

## DISTRIBUTION OF CIVIL ENGINEERING CURRICULUM\_BATCH (2024)

Freshman Year							
<i>Semester 1</i>		<i>IU credits</i>	<i>ECTS</i>	<i>Semester 2</i>		<i>IU credits</i>	<i>ECTS</i>
EN007IU	Writing AE1	2	3.09	EN011IU	Writing AE2	2	3.09
EN008IU	Listening AE1	2	3.09	EN012IU	Speaking AE2	2	3.09
MA001IU	Calculus 1	4	6.18	CE100IU	Introduction to Civil Engineering	1	2.45
PH013IU	Physics 1	2	3.09	MA003IU	Calculus 2	4	6.18
CH011IU	Chemistry for Engineer	3	4.64	PH014IU	Physics 2	2	3.09
CE101IU	Engineering Mechanics -Statics	3	4.64	CH012IU	Chemistry Laboratory	1	2.45
PT001IU	Physical Training 1	3		CE102IU	Introduction to Computing for Engineers	3	4.64
				PT002IU	Physical Training 2	3	
<b>Total Credits</b>		<b>16</b>	<b>24.73</b>	<b>Total Credits</b>		<b>15</b>	<b>24.99</b>
Summer Semester 1							
PH015IU	Physics 3	3	4.64				
PH016IU	Physics 3 Laboratory	1	2.45				
MA024IU	Differential Equations	4	6.18				
<b>Total Credits</b>		<b>8</b>	<b>13.27</b>				
Sophomore Year							
<i>Semester 3</i>		<i>IU credits</i>	<i>ECTS</i>	<i>Semester 4</i>		<i>IU credits</i>	<i>ECTS</i>
PE015IU	Philosophy of Marxism and Leninism	3	4.64	PE017IU	Scientific Socialism	2	3.09
PE016IU	Political Economics of Marxism and Leninism	2	3.09	CE208IU	Mechanics of Materials 2	2	3.09
CE103IU	Computer-Aided Design and Drafting (CADD)	3	4.64	CE209IU	Structural Analysis 1	2	3.09
CE104IU	Computer-Aided Design and Drafting Practice	1	2.45	CE205IU	Fluid Mechanics	2	3.09
CE201IU	Mechanics of Materials 1	2	3.09	CE206IU	Fluid Mechanics Lab	1	2.45
CE202IU	Mechanics of Materials Laboratory	1	2.45	CE214IU	Civil Architecture	2	3.09

CE210IU	Construction Materials	3	4.64	CE216IU	Probability and Statistics	3	4.64
CE213IU	Computational Methods for Civil Engineering	3	4.64	CE215IU	Applied Linear Algebra	2	3.09
<b>Total Credits</b>		<b>18</b>	<b>29.64</b>	<b>Total Credits</b>		<b>16</b>	<b>25.63</b>
<b>Summer Semester 2</b>							
MP001IU Military Training							
<b>Junior Year</b>							
<b>Semester 5</b>		<b>IU credits</b>	<b>ECTS</b>	<b>Semester 6</b>		<b>IU credits</b>	<b>ECTS</b>
CE301IU	Structural Analysis 2	3	4.64	CE307IU	Surveying	2	3.09
CE302IU	Soil Mechanics	3	4.64	CE308IU	Surveying Practice	1	2.45
CE303IU	Soil Mechanics Laboratory	1	2.45	CE309IU	Foundation Engineering	3	4.64
CE304IU	Reinforced concrete 1	3	4.64	CE310IU	Reinforced Concrete 2	3	4.64
CE305IU	Steel Structures	3	4.64	CE313IU	Reinforced Concrete Project	1	2.45
CE217IU	AI in Civil Engineering and Construction management	3	4.64	CE312IU	Steel Structure Project	1	2.45
				CE311IU	Construction Engineering	3	4.64
				PE019IU	Ho Chi Minh's Thoughts	2	3.09
<b>Total Credits</b>		<b>16</b>	<b>25.65</b>	<b>Total Credits</b>		<b>16</b>	<b>27.45</b>
<b>Summer Semester 3</b>		<b>IU credits</b>	<b>ECTS</b>				
CE314IU Internship		<b>3</b>	<b>7.36</b>				
<b>Senior Year</b>							
<b>Semester 7</b>		<b>IU credits</b>	<b>ECTS</b>	<b>Semester 8</b>		<b>IU credits</b>	<b>ECTS</b>
CE401IU	Construction Management	3	4.64	CE_ _ _	CE Elective	3	4.64
CE211IU	Hydrology-Hydraulics	3	4.64	PE018IU	History of Vietnamese Communist Party	2	3.09
CE402IU	Foundation Project	1	2.45	CE_ _ _	CE Elective	3	4.64
CE403IU	Construction Project	1	2.45	CE306IU	Water Supply and Sewerage	3	4.64
PE021IU	General Law	3	4.64	_ _ _ IU	IU Elective	3	4.64
_ _ _ IU	IU Elective	3	4.64	PE022IU	Engineering Ethics and Critical Thinking	3	4.64
CE_ _ _	CE Elective	3	4.64				
<b>Total Credit</b>		<b>17</b>	<b>28.1</b>	<b>Total Credits</b>		<b>17</b>	<b>26.29</b>
<b>Semester 9</b>		<b>IU credits</b>	<b>ECTS</b>				
CE420IU	Graduation Thesis	<b>10</b>	<b>24.55</b>				

