3	4.77
3	3074212042	Main Elements of Chemistry	2	3.18	3	3074211051	Practicum of Analytical Instrument	2	3.18
4	3074212045	Mechanism of Organic Reaction	2	3.18	4	3074213052	Transition Elements of Chemistry	2	3.18
5	3074213046	Surface Chemistry	3	4.77	5	3074213055	Organic Synthetic	2	3.18

5 th Semester					6 th Semester				
No.	Code	Course Name	CU	ECTS	No.	Code	Course Name	CU	ECTS
6	3074213047	Research Methodology	3	4.77	6	3074213058	Molecular Structure Elucidation	3	4.77
7	3074212050	Electrochemistry Analysis	2	3.18	7	Elective Course		4	6.36
8	3074211053	Practicum of Biochemistry	2	3.18	Total			18	28.62
9	Elective Course		2	3.18					
Total			21	33.39					

7 th Semester					8 th Semester				
No.	Code	Course Name	CU	ECTS	No.	Code	Course Name	CU	ECTS
1	3074213044	Environmental Chemistry	3	4.77	1	3074216060	Thesis	6	9.54
2	0002213009	Community Service	3	4.77	2	Elective Course		2	3.18
3	0002213010	Internship	3	4.77	Total			8	12.72
4	3074212054	Seminar	2	3.18					
5	Elective Course		6	9.54					
Total			17	27.03					

Table 9. List of Elective Course

Elective Course Odd Semester						Elective Course Even Semester					
No	Code	Course Name	CU	ECTS	Sem	No	Code	Course Name	CU	ECTS	Sem
1	3074112061	Computational Chemistry	2	3.18	5	1	3074112062	Stereochemistry	2	3.18	4
2	3074112063	Pharmaceutical Chemistry	2	3.18	5	2	3074112074	Electrochemistry	2	3.18	4
3	3074112069	Natural Product Chemistry	2	3.18	5	3	3074212036	Nuclear Chemistry and Radiochemistry	2	3.18	4
4	3074112070	Cosmetics	2	3.18	5	4	3074212032	Literature of Chemistry	2	3.18	4
5	3074112064	Organometallic Compound	2	3.18	7	5	3074112065	Career Development	2	3.18	6
6	3074112066	Food Analysis	2	3.18	7	6	3074112071	Material Chemistry	2	3.18	6
7	3074112067	Evaluation of Nutritional Value of Food	2	3.18	7	7	3074112072	Microbiology	2	3.18	6
8	3074112068	Capita Selecta	2	3.18	7	8	3074112073	Solid State Chemistry	2	3.18	6
9	3074112076	Research Technique of Biochemistry	2	3.18	7	9	3074113075	Food Chemistry	2	3.18	6
10	3074112077	Toxicology	2	3.18	7	10	3074212043	Industrial Chemistry	2	3.18	6
11	3074112080	Bio-inorganic	2	3.18	7	11	3074112078	Biotechnology	2	3.18	8
12	3074212056	Mechanism of Inorganic Reaction	2	3.18	7	12	3074112079	Organic Polymer Chemistry	2	3.18	8