

**AY2021-22 CURRICULUM FOR BACHELOR OF ENGINEERING (CIVIL) &  
BACHELOR OF SOC SCI (ECONOMICS) WITH PROFESSIONAL INTERNSHIP  
(FIRST YEAR ADMISSION)**

Last Updated : 23-Jun-21

**SUMMARY OF ACADEMIC UNIT REQUIREMENT**

Year of Study	Core	MPE	CC	FC	BDE	Total AU
1	34	0	9	0	0	43
2	24	3	8	3	0	38
3	17	0	0	12	0	29
4	18	15	0	0	0	33
5	8	18	0	0	3	29
<b>Total</b>	<b>101</b>	<b>36</b>	<b>17</b>	<b>15</b>	<b>3</b>	<b>172</b>

\* Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

**YEAR 1 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-Requisite
MH1810	Mathematics 1	C	3	
PH1011	Physics*	C	3	
FE1073	An Introduction to Engineering & Practices	C	1	
CV1011	Mechanics of Materials	C	4	
CV1012	Fluid Mechanics	C	3	
HE1001	Microeconomics I	C	3	
CC0001	Inquiry and Communication in the Interdisciplinary World	CC	2	HW0001
CC0002	Navigating the Digital World	CC	2	
			<b>21</b>	

**YEAR 1 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-Requisite
MH1811	Mathematics 2	C	3	MH1810
CV1013	Civil Engineering Materials	C	3	
CV1014	Introduction To Computational Thinking	C	3	
CV2020	Water Resources Engineering	C	3	CV1012
EG1001	Engineers In Society	C	2	
HE2001	Microeconomics II	C	3	HE1001
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2	
CC0005	Healthy Living & Wellbeing	CC	3	
			<b>22</b>	

**YEAR 2 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-Requisite
CV2011	Structural Analysis I	C	3	CV1011
CV2013	Engineering Geology & Soil Mechanics	C	3	
CV2711	Civil Engineering Laboratory A	C	1	
HE1002	Macroeconomics I	C	3	
CV0003	Introduction to Data Science and Artificial Intelligence	FC	3	CV1014
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	
			<b>18</b>	

**YEAR 2 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-Requisite
CV1711	Engineering Drawing and 3D Building Information Modelling	C	1	
CV2012	Structural Analysis II	C	3	CV2011
CV2014	Geotechnical Engineering	C	3	CV2013
CV2019	Matrix Algebra & Computational Methods	C	3	
CV2712	Civil Engineering Laboratory B	C	1	

HE2002	Macroeconomics II	C	3	HE1002
MH1820	Introduction to Probability and Statistical Methods	MPE	3	Compulsory
CC0007	Science & Technology for Humanity	CC	3	
			<b>20</b>	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CV3011	Reinforced Concrete Design	C	3	CV2011
CV3013	Foundation Engineering	C	3	CV2013 & CV2014
CV3014	Transportation Engineering	C	3	
CV3017	Environmental Engineering	C	2	CV1012
HE2003	Econometrics I	C	3	MH1820
HE3001	Microeconomics III	C	3	HE2001
HW0288	Engineering Communication	FC	2	CC0001
			<b>19</b>	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CV3914	Professional Internship	FC	10	Year 3 standing & completed at least 4 semesters of study
			<b>10</b>	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CV4012	Project Planning & Management	C	2	Year 4 Standing
CV4711	Seminars & Site Visits	C	1	
HE3002	Macroeconomics III	C	3	HE2002
CV4XXX	Major Prescribed Elective	MPE	3	Refer to Syllabus
	Econs PE 1	MPE	3	
	Econs PE 2	MPE	3	
	Econs PE 3	MPE	3	
			<b>18</b>	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CV3012	Steel Design	C	3	CV2011
CV3016	Construction Technology & Processes	C	3	
CV4912	Integrated Design Project	C	3	Year 4 Standing
HE3003	Econometrics II	C	3	HE2003
	Econs PE 4	MPE	3	
			<b>15</b>	

YEAR 5 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CV4911	Final Year Project	C	4	Year 4 Standing
	Econs PE 5	MPE	3	
	Econs PE 6	MPE	3	
	Econs PE 7	MPE	4	
			<b>14</b>	

YEAR 5 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CV4911	Final Year Project	C	4	Year 4 Standing
	Econs PE 8	MPE	4	
	Econs PE 9	MPE	4	

	Broadening & Deepening Electives 1	BDE	3	
			15	

Total AU for Graduation : **172**