**Total credits: 152 IU credits/ 257.66 ECTS (not including Physical Training)**

## LIST OF ELECTIVE COURSES

### CE Elective

No.	Course ID	Course	Credits	ECTS
1	CE404IU	Dynamics of Structures	3	4.64
2	CE405IU	Hydraulic Structures	3	4.64
3	CE406IU	Bridges Engineering	3	4.64
4	CE407IU	Tall Buildings	3	4.64
5	CM310IU	Building Information Management	3	4.64
6	CE412IU	Advanced Artificial Intelligence in Civil Engineering and Construction	3	4.64
7	CE413	GIS Applications in Civil Engineering	3	4.64
8	CE414IU	Construction Project Management	3	4.64
9	CM202IU	Construction Measurement and Cost Estimating	3	4.64
10	CM302IU	Construction Procurement and Tendering	3	4.64
11	CM404IU	Contract Management – FIDIC contracts	3	4.64
12	CE415IU	Sustainable Construction	3	4.64

### IU elective

No	S. ID	Subject Name	Credit	ECTS
1	BA003IU	Principles of Marketing	3	4.64
2	BA006IU	Business Communication	3	4.64
3	BA020IU	Business Ethics	3	4.64
4	BA115IU	Introduction to Business Administration	3	4.64
5	BA116IU	Introduction to Social Science	3	4.64
6	BA117IU	Introduction to Microeconomics	3	4.64
7	BA118IU	Introduction to Psychology	3	4.64
8	BA119IU	Introduction to Macroeconomics	3	4.64
9	BA120IU	Business Computing Skills	3	4.64
10	BA123IU	Principles of Management	3	4.64
11	BA130IU	Organizational Behavior	3	4.64
12	BA167IU	Introduction to Vietnamese Legal System	3	4.64
13	BA169IU	Management Information Systems	3	4.64
14	IS019IU	Production Management	3	4.64

No	S. ID	Subject Name	Credit	ECTS
15	IS026IU	Project Management	3	4.64
16	IT063IU	Theoretical Models in Computing	4	6.18
17	IT091IU	Computer Networks	4	6.18
18	IT094IU	Information System Management	4	6.18
19	BA154IU	Entrepreneurship and Small Business Management	3	4.64
20	IT116IU	C++ Programming	4	6.18

