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| **Activity:** | Open Ended Lab |
| **Course Title:** | Building Information Modelling (Lab) |
| **Course Code:** | CE-118L |
| **Semester:** | Spring 2019 |
| **CLO:** | 3 |
| **CLO Weight:** | 50% |
| **Date Provided:** | 14 March, 2019 |
| **Date Submission:** | 14 May, 2019 |

**TO DEVELOP A BUILDING INFORMATION MODEL FOR REINFORCED CONCRETE (RC) BUILDING**

**Introduction**

You are required to contact an Engineer/Architect/Consultant/Contractor/Owner to acquire an idea of plans/elevations/free hand sketches of a potential Reinforced Concrete (RC) Building. You’ll consider the house made up of reinforced concrete frames with in-fill masonry walls and develop a BIM model for the acquired house, using Autodesk Revit.

**Lab. Report Requirement**

The students shall use BIM tools and produce a report, providing:

1. A linked structural and architectural model of the project
2. Sizes and material properties of structural columns, beams, masonry walls, foundations, slabs and reinforcement
3. Analytical models and placement of (gravity) load
4. Annotated Construction documents
5. Detailing
6. Scheduling
7. Revision of Design

**Observation and Results**

For the selected single/one unit/house, if required you have to “Revise the Design”, for achieving economy and safety, using BIM model and discuss the reason.

**Group Size**

Maximum 8 students

**Evaluation Criteria**

50% Report

50% Viva

**Rubrics**

Report Assessment and Viva rubrics provided in the course contents will be followed for assessment of this lab report.