

V- Lab

Letter of Appreciation from IIT Bombay



An Initiative of Ministry of Education Under the
National Mission on Education through ICT

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IIT BOMBAY

NCID - 14
01/01/2026

VL/MP4/NC14/26

To,

Prof Dr. R. R. Deshmukh

**International Centre of Excellence in Engineering and Management (ICEEM) Aurangabad
GUT NO - 4, OPPOSITE BAJAJ AUTO LTD., IN FRONT OF
MIDC FILTRATION PLANT, AURANGABAD - PUNE
HIGHWAY Aurangabad Maharashtra 431136**

Dear Sir / Madam

With reference to your Expression of Interest for Virtual Labs Nodal Centre (VLNC), it gives me immense pleasure to designate your college as a Nodal Centre for Virtual labs. As recommended by you, following have been nominated from your college.

Nodal Coordinator: **Dr Akhter Hussain Syed**

Nodal Outreach Coordinator: **Prof Zafar UL Hasan**

This approval is valid up to 31st Dec 2026 and is subject to the Terms and Conditions mentioned in the EoI and any subsequent directives as issued by MoE. Kindly acknowledge receipt of this letter and acceptance of the Terms and Conditions.

We thank you again for your interest in the Virtual Labs project and appreciate your endeavour in the service of the student community. Wishing you all the best!

Sincerely,

Santosh Noronha

Lab No. 105, Chemical Engineering
IIT Bombay, Powai, Mumbai, 400 076

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(22)25764246

List of V- Labs

Discipline	Lab Name
Biotechnology and Biomedical Engineering	Bioinformatics and Computational Biology
Biotechnology and Biomedical Engineering	Biosensor Virtual Lab
Biotechnology and Biomedical Engineering	Introduction to Bioinformatics Algorithms
Biotechnology and Biomedical Engineering	Techniques in Immunology and Microbiology Lab (New)
Biotechnology and Biomedical Engineering	Bio-Medical Signal & Image Processing Lab
Biotechnology and Biomedical Engineering	Biochemistry Virtual Lab I
Biotechnology and Biomedical Engineering	Bioinformatics and Computational Biology Virtual Lab (New)
Biotechnology and Biomedical Engineering	Bioinformatics and Data Science in Biotechnology Lab (New)
Biotechnology and Biomedical Engineering	Bioinformatics Virtual Lab I
Biotechnology and Biomedical Engineering	Bioinformatics Virtual Lab II
Biotechnology and Biomedical Engineering	Bioinformatics Virtual Lab III
Biotechnology and Biomedical Engineering	Biological Image Processing Lab
Biotechnology and Biomedical Engineering	Biomedical and Signal Processing Lab
Physical Sciences	Virtual Astrophysics Lab
Physical Sciences	Virtual English and Communication Lab

Biotechnology and Biomedical Engineering	Biomedical Instrumentation Lab
Biotechnology and Biomedical Engineering	Bioreactor Modeling and Simulation Lab
Biotechnology and Biomedical Engineering	Biosensor Virtual Lab (New)
Biotechnology and Biomedical Engineering	Biosignal Processing and Analysis Lab (New)
Biotechnology and Biomedical Engineering	Cell Biology Virtual Lab I
Biotechnology and Biomedical Engineering	Cell Biology Virtual Lab II
Biotechnology and Biomedical Engineering	Computer-Aided Drug Design Virtual Lab
Biotechnology and Biomedical Engineering	Immunology Virtual Lab I
Biotechnology and Biomedical Engineering	Immunology Virtual Lab II
Biotechnology and Biomedical Engineering	Microbiology Virtual Lab I
Biotechnology and Biomedical Engineering	Microbiology Virtual Lab II
Biotechnology and Biomedical Engineering	Molecular biology Virtual Lab I
Biotechnology and Biomedical Engineering	Molecular Biology Virtual Lab II
Biotechnology and Biomedical Engineering	Neuron Simulation Lab
Biotechnology and Biomedical Engineering	Neurophysiology Lab
Biotechnology and Biomedical Engineering	Population Ecology I
Biotechnology and Biomedical Engineering	Population Ecology II
Biotechnology and Biomedical Engineering	Systems Biology Virtual Lab
Chemical Engineering	Buoyancy and Floatation (Fluid Mechanics)
Chemical Engineering	Chemical Engineering Lab
Chemical Engineering	Chemical Process Dynamics Laboratory

