



**PROGRAMME STRUCTURE:  
BACHELOR OF CIVIL ENGINEERING  
2018/2019 SESSION**

**SEPTEMBER INTAKE**

**FACULTY OF ENGINEERING, UNIVERSITY OF MALAYA  
KUALA LUMPUR, MALAYSIA**

**CURRICULUM STRUCTURE**  
**BACHELOR OF CIVIL ENGINEERING**  
**SESSION 2018/2019**  
**(SEPTEMBER INTAKE)**

| Course                    | Content  | Credit Hours |
|---------------------------|--|--------------|
| <b>University Courses</b> | ♦ <b>Compulsory Courses:</b>   |              |
|                           | • Information Literacy   | 2            |
|                           | • The Islamic and Asian Civilization (TITAS)* / Basic Malay Language** | 2            |
|                           | • Ethnic Relations* / Introduction to Malaysia**                       | 2            |
|                           | • Basic Entrepreneurship Culture                                       | 2            |
|                           | • Social Engagement  | 2            |
|                           | • English for Communication Programme                                  | 6            |
|                           | ♦ <b>Elective Course from Other Faculties</b>                          | 4            |
|                           | ♦ <b>Co-Curriculum</b>   | 2            |
|                           | <b>Sub-Total Credit Hours</b>  | <b>22</b>    |
| <b>Faculty Courses</b>    | ♦ <b>Faculty Core Courses</b>  | 22           |
|                           | ♦ <b>Faculty Elective Course</b>                                       | 2            |
|                           | <b>Sub-Total Credit Hours</b>  | <b>24</b>    |
| <b>Programme Courses</b>  | ♦ <b>Programme Core Courses</b>  | 82           |
|                           | ♦ <b>Programme Elective Courses</b>                                    | 15           |
|                           | <b>Sub-Total Credit Hours</b>  | <b>97</b>    |
| <b>TOTAL CREDIT HOURS</b> |  | <b>143</b>   |

**Notes:**

- (1) \*Compulsory for Local students.
- (2) \*\* Compulsory for International students.
- (3) Students are required to take a minimum of 6 credits of English course based on English Proficiency qualification (MUET/IELTS/TOEFL).

**ACADEMIC PLANNER**  
**BACHELOR OF CIVIL ENGINEERING**  
**SESSION 2018/2019**

| <b>YEAR 1</b>                 |  |           |           |           |              |                      |
|-------------------------------|--|-----------|-----------|-----------|--------------|----------------------|
| <b>CODE</b>                   | <b>COURSE</b>                                      | <b>S1</b> | <b>S2</b> | <b>SS</b> | <b>TOTAL</b> | <b>PRE-REQUISITE</b> |
| <b>UNIVERSITY COURSES</b>     |  |           |           |           |              |                      |
| GIG 1001                      | The Islamic and Asian Civilizations (TITAS)*       | 2         |           |           |              |                      |
| GLT 1017                      | Basic Malay Language**                             |           |           |           |              |                      |
| GIG 1002                      | Ethnic Relations*                                  |           | 2         |           |              |                      |
| GIG 1006                      | Introduction to Malaysia**                         |           | 2         |           |              |                      |
| GIG 1004                      | Information Literacy                               |           | 2         |           |              |                      |
| GLT 10XX                      | English for Communication Programme 1              | 3         |           |           |              |                      |
|                               | <b>Sub-total</b>                                   | <b>5</b>  | <b>4</b>  | <b>0</b>  | <b>9</b>     |                      |
| <b>FACULTY CORE COURSES</b>   |  |           |           |           |              |                      |
| KIX 1001                      | Engineering Mathematics I                          | 3         |           |           |              |                      |
| KIX 1002                      | Engineering Mathematics II                         |           | 3         |           |              |                      |
| KIX 1003                      | Thinking and Communication Skills                  |           | 2         |           |              |                      |
|                               | <b>Sub-total</b>                                   | <b>3</b>  | <b>5</b>  | <b>0</b>  |              | <b>8</b>             |
| <b>PROGRAMME CORE COURSES</b> |  |           |           |           |              |                      |
| KIA 1001                      | Drawing for Civil Engineers & Computer Programming | 3         |           |           |              |                      |
| KIA 1002                      | Engineering Mechanics                              | 3         |           |           |              |                      |
| KIA 1003                      | Civil Engineering Materials                        | 3         |           |           |              |                      |
| KIA 1004                      | Mechanics of Materials                             |           | 3         |           |              |                      |
| KIA 1005                      | Engineering Survey                                 |           | 3         |           |              |                      |
|                               | <b>Sub-total</b>                                   | <b>9</b>  | <b>6</b>  | <b>0</b>  |              | <b>15</b>            |
|                               | <b>Total</b>                                       | <b>17</b> | <b>15</b> | <b>0</b>  | <b>32</b>    |                      |

