## Curriculum Structure of Bachelor of Engineering (Civil) with Second Major in Society & Urban Systems - Professional Attachment - AY2019/20

### Year 1
**Semester 1**
- **MH1810** Mathematics 1
- **CV1011** Mechanics of Materials
- **PH1011** Physics
  *Students w/o A-level Physics to do "PH1012 Physics A"
- **FE1073** An Introduction to Engineering & Practices
- **HE9091** Principles of Economics
- **HY0001** Ethics and Moral Reasoning
- **HW0188** Engineering Communication I
  *HW0001
- **Society and Culture Course 1**

**Total AU for Graduation** 20

### Year 2
**Semester 1**
- **MH1811** Mathematics 2
- **CV1012** Fluid Mechanics
- **CV1013** Civil Engineering Materials
- **CV1014** Introduction To Computational Thinking
- **CV1711** Civil Engineering Drawing and 3D Building Information Modelling
- **CV0001** Civil Engineering and Sustainable Built Environment
- **Urban Economics & Public Policy Course 1**
  *HE9091

**Total AU for Graduation** 19

### Year 2
**Semester 2**
- **CV2011** Structural Analysis I
  *CV1011
- **CV2013** Engineering Geology & Soil Mechanics
- **CV2015** Hydraulics
  *CV1012
- **MH2814** Probability & Statistics
  *MH1810
- **CV2711** Civil Engineering Laboratory A
- **Society and Culture Course 2**
- **CV0003** Introduction to Data Science and Artificial Intelligence
  *CV1014

**Total AU for Graduation** 19

### Year 3
**Semester 1**
- **CV3011** Reinforced Concrete Design
  *CV2011
- **CV3013** Foundation Engineering
  *CV2013 & CV2014
- **CV3014** Transportation Engineering
- **CV3015** Environmental Engineering
  *CV1012
- **SU3001** Integrated Urban Management
- **Water and Environmental Management Course 1**

**Total AU for Graduation** 19

### Year 3
**Semester 2**
- **CV3012** Steel Design
  *CV2011
- **CV3016** Construction Technology & Processes
- **CV4XXX** Major Prescribed Elective
  *Refer to Syllabus
- **Society and Culture Course 3**
- **Urban Economics & Public Policy Course 2**
  *HE9091
- **GER - UE**

**Total AU for Graduation** 18

### Special Semester
- **CV3915** Professional Attachment
  * Year 3 Standing & Completed at least 4 Semesters of study

**Total AU for Graduation** 5

### Year 4
**Semester 1**
- **CV0002** Engineers & Society
  *Year 4 Standing
- **CV4011** Project Planning & Management
  *Year 4 Standing
- **CV4711** Seminars & Site Visits
- **CV4911** Final Year Project
  *Year 4 Standing
- **Water and Environmental Management Course 2**
- **Urban Economics & Public Policy Course 3**
  *HE9091

**Total AU for Graduation** 17

### Year 4
**Semester 2**
- **CV4911** Final Year Project
  *Year 4 Standing
- **CV4912** Integrated Design Project
  *Year 4 Standing
- **CV4XXX** Major Prescribed Elective
  *Refer to Syllabus
- **SU4001** Leaders in Urban Systems and Policy
- **GER - UE**

**Total AU for Graduation** 18

* pre-requisite

**GER : General Education Requirement**

**GER-Core** 2nd Major Courses

**GER-Unrestricted Elective**

**Last Updated : 15-Mar-19**