Chemical Engineering	Differentiation (Numerical Methods)
Chemical Engineering	Dynamics of Fluid Flow (Fluid Mechanics)
Chemical Engineering	Eigen Value (Numerical Methods)
Chemical Engineering	Engineering Physics
Chemical Engineering	Engineering Physics Lab II
Chemical Engineering	Flow through Pipes (Fluid Mechanics)
Chemical Engineering	Fluid Mechanics - Pressure and Its Measurement (Fluid Mechanics)
Chemical Engineering	Fluid properties and Pressure and its measurement (Fluid Mechanics)
Chemical Engineering	Heat and Mass Transfer Conduction Lab I
Chemical Engineering	Heat and Mass Transfer - Conduction II
Chemical Engineering	Heat and Mass Transfer - Forced and Natural Convection
Chemical Engineering	Heat and Mass Transfer - Radiation
Chemical Engineering	Heat Transfer
Chemical Engineering	Hydrostatic Forces on surface (Fluid Mechanics)
Chemical Engineering	Integration(Numerical Methods)
Chemical Engineering	Interpolation (Numerical Methods)
Chemical Engineering	Kinematics of Flow and Ideal flow, Dimensional and Modal analysis (Fluid Mechanics)
Chemical Engineering	Numerical Methods - Regression Analysis
Chemical Engineering	Optimization(Numerical Methods)
Chemical Engineering	Ordinary Differential Equation (Numerical Methods)
Chemical Engineering	Partial Differential Equation (Numerical Methods)
Chemical Engineering	Process Control
Chemical Engineering	Roots of Equation(Numerical Methods)
Chemical Engineering	Statistics and Regression
Chemical Engineering	Systems of linear equations(Numerical Methods)
Chemical Engineering	Thermodynamics II Virtual Lab
Chemical Engineering	Univariate Analysis Lab Numerical Methods
Chemical Engineering	Virtual Mass Transfer Lab

Chemical Engineering	Viscous Flow, compressible flow, boundary layer (Fluid Mechanics)
Chemical Sciences	Advanced Analytical Chemistry Virtual Lab
Chemical Sciences	Circular Dichroism Spectroscopy Lab
Chemical Sciences	Colloid and Surface Chemistry Lab
Chemical Sciences	Inorganic Chemistry Virtual Lab
Chemical Sciences	Molecular Absorption Spectroscopy Lab
Chemical Sciences	Molecular Fluorescence Spectroscopy Lab
Chemical Sciences	Organic Chemistry Virtual Lab
Chemical Sciences	Physical Chemistry (Amrita) Lab
Chemical Sciences	Physical Chemistry (IITH) Lab
Chemical Sciences	Quantum Chemistry Lab
Civil Engineering	Advanced Remote Sensing and GIS Lab (New)
Civil Engineering	Basic Engineering Mechanics and Strength of Materials Lab
Civil Engineering	Concrete Structures Lab (New)
Civil Engineering	Design of Reinforced Cement Concrete Structure Lab
Civil Engineering	Engineering Geology
Civil Engineering	Environmental Engineering Lab I (New)
Civil Engineering	Environmental Engineering Lab II (New)
Civil Engineering	Fluid Machinery Lab (New)
Civil Engineering	Fluid Mechanics Lab
Civil Engineering	Geotechnical Engineering
Civil Engineering	Hydraulics and Fluid Mechanics Lab
Civil Engineering	Marine Structure Lab (New)
Civil Engineering	Mining Geology Lab (New)
Civil Engineering	Smart Structures and Dynamics Lab
Civil Engineering	Soil Mechanics Lab
Civil Engineering	Strength of Materials Lab
Civil Engineering	Structural Analysis II Virtual Lab (New)
Civil Engineering	Structural Dynamics Lab