**Notes:**

- (1) \*Compulsory for Local students.
- (2) \*\* Compulsory for International students.
- (3) Students are required to take a minimum of 6 credits of English course based on English Proficiency qualification (MUET/IELTS/TOEFL).

| YEAR 2                        |  |           |           |          |           |                 |
|-------------------------------|--|-----------|-----------|----------|-----------|-----------------|
| CODE                          | COURSE   | S1        | S2        | SS       | TOTAL     | PRE-REQUISITE   |
| <b>UNIVERSITY COURSES</b>     |  |           |           |          |           |                 |
| GLT 10XX                      | English for Communication Programme 2              | 3         |           |          |           |                 |
| GIG 1003                      | Basic Entrepreneurship Culture                     | 2         |           |          |           |                 |
| GIG 1005                      | Social Engagement                                  |           | 2         |          |           |                 |
|                               | Co-curriculum                                      | 2         |           |          |           |                 |
|                               | Elective Courses (other faculty)                   | 2         | 2         |          |           |                 |
|                               | <b>Sub-total</b>                                   | <b>9</b>  | <b>4</b>  | <b>0</b> | <b>13</b> |                 |
| <b>FACULTY CORE COURSES</b>   |  |           |           |          |           |                 |
| KIX 2002                      | Engineering Economics Analysis                     |           | 3         |          |           |                 |
|                               | <b>Sub-total</b>                                   | <b>0</b>  | <b>3</b>  | <b>0</b> | <b>3</b>  |                 |
| <b>PROGRAMME CORE COURSES</b> |  |           |           |          |           |                 |
| KIA 2001                      | Theory of Structure                                | 3         |           |          |           | KIA1002,KIA1004 |
| KIA 2002                      | Soil Mechanics                                     | 3         |           |          |           |                 |
| KIA 2003                      | Fluid Mechanics                                    | 3         |           |          |           |                 |
| KIA 2004                      | Reinforced Concrete Design                         |           | 3         |          |           | KIA1002,KIA1004 |
| KIA 2005                      | Water Resources                                    |           | 3         |          |           |                 |
| KIA 2006                      | Environmental Engineering and Sustainability       |           | 3         |          |           |                 |
| KIA 2007                      | Laboratory A (Structures and Materials)            |           | 1         |          |           |                 |
| KIA 2008                      | Laboratory B (Water and Environmental Engineering) |           | 1         |          |           |                 |
| KIA 2009                      | Survey Camp  |           |           | 2        |           | KIA1005         |
|                               | <b>Sub-total</b>                                   | <b>9</b>  | <b>11</b> | <b>2</b> | <b>22</b> |                 |
|                               | <b>Total</b>                                       | <b>18</b> | <b>18</b> | <b>2</b> | <b>38</b> |                 |

