

# Department of Civil Engineering

## Year of establishment

B.Tech in Civil Engineering was introduced in 2019 as part of the university's expansion into Engineering and Technology disciplines. This programme is AICTE-approved, affirming its academic credibility.

The Department of Civil Engineering at Khwaja Moinuddin Chishti Language University, Lucknow is committed to excellence in teaching, research, and innovation in the field of civil engineering. Established with the vision of producing skilled professionals and future leaders in infrastructure development, the department focuses on imparting both theoretical knowledge and practical skills that are essential for modern engineering challenges.

The department offers a comprehensive curriculum covering structural engineering, geotechnical engineering, transportation engineering, environmental engineering, water resources, and construction technology. With state-of-the-art laboratories, advanced software tools, and experienced faculty members, students are trained to bridge the gap between classroom learning and real-world applications.

In addition to academics, the department encourages students to engage in research, projects, industrial training, and consultancy works to develop problem-solving abilities and professional competence. Emphasis is also placed on sustainable practices, innovation, and multidisciplinary collaboration to prepare graduates for contributing to national and global infrastructure needs.

Through quality education, research initiatives, and industry interactions, the Civil Engineering Department of KMCLU, Lucknow strives to nurture engineers who can contribute meaningfully to society and meet the growing demands of infrastructure development with responsibility and integrity.

## 1. Vision and mission

### VISION

To achieve excellence in language, education, innovation and research in the field of civil engineering that grooms the learner in to becoming productive, responsible, ethical, creative and compassionate members of society.

### MISSION

**M1:** To Impart a better learning environment through innovation in teaching and training to produce industry capable professionals.

**M2:** To provide ethical and moral standards towards serving the society.

**M3:** To improve the technical skills by collaborating industries and research organization to promote employability and entrepreneurship.

## 2. Courses offered

| <b>Programme</b>                      | <b>Specialization</b> | <b>Intake</b> | <b>Started In</b> |
|---------------------------------------|-----------------------|---------------|-------------------|
| Bachelor of Technology (CE) (Regular) | Civil Engineering     | 60            | 2019              |

## 3. Faculty members

| <b>Name</b>             | <b>Designation</b>          | <b>E-Mail</b>                |
|-------------------------|-----------------------------|------------------------------|
| Er. Kaushlesh kr. Shah  | Assistant Professor and HOD | kaushleshshah@kmclu.ac.in    |
| Er. Mohd. Salman Ansari | Assistant Professor         | 23sam.ansari@gmail.com       |
| Er. Abhishek Awasthi    | Assistant Professor         | Abhishek.civil08@gmail.com   |
| Er. Astha Chaurasia     | Assistant Professor         | asthachaurasia1998@gmail.com |

## 4. Labs/Equipment

1. Building Materials & Construction Lab
2. Surveying Lab
3. Fluid Mechanics Lab
4. Hydraulics & Hydraulic Machines Lab
5. Structural Analysis Lab
6. Concrete Technology Lab
7. Transportation Engineering Lab
8. Geotechnical Engineering Lab
9. Environmental Engineering Lab

## 1. Building Materials & Construction Lab

Tensile testing machine, Vicat's Apparatus, Compression Testing Machine, Le-Chatelier's Apparatus, Sieve Shaker & I.S. Sieves (coarse & fine both), Silt Content & Bulking of sand, Oven, Cube Vibrator, aggregate impact value testing machine, Air permeability apparatus.



**TENSILE TESTING MACHINE**



**AGGREGATE IMPACT VALUE TESTING MACHINE**



**AIR PERMEABILITY APPARATUS**



**SIEVE SHAKER MACHINE**

## 2. Surveying Lab

Chains & Links, Prismatic Compass & Surveyor's compass, Digital Theodolite, Dumpy Level, Auto Level, Plane Table, Planimeter.



