



**Tulsiramji Gaikwad-Patil College of Engineering and Technology**

Wardha Road, Nagpur-441 108

**NAAC Accredited with A+ Grade**

**(An Autonomous Institute Affiliated to RTM Nagpur University, Nagpur)**



**Program: B.Tech. Civil Engineering**

**Semester VI**

**BCE33615: Building Information Modelling and Management Lab**

	<b>Course Outcomes</b>	<b>CL</b>
<b>BCE33615.1</b>	<b>Develop</b> a Building Information Model of a simple residential building and generate structural framing plans including beams, columns, and slabs using BIM software.	6
<b>BCE33615.2</b>	<b>Integrate</b> a 4D construction schedule with a BIM model and perform quantity takeoff for concrete and steel to support construction planning and cost estimation.	5
<b>BCE33615.3</b>	<b>Establish</b> a collaborative project environment within a BIM platform and apply information management standards, such as naming conventions, to ensure effective coordination in a BIM project.	3
<b>BCE33615.4</b>	<b>Analyze</b> clashes between structural and architectural elements using BIM software and explore computational design tools integrated within the BIM environment to enhance design efficiency.	4
<b>BCE33615.5</b>	<b>Generate</b> building section and elevation drawings from a BIM model and a visual walkthrough of a modeled infrastructure project to effectively communicate design intent.	6

**HoD(CE)**