| YEAR 3                        |  |           |           |          |           |               |
|-------------------------------|--|-----------|-----------|----------|-----------|---------------|
| CODE                          | COURSE   | S1        | S2        | SS       | TOTAL     | PRE-REQUISITE |
| <b>UNIVERSITY COURSES</b>     |  |           |           |          |           |               |
|                               | -  |           |           |          |           |               |
|                               | <b>Sub-total</b>                               | <b>0</b>  | <b>0</b>  | <b>0</b> | <b>0</b>  |               |
| <b>FACULTY CORE COURSES</b>   |  |           |           |          |           |               |
| KIX 2001                      | Integrated Design I                            | 2         |           |          |           |               |
| KIX 2003                      | Law and Ethics in Engineering                  |           | 2         |          |           |               |
| KIX 2004                      | Engineering Project Management                 | 3         |           |          |           |               |
| KIX 3001                      | Integrated Design II                           |           | 4         |          |           | KIX2001       |
|                               | <b>Sub-total</b>                               | <b>5</b>  | <b>6</b>  | <b>0</b> |           | <b>11</b>     |
| <b>PROGRAMME CORE COURSES</b> |  |           |           |          |           |               |
| KIA 3001                      | Statistics and Numerical Techniques            | 3         |           |          |           |               |
| KIA 3002                      | Structural Steel Design                        | 3         |           |          |           |               |
| KIA 3003                      | Traffic Engineering                            | 3         |           |          |           |               |
| KIA 3004                      | Construction Management and Technology         | 3         |           |          |           |               |
| KIA 3005                      | Hydraulics                                     |           | 3         |          |           | KIA2003       |
| KIA 3006                      | Foundation Engineering                         |           | 3         |          |           | KIA2002       |
| KIA 3007                      | Laboratory C (Geotechnics and Transportations) | 1         |           |          |           |               |
| KIA 3008                      | Industrial Training                            |           |           | 5        |           |               |
| KIA 3009                      | Structural Analysis                            |           | 3         |          |           |               |
| KIA 3010                      | Geotechnical Engineering                       |           | 3         |          |           | KIA2002       |
|                               | <b>Sub-total</b>                               | <b>13</b> | <b>12</b> | <b>5</b> | <b>30</b> |               |
|                               | <b>Total</b>                                   | <b>18</b> | <b>18</b> | <b>5</b> | <b>41</b> |               |

| <b>YEAR 4</b>                     |                                     |           |           |           |              |                      |
|-----------------------------------|-------------------------------------|-----------|-----------|-----------|--------------|----------------------|
| <b>CODE</b>                       | <b>COURSE</b>                       | <b>S1</b> | <b>S2</b> | <b>SS</b> | <b>TOTAL</b> | <b>PRE-REQUISITE</b> |
| <b>UNIVERSITY COURSES</b>         |                                     |           |           |           |              |                      |
|                                   | -                                   |           |           |           |              |                      |
|                                   | <b>Sub-total</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>     |                      |
| <b>FACULTY ELECTIVE COURSES</b>   |                                     |           |           |           |              |                      |
|                                   | Elective Faculty                    | 2         |           |           |              |                      |
|                                   | <b>Sub-total</b>                    | <b>2</b>  | <b>0</b>  | <b>0</b>  | <b>2</b>     |                      |
| <b>PROGRAMME CORE COURSES</b>     |                                     |           |           |           |              |                      |
| KIA 4001                          | Final Year Project                  | 3P        | 3         |           |              |                      |
| KIA 4002                          | Capstone Design Project             |           | 3         |           |              |                      |
| KIA 4003                          | Advanced Reinforced Concrete Design | 3         |           |           |              | KIA2004              |
| KIA 4004                          | Highway Engineering                 | 3         |           |           |              |                      |
|                                   | <b>Sub-total</b>                    | <b>9</b>  | <b>6</b>  | <b>0</b>  | <b>15</b>    |                      |
| <b>PROGRAMME ELECTIVE COURSES</b> |                                     |           |           |           |              |                      |
| KIA/KID 40XX                      | Elective 1                          | 3         |           |           |              |                      |
| KIA/KID 40XX                      | Elective 2                          | 3         |           |           |              |                      |
| KIA/KID 40XX                      | Elective 3                          |           | 3         |           |              |                      |
| KIA/KID 40XX                      | Elective 4                          |           | 3         |           |              |                      |
| KIA/KID 40XX                      | Elective 5                          |           | 3         |           |              |                      |
|                                   | <b>Sub-total</b>                    | <b>6</b>  | <b>9</b>  | <b>0</b>  | <b>15</b>    |                      |
|                                   | <b>Total</b>                        | <b>17</b> | <b>15</b> | <b>0</b>  | <b>32</b>    |                      |
| <b>TOTAL CREDIT</b>               |                                     |           |           |           | <b>143</b>   |                      |

**LIST OF FACULTY ELECTIVE COURSE#:**

| CODE    | COURSE                       | CREDIT |
|---------|------------------------------|--------|
| KIX3002 | Engineering Entrepreneurship | 2      |
| KIX3003 | Sustainable Engineering      | 2      |

