

*** Honors Program in Meteorology** (*Dated September 30th, 2015*)

Total credits of the curriculum : **153 credits**

- **General education knowledge:** **33 credits**

(Not including physical education, military defense education and soft skills)

- **Basic courses:** **6 credits**

- **Fundamental courses:** **23 credits**

- **Core courses:** **12 credits**

- **Advanced courses:** **79 credits**

+ *Required:* *48 credits*

+ *Elective:* *21/44 credits*

+ *Graduation thesis/ subjects replacing thesis:* *10 credits*

Available curriculum

No.	Code	Subject	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
I		General education knowledge <i>(Not including subjects 11 - 13)</i>	33				
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	FLF2104	<i>General English 4</i>	5		75		FLF2103
11		<i>Physical Education</i>	4				
12		<i>National Defence Education</i>	8				
13		<i>Soft Skills</i>	3				
II		Basic courses	6				
14	HIS1056	<i>Fundamentals of Vietnamese culture</i>	3	42	3		
15	GEO1050	<i>Earth and life sciences</i>	3	30	10	5	
III		Fundamental courses	23				
16	MAT1090	<i>Linear Algebra</i>	3	30	15		

No.	Code	Subject	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
17	MAT1091	<i>Calculus 1</i>	3	30	15		
18	MAT1092	<i>Calculus 2</i>	3	30	15		MAT1091
19	MAT1101	<i>Probability and Statistics</i>	3	27	18		MAT1091
20	PHY1100	<i>Mechanics - Thermodynamics</i>	3	30	15		
21	PHY1103	<i>Electromagnetism - Optics</i>	3	30	15		PHY1100
22	CHE1080	<i>General Chemistry</i>	3	42		3	
23	CHE1069	<i>General Chemistry Laboratory</i>	2		30		CHE1080
IV		Core courses	12				
24	HMO2201	<i>Calculation Methods</i>	3	36	6	3	MAT1092
25	HMO2202	<i>Fluid Dynamics</i>	3	33	9	3	MAT1092 PHY1100
26	HMO2203	<i>GIS and Remote Sensing</i>	3	30	12	3	
27	HMO2204	<i>Equations of Mathematical Physics</i>	3	36	6	3	MAT1092
V		Advanced courses	79				
V.1		Required	48				
28	HMO3204	<i>General Meteorology</i>	3	30	12	3	PHY1100
29	HMO3301	<i>Physical Meteorology</i>	4	40	16	4	HMO3204
30	HMO3302	<i>Meteorological Instrumentation and Observations</i>	3	30	12	3	PHY1100
31	HMO3303	<i>Dynamic Meteorology 1</i>	3	30	12	3	HMO3204
32	HMO3304	<i>Dynamic Meteorology 2</i>	3	30	12	3	HMO3303
33	HMO3305	<i>Synoptic Meteorology 1</i>	3	30	12	3	HMO3303
34	HMO3306	<i>Synoptic Meteorology 2</i>	3	30	12	3	HMO3305
35	HMO3307	<i>Numerical Weather Prediction</i>	3	30	12	3	HMO3304
36	HMO3308	<i>Radar and Satellite</i>	3	30	12	3	HMO3301

No.	Code	Subject	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
		<i>Meteorology</i>					
37	HMO3309	<i>Statistics in Meteorology</i>	4	45	12	3	MAT1101
38	HMO3311	<i>Climatology and Climate of Vietnam</i>	5	50	20	5	HMO3305
39	HMO3325	<i>Meteorological Observation Practicum</i>	3		30	15	HMO3302
40	HMO3326	<i>Operational forecast practicum</i>	3		30	15	HMO3306
41	HMO3327	<i>Directed research 1</i>	3		6	39	HMO3306
42	HMO3334	<i>Directed research 2</i>	2		6	24	HMO3327
V.2		<i>Elective</i>	21/44				
43	HMO3310	<i>Oceanology and Ocean-Atmosphere Interaction</i>	3	30	12	3	HMO2202
44	HMO3312	<i>Tropical Meteorology</i>	3	30	12	3	HMO3306
45	HMO3313	<i>Boundary Layer Meteorology</i>	3	30	12	3	HMO3303
46	HMO3315	<i>Physics of Climate</i>	3	30	12	3	HMO3303
47	HMO3319	<i>Computer Application in Meteorology</i>	3	9	33	3	HMO3307
48	HMO3321	<i>Weather Forecasting Practicum</i>	3	9	33	3	HMO3306
49	HMO3322	<i>Climate Variability and Climate Change</i>	3	30	12	3	HMO3311
50	HMO3323	<i>Climate System Modeling</i>	3	27	15	3	HMO3311
51	HMO3205	<i>Fundamentals of Climate Change</i>	3	30	12	3	HMO3311
52	HMO3600	<i>General oceanography</i>	3	30	12	3	
53	GEO2317	<i>Geography</i>	5	50	20	5	GEO1050
54	EVS2302	<i>General Environmental Science</i>	3	30	12	3	GEO1050
55	HMO3320	<i>Mesoscale Meteorology</i>	3	30	12	3	HMO3303

No.	Code	Subject	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
56	HMO3317	<i>Atmospheric Circulation</i>	3	30	12	3	HMO3305
V.3		<i>Graduation thesis</i>	10				
57	HMO4071	<i>Graduation Thesis</i>	10				HMO3327
		Total	153				