Civil Engineering	Surveying Lab
Civil Engineering	Transportation Engineering Lab (New)
Civil Engineering	Virtual Structural Analysis-II Lab (New)
Civil Engineering	Waves and Vibration Transmission in Periodic Structures Lab (New)
Computer Science & Engineering	Advanced Network Technologies Virtual Lab
Computer Science & Engineering	Artificial Intelligence I
Computer Science & Engineering	Artificial Intelligence II
Computer Science & Engineering	Artificial Neural Networks Lab
Computer Science & Engineering	Automata and Formal Languages Virtual Lab I (New)
Computer Science & Engineering	Automata and Formal Languages Virtual Lab II (New)
Computer Science & Engineering	Basics of HTML
Computer Science & Engineering	Computational Linguistics Lab
Computer Science & Engineering	Computer Forensics Lab (New)
Computer Science & Engineering	Computer Graphics
Computer Science & Engineering	Computer Organisation and Architecture Lab
Computer Science & Engineering	Computer Organization Lab
Computer Science & Engineering	Computer Programming Lab
Computer Science & Engineering	Core Java Programming
Computer Science & Engineering	Creative Design, Prototyping & Experiential Lab (New)
Computer Science & Engineering	Cryptography
Computer Science & Engineering	Cryptography Lab
Computer Science & Engineering	Data Structures - I (New)
Computer Science & Engineering	Data Structures - II (New)
Computer Science & Engineering	Data Structures Lab
Computer Science & Engineering	Digital Logic Circuit Design Virtual Lab (New)
Computer Science & Engineering	Discrete Mathematics Virtual Lab I (New)
Computer Science & Engineering	Discrete Mathematics Virtual Lab II (New)
Computer Science & Engineering	Formal Language Automata Virtual Lab (New)
Computer Science & Engineering	Image Processing Lab

Computer Science & Engineering	Internet of Things (IoT) Virtual Lab (New)
Computer Science & Engineering	Introductory Cyber Security Virtual Lab (New)
Computer Science & Engineering	Natural Language Processing Lab
Computer Science & Engineering	Network Security Virtual Lab (New)
Computer Science & Engineering	Pattern recognition
Computer Science & Engineering	Problem Solving Lab
Computer Science & Engineering	Python Programming Lab (New)
Computer Science & Engineering	Python Programming Lab: Advanced Topics (New)
Computer Science & Engineering	Soft Computing Tools in Engineering Lab
Computer Science & Engineering	Software Engineering Virtual Lab
Computer Science & Engineering	Speech Signal Processing Lab
Design Engineering	Drone Technology
Design Engineering	Psychological Process and Application in Everyday Life (New)
Electrical Engineering	Analog Signals, Network and Measurement Virtual Laboratory
Electrical Engineering	Basic Electrical Science Lab (New)
Electrical Engineering	Basics of Electrical Engineering Lab (New)
Electrical Engineering	Basics of Pneumatic Components Lab (New)
Electrical Engineering	Control and Instrumentation
Electrical Engineering	Control Engineering
Electrical Engineering	Digital Control Virtual Laboratory (New)
Electrical Engineering	Electrical Machines (COEP) Lab
Electrical Engineering	Electrical Machines Lab (New)
Electrical Engineering	Electrical Measurements
Electrical Engineering	Industrial Automation Lab
Electrical Engineering	Industrial Electric Drives Lab
Electrical Engineering	Mechatronics System Design Lab (New)
Electrical Engineering	Microwave Engineering
Electrical Engineering	Optical Communication
Electrical Engineering	PLC Lab

Electrical Engineering	Power Electronics
Electrical Engineering	Power Electronics I Virtual Lab (New)
Electrical Engineering	Power Electronics II Virtual Lab (New)
Electrical Engineering	Process Loop Component and Control Valve for Various Applications Lab (New)
Electrical Engineering	Process Loop Component for Current and Pneumatic Converters Lab (New)
Electrical Engineering	Process Loop Component for High Low Selector and Alarm Annunciators Lab (New)
Electrical Engineering	Process Loop Component for Transmitter and Tank Applications Lab (New)
Electrical Engineering	Project and System Engineering and Management - I
Electrical Engineering	Project and System Engineering and Management - II
Electrical Engineering	Real Time Embedded Systems Lab
Electrical Engineering	Sensors Modeling & Simulation Lab
Electrical Engineering	Single Board Heater System Lab
Electrical Engineering	Substation Automation Lab
Electrical Engineering	Virtual High Voltage Lab
Electrical Engineering	Virtual Laboratory For Simulation and Gaming
Electrical Engineering	Virtual Power Lab
Electronics & Communications	Analog and Digital Electronics I
Electronics & Communications	Analog and Digital Electronics II
Electronics & Communications	Analog Electronics Circuits Virtual Lab
Electronics & Communications	Analog Electronics Lab (New)
Electronics & Communications	Analog Signals, Network and Measurement Lab
Electronics & Communications	Basic Electronics Lab
Electronics & Communications	Biomedical Signal Processing Lab (New)
Electronics & Communications	Computer Network Virtual Lab (New)
Electronics & Communications	Digital Applications Lab (New)
Electronics & Communications	Digital Electronic Circuits Lab
Electronics & Communications	Digital Electronics Lab-I (New)