**LIST OF PROGRAMME ELECTIVE COURSES#:**

| CODE  | COURSE   | CREDIT |
|---|--|--------|
| <b>Structural and Material</b>                      |  |        |
| KIA 4005  | Advanced Structural Steel                          | 3      |
| KIA 4006  | Timber Design                                      | 3      |
| KIA 4007  | Wind and Earthquake Engineering                    | 3      |
| KIA 4008  | Bridge Engineering                                 | 3      |
| KIA 4009  | Concrete Engineering and Technology                | 3      |
| KIA 4010  | Special Concrete                                   | 3      |
| KIA 4011  | Prestressed Concrete Design                        | 3      |
| <b>Soil, Geotechnical Engineering and Transport</b> |  |        |
| KIA 4012  | Rock Engineering                                   | 3      |
| KIA 4013  | Ground Improvements                                | 3      |
| KIA 4014  | Air Traffic Management                             | 3      |
| KIA 4015  | Transportation and Highway Planning                | 3      |
| <b>Water and Environmental Engineering</b>          |  |        |
| KID 4003  | Water Supply Engineering                           | 3      |
| KID 4005  | Advanced Hydrology Engineering                     | 3      |
| KID 4006  | Surface Water Quality Engineering                  | 3      |
| KID 4007  | Environmental Health Engineering                   | 3      |
| KID 4008  | Environmental Impact Assessment                    | 3      |
| KID 4009  | Solid & Hazardous Waste Management                 | 3      |
| KID 4010  | Environmental Risk Management                      | 3      |
| KID 4011  | Environmental Management System                    | 3      |
| KID 4012  | Occupational, Safety and Health                    | 3      |
| KID 4013  | Air Pollution and Control                          | 3      |
| KID 4014  | Contaminant Transport                              | 3      |
| <b>Mathematics, Survey, and Management</b>          |  |        |
| KIA 4016  | GIS for Civil Engineering                          | 3      |
| KIA 4017  | Quantitative Techniques in Construction Management | 3      |

