

Department of **Geophysics Engineering**  
Undergraduate – Geophysics Engineering  
FACULTY OF CIVIL ENGINEERING AND PLANNING  
**INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS)**

Smt	Code	Courses	Credits
1	IG1108	English	3
1	RF1301	Introduction to Geoscience	3
1	SF1301	Physics I	4
1	SK1203	Chemistry I	3
1	SM1301	Calculus I	4
2	IG1101	Islam Education*	2
2	IG1102	Protestant Education*	2
2	IG1103	Catholic Education*	2
2	IG1104	Hindu Education*	2
2	IG1105	Buddha Education*	2
2	IG1106	Concept of Nationalism	3
2	IG1110	Khonghucu Education*	2
2	RF1302	Physical Geology	3
2	SF1302	Physics II	4
2	SK1204	Chemistry II	3
2	SM1302	Calculus II	4
3	IG1107	Concept of Scientific Technology and Communication	3
3	RF1201	Fundamental Electronics	3
3	RF1303	Mathematical Geophysics I	3
3	RF1304	Geodynamics	3
3	RF1305	Wave Propagation	3

Smt	Code	Courses	Credits
3	RF1306	Rock Physics	4
4	RF1202	Geographic Information System	3
4	RF1203	Digital Electronics	3
4	RF1307	Mathematical Geophysics II	3
4	RF1308	Structural Geology	3
4	RF1309	Computational Geophysics	3
4	RF1310	Gravity and Magnetic Exploration	4
5	RF1311	Thermodynamics	3
5	RF1312	Geophysical Digital Data Analysis	3
5	RF1313	Geoelectric Exploration	4
5	RF1314	Seismic Exploration	4
5	RF1401	Disaster Mitigation**	2
5	RF1402	Oil and Gas Geology**	2
5	RF1403	Exploration Management**	2
5	RF1404	Geophysic Instrumentation**	3
5	RF1405	Geostatistics**	3
6	IG1109	Technopreneurship	3
6	RF1315	Inversion Methods	3
6	RF1316	Analysis of Well-Log Data	3
6	RF1317	Electromagnetic Exploration	4
6	RF1318	Geothermal Exploration	4

Smt	Code	Courses	Credits
6	RF1406	Groundwater Exploration**	3
6	RF1407	Sedimentation and Stratigraphy**	3
6	RF1408	Acquisition and Processing of Seismic Data**	3
7	RF1319	Seminar	2
7	RF1320	Integrated Field Course	4
7	RF1321	Capita Selecta I	2
7	RF1322	Exploration of Mineral Deposit	3
7	RF1323	Geotomography	4
7	RF1409	Disaster Geology**	3
7	RF1410	Seismic Modeling**	3
7	RF1411	Reservoir Geophysics**	4
8	RF1324	Capita Selecta II	2
8	RF1412	Carbonate Exploration**	2
8	RF1413	Marine Geophysics**	2
8	RF1414	Mining Geophysics**	3
8	RF1415	Seismic Data Interpretation**	3
8	RF1501	Final Project	6

\* Select one of those with stars

\*\* Elective courses