

**AY2021-22 CURRICULUM FOR BACHELOR OF ENGINEERING (CIVIL)
WITH SECOND MAJOR IN BUSINESS (INTERNATIONAL TRADING) - PROFESSIONAL ATTACHMENT
(FIRST YEAR ADMISSION)**

Last Updated : 23-Jun-21

| SUMMARY OF ACADEMIC UNIT REQUIREMENT | | | | | | |
|--------------------------------------|-----------|----------|-----------|-----------|-----------|------------|
| Year of Study | Core | MPE | CC | FC | BDE | Total AU |
| 1 | 28 | 0 | 9 | 0 | 6 | 43 |
| 2 | 21 | 0 | 8 | 0 | 9 | 38 |
| 3 | 17 | 3 | 0 | 10 | 9 | 39 |
| 4 | 14 | 0 | 0 | 0 | 12 | 26 |
| Total | 80 | 3 | 17 | 10 | 36 | 146 |

* 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 | |
| CC0001 | Inquiry and Communication in the Interdisciplinary World | CC | 2 | HW0001 |
| CC0002 | Navigating the Digital World | CC | 2 | |
| AB1201 | Financial Management | BDE | 3 | |
| | | | 21 | |

| 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 | |
| CC0003 | Ethics & Civics in a Multi-Cultural World | CC | 2 | |
| CC0005 | Healthy Living & Wellbeing | CC | 3 | |
| AB1501 | Marketing | BDE | 3 | |
| | | | 22 | |

| 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 | |
| MH2814 | Probability & Statistics | C | 3 | MH1810 |
| CC0006 | Sustainability: Society, Economy & Environment | CC | 3 | |
| ML0004 | Career and Entrepreneurial Development for the Future World | CC | 2 | |
| AD1102 | Financial Accounting | BDE | 3 | |
| BF2218 | Commodity Markets | BDE | 4 | |
| | | | 22 | |

| 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 | |
| CC0007 | Science & Technology for Humanity | CC | 3 | |
| BF3214 | Commodities Trading | BDE | 2 | |
| | | | 16 | |

| 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 |
| CV0003 | Introduction to Data Science and Artificial Intelligence | FC | 3 | CV1014 |
| HW0288 | Engineering Communication | FC | 2 | CC0001 |
| AD2102 | Management Accounting | BDE | 3 | AD1102 |
| | | | 19 | |

| YEAR 3 SEMESTER 2 | | | | |
|-------------------|-------------------------------------|------|-----------|-------------------|
| Course Code | Course Title | Type | AU | Pre-Requisite |
| CV3012 | Steel Design | C | 3 | CV2011 |
| CV3016 | Construction Technology & Processes | C | 3 | |
| CV4XXX | Major Prescribed Elective | MPE | 3 | Refer to Syllabus |
| BF2216 | Trade Incoterms & Ship Chartering | BDE | 4 | |
| | Broadening & Deepening Electives 1 | BDE | 2 | |
| | | | 15 | |

| YEAR 3 SPECIAL SEMESTER | | | | |
|-------------------------|-------------------------|------|----------|---|
| Course Code | Course Title | Type | AU | Pre-Requisite |
| CV3915 | Professional Attachment | FC | 5 | Year 3 standing & completed at least 4 semesters of study |
| | | | 5 | |

| 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 | |
| CV4911 | Final Year Project | C | 4 | Year 4 Standing |
| BE1402 | Business Operations and Process | BDE | 3 | |
| BF2302 | International Tax and Trading Law | BDE | 2 | |
| | | | 12 | |

| YEAR 4 SEMESTER 2 | | | | |
|-------------------|---|------|----|-----------------|
| Course Code | Course Title | Type | AU | Pre-Requisite |
| CV4911 | Final Year Project | C | 4 | Year 4 Standing |
| CV4912 | Integrated Design Project | C | 3 | Year 4 Standing |
| BF3212 | Trade, Structured & Supply Chain Finance | BDE | 2 | |
| BF3213 | Enterprise Risk Management in Commodity Markets | BDE | 2 | |

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|--|------------------------------------|-----|-----------|--|
| | Broadening & Deepening Electives 2 | BDE | 3 | |
| | | | 14 | |

Total AU for Graduation : **146**