# The list of courses offered is subject to change.

## GRADUATION REQUIREMENT CHART

### BACHELOR OF CIVIL ENGINEERING

| CODE                            | COURSE  | CREDIT    | PASSING GRADE    | MARKING SCHEME   |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
|---------------------------------|---|-----------|------------------|--|--|--|--|--------------|---------|--------------|---------|--------|----|------|------------------|-------|---|------|-------------|-------|----|------|-------------|-------|----|------|------|-------|---|------|------|-------|----|------|------|-------|----|------|------|-------|---|------|------|-------|----|------|------|-------|----|------|------|-------|---|------|------|------|---|------|------|
| <b>UNIVERSITY COURSES</b>       |   |           |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GIG 1001                        | The Islamic and Asian Civilizations (TITAS)*  | 2         | C                | <table border="1"> <thead> <tr> <th>MARKS</th> <th>GRADE</th> <th>GRADE POINTS</th> <th>MEANING</th> </tr> </thead> <tbody> <tr> <td>90-100</td> <td>A+</td> <td>4.00</td> <td>HIGH DISTINCTION</td> </tr> <tr> <td>80-89</td> <td>A</td> <td>4.00</td> <td>DISTINCTION</td> </tr> <tr> <td>75-79</td> <td>A-</td> <td>3.70</td> <td>DISTINCTION</td> </tr> <tr> <td>70-74</td> <td>B+</td> <td>3.30</td> <td>GOOD</td> </tr> <tr> <td>65-69</td> <td>B</td> <td>3.00</td> <td>GOOD</td> </tr> <tr> <td>60-64</td> <td>B-</td> <td>2.70</td> <td>GOOD</td> </tr> <tr> <td>55-59</td> <td>C+</td> <td>2.30</td> <td>PASS</td> </tr> <tr> <td>50-54</td> <td>C</td> <td>2.00</td> <td>PASS</td> </tr> <tr> <td>45-49</td> <td>C-</td> <td>1.70</td> <td>FAIL</td> </tr> <tr> <td>40-44</td> <td>D+</td> <td>1.30</td> <td>FAIL</td> </tr> <tr> <td>35-39</td> <td>D</td> <td>1.00</td> <td>FAIL</td> </tr> <tr> <td>0-34</td> <td>F</td> <td>0.00</td> <td>FAIL</td> </tr> </tbody> </table> |  |  |  | MARKS        | GRADE   | GRADE POINTS | MEANING | 90-100 | A+ | 4.00 | HIGH DISTINCTION | 80-89 | A | 4.00 | DISTINCTION | 75-79 | A- | 3.70 | DISTINCTION | 70-74 | B+ | 3.30 | GOOD | 65-69 | B | 3.00 | GOOD | 60-64 | B- | 2.70 | GOOD | 55-59 | C+ | 2.30 | PASS | 50-54 | C | 2.00 | PASS | 45-49 | C- | 1.70 | FAIL | 40-44 | D+ | 1.30 | FAIL | 35-39 | D | 1.00 | FAIL | 0-34 | F | 0.00 | FAIL |
| MARKS                           | GRADE   |           |                  |  |  |  |  | GRADE POINTS | MEANING |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 90-100                          | A+  | 4.00      | HIGH DISTINCTION |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 80-89                           | A   | 4.00      | DISTINCTION      |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 75-79                           | A-  | 3.70      | DISTINCTION      |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 70-74                           | B+  | 3.30      | GOOD             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 65-69                           | B   | 3.00      | GOOD             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 60-64                           | B-  | 2.70      | GOOD             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 55-59                           | C+  | 2.30      | PASS             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 50-54                           | C   | 2.00      | PASS             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 45-49                           | C-  | 1.70      | FAIL             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 40-44                           | D+  | 1.30      | FAIL             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 35-39                           | D   | 1.00      | FAIL             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| 0-34                            | F   | 0.00      | FAIL             |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GLT 1017                        | Basic Malay Language**  |           |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GIG 1002                        | Ethnic Relations*   | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GIG 1006                        | Introduction to Malaysia**  |           |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GIG1003                         | Basic of Entrepreneurship Culture   | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GIG 1004                        | Information Literacy  | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GIG1005                         | Social Engagement   | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| GLT 10XX                        | English for Communication Programme   | 6         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
|                                 | Elective Course from Other Faculties  | 4         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
|                                 | Co-Curriculum   | 2         | c                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
|                                 | <b>Sub-total Credit Hours</b>   | <b>22</b> |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| <b>FACULTY CORE COURSES</b>     |   |           |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 1001                        | Engineering Mathematics I   | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 1002                        | Engineering Mathematics II  | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 1003                        | Thinking and Communication Skills   | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 2001                        | Integrated Design I   | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 2002                        | Engineering Economic Analysis   | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 2003                        | Law and Ethics in Engineering   | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 2004                        | Engineering Project Management  | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIX 3001                        | Integrated Design II  | 4         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
|                                 | <b>Sub-total Credit Hours</b>   | <b>22</b> |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| <b>FACULTY ELECTIVE COURSES</b> |   |           |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
|                                 | <b>List of Faculty Elective Courses#:</b> <ul style="list-style-type: none"> <li>• KIX3002 – Engineering Entrepreneurship</li> <li>• KIX3003 – Sustainable Engineering</li> </ul> <i>#subject to changes.</i> | 2         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
|                                 | <b>Sub-total Credit Hours</b>   | <b>2</b>  |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| <b>PROGRAMME CORE COURSES</b>   |   |           |                  |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 1001                        | Drawing for Civil Engineers & Computer Programming  | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 1002                        | Engineering Mechanics   | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 1003                        | Civil Engineering Materials   | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 1004                        | Mechanics of Materials  | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 1005                        | Engineering Survey  | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 2001                        | Theory of Structure   | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 2002                        | Soil Mechanics  | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |
| KIA 2003                        | Fluid Mechanics   | 3         | C                |  |  |  |  |              |         |              |         |        |    |      |                  |       |   |      |             |       |    |      |             |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |       |    |      |      |       |    |      |      |       |   |      |      |      |   |      |      |