Electronics & Communications	Digital Electronics Lab-II (New)
Electronics & Communications	Digital Logic Design Lab (Logic Gates & Mux-Demux) (New)
Electronics & Communications	Digital Logic Design Virtual Lab (New)
Electronics & Communications	Digital Signal Processing
Electronics & Communications	DLD with Verilog Virtual Laboratory
Electronics & Communications	Embedded System Design with 8051 and PIC Microcontroller
Electronics & Communications	Error Correcting Codes Virtual Lab (New)
Electronics & Communications	Fading Channels and Mobile Communications
Electronics & Communications	Hybrid Electronics Lab
Electronics & Communications	Microelectronics VLSI
Electronics & Communications	VLSI Design Testing Laboratory
Electronics & Communications	VLSI Virtual Laboratory (New)
Electronics & Communications	VLSI with SPICE Code Virtual lab
Heat and Mass Transfer Chemical Engineering	Heat and Mass Transfer Conduction Lab I
Mechanical Engineering	3D Printing Virtual Simulation Lab (New)
Mechanical Engineering	Aerodynamics Virtual Lab (New)
Mechanical Engineering	Assorted Manufacturing Processes (Founding & Casting) Virtual Simulation Lab (New)
Mechanical Engineering	Dynamics of Machine Lab (New)
Mechanical Engineering	Electron Microscopy for Beginners (New)
Mechanical Engineering	Engineering Dynamics Virtual Lab (New)
Mechanical Engineering	Engineering Graphics & Design Lab (New)
Mechanical Engineering	Engineering Graphics Lab (New)
Mechanical Engineering	FAB Lab
Mechanical Engineering	Fluid Mechanics Lab
Mechanical Engineering	Heat Transfer
Mechanical Engineering	Instrumentation and Control Lab
Mechanical Engineering	Kinematics and Dynamics of Mechanisms Lab
Mechanical Engineering	Machine Dynamics & Mechanical Vibration Lab

Mechanical Engineering	Manufacturing Processes (Foundry & Casting) Virtual Simulation Lab
Mechanical Engineering	Material Response to Microstructural
Mechanical Engineering	Mechanics of Machine II
Mechanical Engineering	Mechanics of Machine Lab
Mechanical Engineering	Mechanisms and Robotics Lab
Mechanical Engineering	Metal Forming Virtual Simulation Lab
Mechanical Engineering	Micromachining Lab
Mechanical Engineering	Mine Automation & Virtual Reality
Mechanical Engineering	Model Based Fault Detection Lab
Mechanical Engineering	Sensors and Instrumentation Lab
Mechanical Engineering	Vibration and Acoustics Lab
Mechanical Engineering	Vibration Lab II
Physical Sciences	Advanced Mechanics Virtual Lab
Physical Sciences	Basics of Physics (New)
Physical Sciences	Basics of Physics Lab 2
Physical Sciences	Digital Anthropology Lab (New)
Physical Sciences	Electric Circuits Virtual Lab
Physical Sciences	Electricity and Magnetism Virtual Lab
Physical Sciences	Harmonic Motion and Waves Virtual Lab
Physical Sciences	Heat & Thermodynamics Lab
Physical Sciences	Laser Optics Virtual Lab
Physical Sciences	Mechanical Metallurgy Lab
Physical Sciences	Mechanics Virtual Lab (Pilot)
Physical Sciences	Modern Physics Virtual Lab
Physical Sciences	Optics Virtual Lab
Physical Sciences	Physics Laboratory I
Physical Sciences	Probability and Statistics
Physical Sciences	Queuing Theory and Modelling
Physical Sciences	Solid State Physics Virtual Lab