

## Bachelor of Engineering Program in Civil Engineering (Revised B.E.2017)

### Year 1 – Semester 1

| Course       | Title                      | Credit    |
|--------------|----------------------------|-----------|
| ENGL1101     | Fundamental English        | 2         |
| MATH0110     | Mathematics I              | 3         |
| MUTA0001     | Preliminary Project Design | 0         |
| PHYS0110     | Physics I                  | 3         |
| PHYS0190     | Physics Laboratory I       | 1         |
| SOHU0019     | Innovation and Creativity  | 3         |
| STAT0115     | General Statistics         | 3         |
| <u>Total</u> |                            | <u>15</u> |

### Year 1 – Semester 2

| Course       | Title                      | Credit    |
|--------------|----------------------------|-----------|
| MATH0111     | Mathematics II             | 3         |
| MECH0110     | Engineering Mechanics      | 3         |
| MECH0115     | Basic Engineering Drawing  | 3         |
| MECH0190     | Basic Tool Skills Practice | 3         |
| PHYS0111     | Physics II                 | 3         |
| PHYS0191     | Physics Laboratory II      | 1         |
| <u>Total</u> |                            | <u>16</u> |

### Year 1 – Summer Semester

| Course       | Title                                     | Credit   |
|--------------|---|----------|
| CHEM0120     | Chemistry                                 | 3        |
| CHEM0190     | Chemistry Laboratory                      | 1        |
| ENGL1102     | Fundamental English for Academic Purposes | 2        |
| <u>Total</u> |   | <u>6</u> |

### Year 2 – Semester 1

| Course       | Title                                    | Credit    |
|--------------|--|-----------|
| CIVL0215     | Solid Mechanics                          | 3         |
| CLVL0241     | Engineering Survey                       | 4         |
| CIVL0221     | Applied Mathematics in Civil Engineering | 3         |
| EECP0101     | Introduction to Computer                 | 3         |
| ENGL2101     | Fundamental English Communication        | 2         |
| MATH0210     | Mathematics III                          | 3         |
| MECH0220     | Thermodynamics                           | 3         |
| <u>Total</u> |  | <u>21</u> |

### Year 2 – Semester 2

| Course       | Title                   | Credit    |
|--------------|-------------------------|-----------|
| CIVL0212     | Concrete Technology     | 3         |
| CIVL0242     | Route Survey            | 4         |
| CIVL0311     | Structural Analysis I   | 3         |
| CIVL0320     | Applied Solid Mechanics | 3         |
| ENCC0005     | Engineering Innovation  | 3         |
| MATH0211     | Mathematics IV          | 3         |
| MATS0310     | Engineering Materials   | 3         |
| MUTA0002     | Critical Project Design | 0         |
| <u>Total</u> |                         | <u>22</u> |

### Year 2 – Summer Semester

| Course       | Title                    | Credit     |
|--------------|--------------------------|------------|
| CIVL0243     | Surveying Field Practice | 0(80 hrs.) |
| <u>Total</u> |                          | <u>0</u>   |

**Year 3 – Semester 1**

| Course   | Title                                   | Credit    |
|----------|---|-----------|
| CIVL0210 | Civil Engineering Materials and Testing | 3         |
| CIVL0260 | Hydraulics                              | 3         |
| CIVL0262 | Hydraulics Laboratory                   | 1         |
| CIVL0312 | Structural Analysis II                  | 3         |
| CIVL0411 | Reinforced Concrete Design              | 4         |
| ENGLxxxx | English Elective                        | 2         |
| XXXXxxxx | Free Elective                           | 3         |
|          | <u>Total</u>                            | <u>19</u> |

**Year 3 – Semester 2**

| Course   | Title                                  | Credit    |
|----------|--|-----------|
| CIVL0261 | Engineering Hydrology                  | 3         |
| CIVL0371 | Soil Mechanics                         | 3         |
| CIVL0372 | Soil Mechanics Laboratory              | 1         |
| CIVL0413 | Timber and Steel Design                | 4         |
| ENGL2102 | English Communication in the Workplace | 2         |
| XXXXxxxx | Free Elective                          | 3         |
|          | <u>Total</u>                           | <u>16</u> |

**Year 3 – Summer Semester**

| Course   | Title                      | Credit      |
|----------|----------------------------|-------------|
| CIVL0390 | Civil Engineering Training | 0(160 hrs.) |
|          | <u>Total</u>               | <u>0</u>    |

**Year 4 – Semester 1**

| Course   | Title                                 | Credit    |
|----------|---------------------------------------|-----------|
| CIVL0280 | Water Supply and Sanitary Engineering | 3         |
| CIVL0350 | Construction Management               | 3         |
| CIVL0373 | Foundation Engineering                | 4         |
| CIVLXXXX | Civil Engineering Elective            | 3         |
| CIVL0490 | Civil Engineering Project I           | 2         |
| ENGL1308 | English for Future Careers            | 2         |
| SCIE0103 | Earth and Space                       | 3         |
|          | <u>Total</u>                          | <u>20</u> |

**Year 4 – Semester 2**

| Course   | Title                                | Credit    |
|----------|--------------------------------------|-----------|
| CIVL0361 | Hydraulic Engineering                | 3         |
| CIVL0414 | Prestressed Concrete Design          | 3         |
| CIVL0415 | Computer Method in Civil Engineering | 2         |
| CIVL0431 | Highway Engineering                  | 3         |
| CIVL0491 | Civil Engineering Project II         | 2         |
| CIVLXXXX | Civil Engineering Elective           | 3         |
| ENCC0006 | Ethics for Engineers                 | 1         |
|          | <u>Total</u>                         | <u>17</u> |