#### NIRMA UNIVERSITY

### Institute of Technology

## School of Engineering

# Bachelor of Technology - Civil Engineering

#### Semester- VI

L	T	P	C
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Course Code	2CL603
Course Name	Construction Workshop

#### **Course Outcomes:**

At the end of the course, students will be able to -

- 1. experiment with different materials and tools for building construction
- 2. plan and execute construction activities in a team
- 3. relate the acquired theoretical knowledge with field practices.

# **Syllabus**

Laboratory hours: 30

Introduction to construction practices, materials, and tools.

Setting out of plan, excavation, timbering of trenches, foundation, DPC and plinth beam.

Construction of Brick Masonry, incorporating provision of opening, lintel, weather shed, and earthquake resistant features etc.

Execution of Reinforced Concrete Elements like column, beam, slab, staircase etc. with appropriate formwork.

Finishing works: Flooring, Plastering, Skirting, etc.

#### Laboratory Work:

Laboratory work will be based on above syllabus with minimum 03 exercises to be incorporated.

# Suggested Readings:

- 1. Bindra, S. P. & Arora, S.P. Building Construction, Dhanpat Rai.
- 2. Chudley, R. & R. Greeno, Building Construction Handbook, Butterworth Heinneman.
- 3. Punmia, B.C. Building Construction, Laxmi Publications.
- 4. Mckay, W. B. Building Construction Metric Vol. I to IV, Orient Longman.
- Goyal, M.M. Handbook of building construction: The Essential Source of Construction Practice, Amrendiya Consultancy.
- 6. Rangwala, S.C. Building Construction, Charotar Publication.
- L= Lecture, T= Tutorial, P= Practical, C= Credit w.e.f. academic year 2020-21 and onwards