**POKHARA UNIVERSITY**

**Bachelor of Civil and Rural Engineering**

**Curricular Structure (Revised, 2018)**

The Bachelor of Civil Engineering program is designed to produce high quality civil and Rural engineers. It is a four-year program structured in eight semesters. The students need to complete 139 credit hours of course work and project work for graduation.

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|  | **Semester I** |  |  |  | **Semester II** |  |
| **Course****Code** | **Course Description** | **Credit****Hours** |  | **Course****Code** | **Course Description** | **Credit****Hours** |
| MTH 112 | Engineering Mathematics I | 3 |   | MTH 114 | Engineering Mathematics II | 3 |
| PHY 111 | Physics | 4 |   | CHM 111 | Chemistry | 4 |
| MEC 111 | Thermal Science | 2 |   | CVL 211 | Civil Engineering Materials | 2 |
| MEC 130 | Applied Mechanics I | 3 |   | MEC 131 | Applied Mechanics II | 2 |
| MEC 110 | Mechanical Workshop | 1 |   | ELX 112 | Fundamentals of Electrical and Electronic | 3 |
| ENG 111 | Communication Techniques | 2 |   | MEC 120 | Engineering Drawing | 2 |
| CMP 113 | Programming in C | 3 |   |  |  |  |

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|  | **Semester III** |  |  |  | **Semester IV** |  |
| **Course****Code** | **Course Description** | **Credit****Hours** |  | **Course****Code** | **Course Description** | **Credit****Hours** |
| MTH 212 | Engineering Mathematics III | 3 |  | GTE 320 | Soil Mechanics | 4 |
| CVR 212 | Rural Infrastructure I | 3 |  | WRE 211 | Hydraulics | 3 |
| WRE 210 | Fluid Mechanics | 3 |  | ENV 330 | Water Supply Engineering | 3 |
| CVL 221 | Surveying I | 3 |  | CVL 321 | Surveying II | 3 |
| STR 210 | Strength of Materials | 3 |  | ARC 358 | Building Technology | 2 |
| GTE 210 | Engineering Geology | 3 |  | STR 212 | Structural Analysis I | 3 |
| CVR 290 | Rural Engineering Project I | 1 |  | CVR 291 | Rural Engineering Project II | 1 |

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|  | **Semester V** |  |  |  | **Semester VI** |  |
| **Course****Code** | **Course Description** | **Credit****Hours** |  | **Course****Code** | **Course Description** | **Credit****Hours** |
| GTE 321 | Foundation Engineering | 3 |  | WRE 320 | Irrigation Engineering | 3 |
| WRE 350 | Engineering Hydrology | 2 |  | CVR 313 | Rural Infrastructure III | 3 |
| CVR 312 | Rural Infrastructure II | 2 |  | STR 320 | Design of Steel and Timber Structures | 3 |
| ENV 331 | Sanitary Engineering | 3 |  | CVR 314 | Engineering, Environment and Society | 2 |
| STR 331 | Concrete Technology & Masonry Structures | 3 |  | MTH 311 | Applied Mathematics  | 3 |
| STR 312 | Structural Analysis II | 3 |  | ECO 411 | Engineering Economics | 3 |
| CVL 322 | Survey Field Project | 1 |  |  |  |  |

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|  | **Semester VII** |  |  |  | **Semester VIII** |  |
| **Course****Code** | **Course Description** | **Credit****Hours** |  | **Course****Code** | **Course Description** | **Credit****Hours** |
| CVL 311 | Safety Engineering | 2 |  | CVL 441 | Construction Project Management | 3 |
| WRE 430 | Hydropower Engineering | 3 |  | CVL 440 | Engineering Professional Practice | 2 |
| STR 440 | Design of R.C.C. Structures | 3 |  | TRP 412 | Transportation Engineering II | 3 |
| TRP 411 | Transportation Engineering I | 3 |  | --- | Elective II | 3 |
| CVL 431 | Estimating and Valuation | 3 |  | CVR 491 | Rural Engineering Project III | 5 |
|  --- | Elective I | 3 |  |  |  |  |