PROGRAMME STRUCTURE: BACHELOR OF CIVIL ENGINEERING 2018/2019 SESSION

| KIA 2004                          | Reinforced Concrete Design   | 3          | C | <table border="1"> <thead> <tr> <th>GRADE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td>P</td> <td>Progressive</td> </tr> <tr> <td>K</td> <td>Transfer of credit without grade</td> </tr> <tr> <td>K1</td> <td>Exemption of course</td> </tr> <tr> <td>I</td> <td>Maybe given when:<br/>a) a student has not taken the final examination for any course in any semester due to medical reasons/compassionate grounds and/or;<br/>b) a student has not fulfill a part of the course requirement in a semester due to medical/compassionate grounds or by reasons beyond the control of the student which is acceptable to the Committee of Examiners concerned.</td> </tr> <tr> <td>R</td> <td>Given for a course which is audited that fulfils the minimum 80% attendance requirement. No credit is given for this grade</td> </tr> <tr> <td>UR</td> <td>Given for a course which is audited but does not fulfil the minimum 80% attendance requirement. No credit is given for this grade.</td> </tr> <tr> <td>W</td> <td>Given for a course from which a student has withdrawn officially during a particular semester.</td> </tr> <tr> <td>W1</td> <td>Given for all courses where a student has officially withdrawn from a semester.</td> </tr> <tr> <td>W2</td> <td>Given for all courses where a student has withdrawn officially from the University.</td> </tr> </tbody> </table> | GRADE | REMARKS | P | Progressive | K | Transfer of credit without grade | K1 | Exemption of course | I | Maybe given when:<br>a) a student has not taken the final examination for any course in any semester due to medical reasons/compassionate grounds and/or;<br>b) a student has not fulfill a part of the course requirement in a semester due to medical/compassionate grounds or by reasons beyond the control of the student which is acceptable to the Committee of Examiners concerned. | R | Given for a course which is audited that fulfils the minimum 80% attendance requirement. No credit is given for this grade | UR | Given for a course which is audited but does not fulfil the minimum 80% attendance requirement. No credit is given for this grade. | W | Given for a course from which a student has withdrawn officially during a particular semester. | W1 | Given for all courses where a student has officially withdrawn from a semester. | W2 | Given for all courses where a student has withdrawn officially from the University. |
|-----------------------------------|--|------------|---|--|-------|---------|---|-------------|---|----------------------------------|----|---------------------|---|--|---|--|----|--|---|--|----|---|----|---|
| GRADE                             | REMARKS  |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| P                                 | Progressive  |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| K                                 | Transfer of credit without grade   |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| K1                                | Exemption of course  |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| I                                 | Maybe given when:<br>a) a student has not taken the final examination for any course in any semester due to medical reasons/compassionate grounds and/or;<br>b) a student has not fulfill a part of the course requirement in a semester due to medical/compassionate grounds or by reasons beyond the control of the student which is acceptable to the Committee of Examiners concerned. |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| R                                 | Given for a course which is audited that fulfils the minimum 80% attendance requirement. No credit is given for this grade   |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| UR                                | Given for a course which is audited but does not fulfil the minimum 80% attendance requirement. No credit is given for this grade.   |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| W                                 | Given for a course from which a student has withdrawn officially during a particular semester.   |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| W1                                | Given for all courses where a student has officially withdrawn from a semester.  |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| W2                                | Given for all courses where a student has withdrawn officially from the University.  |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 2005                          | Water Resources  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 2006                          | Environmental Engineering and Sustainability   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 2007                          | Laboratory A (Structures and Materials)  | 1          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 2008                          | Laboratory B (Water and Environmental Engineering)   | 1          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 2009                          | Survey Camp  | 2          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3001                          | Statistics and Numerical Techniques  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3002                          | Structural Steel Design  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3003                          | Traffic Engineering  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3004                          | Construction Management and Technology   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3005                          | Hydraulics   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3006                          | Foundation Engineering   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3007                          | Laboratory C (Geotechnics and Transportations)   | 1          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3008                          | Industrial Training  | 5          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3009                          | Structural Analysis  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 3010                          | Geotechnical Engineering   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 4001                          | Final Year Project   | 6          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 4002                          | Capstone Design Project  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 4003                          | Advanced Reinforced Concrete Design  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA 4004                          | Highway Engineering  | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
|                                   | <b>Sub-total Credit Hours</b>  | <b>82</b>  |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| <b>PROGRAMME ELECTIVE COURSES</b> |  |            |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA/KID 40XX                      | Elective 1   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA/KID 40XX                      | Elective 2   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA/KID 40XX                      | Elective 3   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA/KID 40XX                      | Elective 4   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| KIA/KID 40XX                      | Elective 5   | 3          | C |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
|                                   | <b>Sub-total Credit Hours</b>  | <b>15</b>  |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |
| <b>TOTAL CREDIT</b>               |  | <b>143</b> |   |  |       |         |   |             |   |                                  |    |                     |   |  |   |  |    |  |   |  |    |   |    |   |

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