

\* **Geology** (*Dated September 30<sup>th</sup>, 2015*)

<b>Total credits of the curriculum :</b>	<b>136 credits</b>
- <b>General education knowledge:</b>	<b>28 credits</b>
<i>(Not including physical education, military defense education and soft skills)</i>	
- <b>Basic courses:</b>	<b>6 credits</b>
- <b>Fundamental courses:</b>	<b>22 credits</b>
- <b>Core courses:</b>	<b>28 credits</b>
+ <i>Required:</i>	<i>25 credits</i>
+ <i>Elective:</i>	<i>3/12 credits</i>
- <b>Advanced courses:</b>	<b>52 credits</b>
+ <i>Required:</i>	<i>39 credits</i>
+ <i>Elective:</i>	<i>6/24 credits</i>
+ <i>Undergraduate thesis/ subjects replacing thesis:</i>	<i>7 credits</i>

## Available curriculum

No.	Code	Subject	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
<b>I</b>		<b>General education knowledge</b> <i>(Not including subjects 10- 12)</i>	<b>28</b>				
1	PHI1004	<i>Fundamental Principles of Marxism - Leninism 1</i>	2	24	6		
2	PHI1005	<i>Fundamental Principles of Marxism - Leninism 2</i>	3	36	9		PHI1004
3	POL1001	<i>Ho Chi Minh Ideology</i>	2	20	10		PHI1005
4	HIS1002	<i>The Revolutionary Line of the Communist Party of Vietnam</i>	3	42	3		POL1001
5	INT1003	<i>Introduction to Informatics 1</i>	2	10	20		
6	INT1005	<i>Introduction to Informatics 3</i>	2	12	18		INT1003
7	FLF2101	<i>General English 1</i>	4	16	40	4	
8	FLF2102	<i>General English 2</i>	5	20	50	5	FLF2101
9	FLF2103	<i>General English 3</i>	5	20	50	5	FLF2102
10		<i>Physical Education</i>	4				
11		<i>National Defence Education</i>	8				
12		<i>Soft Skills</i>	3				
<b>II</b>		<b>Basic courses</b>	<b>6</b>				
13	HIS1056	<i>Fundamentals of Vietnamese Culture</i>	3	42	3		
14	GEO1050	<i>Earth and life sciences</i>	3	30	10	5	
<b>III</b>		<b>Fundamental courses</b>	<b>22</b>				
15	MAT1090	<i>Linear Algebra</i>	3	30	15		
16	MAT1091	<i>Calculus 1</i>	3	30	15		

No.	Code	Subject	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
17	MAT1192	<i>Calculus 2</i>	2	20	10		MAT1091
18	MAT1101	<i>Probability and Statistics</i>	3	27	18		MAT1091
19	PHY1100	<i>Mechanics - Thermodynamics</i>	3	30	15		MAT1091
20	PHY1103	<i>Electromagnetism - Optics</i>	3	30	15		MAT1091
21	PHY1104	<i>General Physics Practice</i>	2		30		PHY1100
22	CHE1080	<i>General chemistry</i>	3	42		3	
<b>IV</b>		<b>Core courses</b>	<b>28</b>				
<b>IV.1</b>		<b>Required</b>	<b>25</b>				
23	GLO2076	<i>English for Geology</i>	3	20	20	5	FLF2103
24	GLO2078	<i>Physical Geology</i>	4	45	10	5	GEO1050
25	GEO2059	<i>GIS and remote sensing</i>	3	15	25	5	GLO2078
26	GLO2068	<i>Natural Disasters</i>	3	30	10	5	GLO2078
27	GLO2066	<i>Exploring Geology in the Field</i>	3		45		GLO2078
28	GLO2074	<i>Introduction to Geophysics</i>	3	30	10	5	GLO2078
29	GLO2058	<i>Applied Geoinformatics</i>	3	15	25	5	GE02059
30	GLO2086	<i>Techniques of Geological Survey</i>	3	10	30	5	GLO2078
<b>IV.2</b>		<b>Elective</b>	<b>3/12</b>				
31	GEO3221	<i>Geomorphology</i>	3	30	10	5	GLO2078
32	GLO3120	<i>Marine Geology</i>	3	30	10	5	GLO2074
33	GEO2318	<i>Geodesy</i>	3	30	10	5	GEO1050
34	GLO2088	<i>Marine geophysical</i>	3	30	10	5	GLO2074
<b>V</b>		<b>Advanced courses</b>	<b>55</b>				
<b>V.1</b>		<b>Required</b>	<b>39</b>				
35	GLO2093	<i>Mineralogy and Mineral Optics</i>	4	40	15	5	GLO2078

No.	Code	Subject	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
36	GLO2089	<i>Petrology</i>	4	25	30	5	GLO2093
37	GLO2090	<i>Sedimentology and Stratigraphy</i>	4	40	15	5	GLO2093
38	GLO2094	<i>Structural Geology</i>	4	25	30	5	GLO2089 GLO2090
39	GLO2067	<i>Geology field Methods</i>	3		45		GLO2094
40	GLO2070	<i>Geochemistry</i>	3	30	10	5	GLO2089
41	GLO2071	<i>Introduction to Paleontology</i>	3	25	20		GLO2078
42	GLO2091	<i>History of the Earth</i>	3	30	10	5	GLO2094
43	GLO2073	<i>Geology of Vietnam</i>	5	60	10	5	GLO2071 GLO2094
44	GLO2023	<i>Minerals science</i>	3	30	10	5	GLO2078
45	GLO2092	<i>Scientific method in Geology</i>	3	10	30	5	GLO2078
<b>V.2</b>		<b><i>Elective</i></b>	<b>6/24</b>				
46	GLO3111	<i>Environmental Geology</i>	3	30	10	5	GLO2094
47	GLO3113	<i>Earth Systems Modeling</i>	3	30	10	5	GLO2078
48	GLO3076	<i>Mineral resources of Vietnam</i>	3	30	10	5	GLO2023
49	GLO3136	<i>Petroleum basins of Vietnam</i>	3	30	10	5	GLO2089 GLO2090
50	GLO3127	<i>Petroleum geology</i>	3	30	10	5	GLO2094
51	GLO2095	<i>Quaternary Geology</i>	3	30	10	5	GLO2090
52	GLO2096	<i>Minerals processing technology</i>	3	30	10	5	GLO2023
53	GLO2097	<i>Methods of minerals and geological mapping</i>	3	25	15	5	GLO2073
<b>V.3</b>		<b><i>Graduation thesis/ subjects replacing thesis</i></b>	<b>7</b>				
V.3.1		<i>Graduation thesis</i>	7				
54	GLO4056	<i>Graduation Thesis</i>	7				GLO2092
V.3.2		<i>Subjects replacing thesis</i>	7				
55	GLO4009	<i>Methods of minerals and geological</i>	3	30	10	5	GLO2023

No.	Code	Subject	Credits	Credit hours			Prerequisite
				<i>Lecture</i>	<i>Practice</i>	<i>Self-study</i>	
		<i>exploration</i>					
56	GLO4010	<i>Establishing Projects in Geology</i>	4	45	15		GLO2092
		<b>Total</b>	<b>139</b>				