### LIST OF PREVIOUS COURSES

No.	Course ID	Course	Credits	ECTS	Course ID	Previous courses
1	EN011IU	Writing AE 2	2	3.09	EN007IU	Writing AE1
2	MA003IU	Calculus 2	4	6.18	MA001IU	Calculus 1
3	PE017IU	Scientific socialism	2	3.09	PE015IU	Philosophy of Marxism and Leninism
4	PE017IU	Scientific socialism	2	3.09	PE016IU	Political economics of Marxism and Leninism
5	PE018IU	History of Vietnamese Communist Party	2	3.09	PE015IU	Philosophy of Marxism and Leninism
6	PE018IU	History of Vietnamese Communist Party	2	3.09	PE016IU	Political economics of Marxism and Leninism
7	PE018IU	History of Vietnamese Communist Party	2	3.09	PH017IU	Scientific socialism
8	CE201IU	Mechanics of Materials 1	2	3.09	CE101IU	Engineering Mechanic - Statics
9	CE202IU	Mechanics of Materials Laboratory	1	2.45	CE101IU	Engineering Mechanic - Statics
10	CE203IU	Engineering Mechanic - Dynamics	3	4.64	CE101IU	Engineering Mechanic - Statics
11	CE208IU	Mechanics of Materials 2	2	3.09	CE201IU	Mechanics of Materials 1
12	CE209IU	Structural Analysis 1	2	3.09	CE201IU	Mechanics of Materials 1
13	CE210IU	Construction Materials	3	4.64	CE201IU	Mechanics of Materials 1
14	CE210IU	Construction Materials	3	4.64	CH011IU	Chemistry for Engineers
15	CE211IU	Hydrology- Hydraulics	3	4.64	CE205IU	Fluid Mechanics
16	CE213IU	Computational Methods for Civil Engineering	3	4.64	MA003IU	Calculus 2
17	CE301IU	Structural Analysis 2	3	4.64	CE209IU	Structural Analysis 1
18	CE301IU	Structural Analysis 2	3	4.64	CE213IU	Computational Methods for Civil Engineering
19	CE302IU	Soil Mechanics	3	4.64	CE201IU	Mechanics of Materials 1
20	CE303IU	Soil Mechanics Laboratory	1	2.45	CE201IU	Mechanics of Materials 1

21	CE304IU	Reinforced concrete 1	3	4.64	CE209IU	Structural Analysis 1
22	CE305IU	Steel Structures	3	4.64	CE209IU	Structural Analysis 1
23	CE306IU	Water Supply and Sewerage	3	4.64	CE211IU	Hydrology- Hydraulics
24	CE309IU	Foundation Engineering	3	4.64	CE302IU	Soil Mechanics
25	CE310IU	Reinforced Concrete 2	3	4.64	CE304IU	Reinforced concrete 1
26	CE311IU	Construction Engineering	3	4.64	CE304IU	Reinforced concrete 1
27	CE312IU	Steel Structure Project	1	2.45	CE305IU	Steel Structures
28	CE313IU	Reinforced Concrete Project	1	2.45	CE304IU	Reinforced concrete 1
29	CE401IU	Construction Management	3	4.64	CE311IU	Construction Engineering
30	CE402IU	Foundation Project	1	2.45	CE309IU	Foundation Engineering
31	CE403IU	Construction Project	1	2.45	CE311IU	Construction Engineering
32	CE404IU	Dynamics of Structures	3	4.64	CE301IU	Structural Analysis 2
33	CE405IU	Hydraulic Structures	3	4.64	CE211IU	Hydrology- Hydraulics
34	CE406IU	Bridge Engineering	3	4.64	CE310IU	Reinforced Concrete 2
35	CE407IU	Tall Buildings	3	4.64	CE404IU	Dynamics of Structures

#### LIST OF CO-REQUISITE COURSES

No.	Course ID	Course	Credits	ECTS		Co-requisite courses
1	CE103IU	Computer-Aided Design and Drafting (CADD)	3	4.64	CE104IU	Practice CADD
2	CE104IU	Practice CADD	1	2.45	CE103IU	Computer-Aided Design and Drafting (CADD)
3	CE201IU	Mechanics of Materials 1	2	3.09	CE202IU	Mechanics of Materials Laboratory
4	CE202IU	Mechanics of Materials Laboratory	1	2.45	CE201IU	Mechanics of Materials 1
5	CE205IU	Fluid Mechanics	2	3.09	CE206IU	Fluid Mechanics Laboratory
6	CE206IU	Fluid Mechanics Laboratory	1	2.45	CE205IU	Fluid Mechanics
7	CE302IU	Soil Mechanics	3	4.64	CE303IU	Soil Mechanics Laboratory
8	CE303IU	Soil Mechanics Laboratory	1	2.45	CE302IU	Soil Mechanics
9	CE307IU	Surveying	2	3.09	CE308IU	Surveying Practice
10	CE308IU	Surveying Practice	1	2.45	CE307IU	Surveying