**DIGITAL THEODOLITE**



**DUMPY LEVEL**



**PLANIMETER**

### 3. Fluid Mechanics Lab

Venturimeter, Orifice meter, Friction Factor Apparatus, Bend meter, Reynolds Apparatus, Orifice, Bernoulli's Apparatus, Metacentric height Apparatus



IMPACT OF JET APPARATUS



PIPE FRICTION APPARATUS



**BERNOULLI'S THEOREM APPARATUS**

**4-Structural Analysis Lab** Maxwell Theorem Apparatus, Flexural rigidity Apparatus, Column Buckling Apparatus, 3-pin jointed bar Apparatus, Curved Members Apparatus, Unsymmetrical Bending Apparatus, 2-Hinged Arch, 3- Hinged Arch



**COLUMN BUCKLING APPARATUS**



**THREE HINGED ARCH APPARATUS**



**3-PIN JOINTED BAR APPARATUS**



**Unsymmetrical Bending Apparatus**

## 6. Concrete Technology Lab

Vicat's Apparatus, Compression Testing Machine, Le-Chatelier's Apparatus, Flexure Testing Machine, Sieve Shaker with I.S., Sieves (coarse & fine both), Slump Cone Apparatus, Vee-Bee Consistometer, Flow Table Test, Compaction Factor Test, Schmidt Rebound Hammer, Concrete Test Hammer, Concrete Drum Mixer, Vibrating Table, Water Bath, Oven, Cube Vibrator)



**COMPRESSION TESTING MACHINE**



**CONCRETE COMPACTION FACTOR MACHINE**



**CONCRETE VIBRATOR TABLE**



**CONCRETE MIXTURE MACHINE**

## 7. Transportation Engineering Lab

Aggregate Crushing Value Apparatus, Aggregate Impact Value Apparatus, Los-Angeles Abrasion Machine, Dorry's Attrition Machine, Length Gauge, Thickness Gauge, CBR Testing Apparatus, Marshall's Apparatus, Penetrometer, Ring & Ball Apparatus, Ductility Testing Machine, Flash & Fire Point Apparatus, Sieve Shaker with I.S. Sieves, Oven, Softening point apparatus, pensky marten flash point apparatus



**SOFTENING POINT TEST APPARATUS**



**MARSHALL STABILITY TEST APPARATUS**



**BITUMEN PENETROMETER APPARATUS**



**PENSKY MARTEEN FLASH POINT APPARATUS**

## 8. Geotechnical Engineering Lab

Hydrometer, Cassagrande's Apparatus, Proctor Compaction Apparatus, Relative Density Apparatus, CoreCutter, Permeability Apparatus, Direct Shear Apparatus, Standard Penetration Test, Static Cone Penetration Apparatus, Sand Replacement apparatus, Water Content Determination Apparatus, Shrinkage Limit Apparatus, Plastic Limit Apparatus, Fine sieves, Vane shear test.



FINE SIEVES



VANE SHEAR TEST



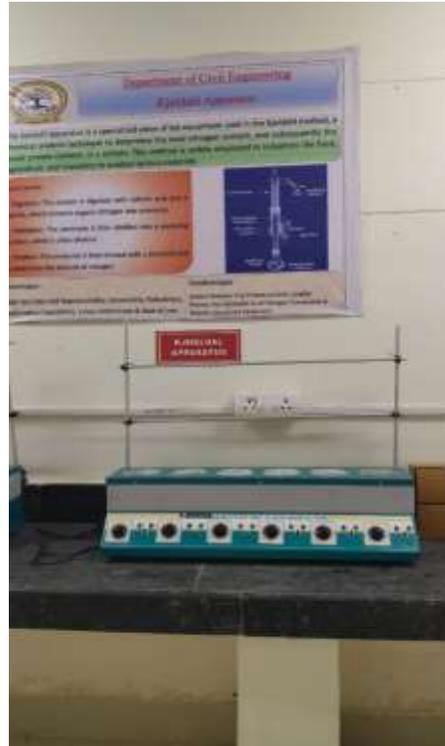
DIRECT SHEAR APPRATUS

## 9. Environmental Engineering Lab

pH meter, Turbidity meter, BOD Incubator apparatus, COD Digestion tank apparatus, Conductivity Meter Apparatus, Kjeldahl Apparatus, Jar Test Apparatus, High Volume Sampler, Sound level meter, Distillation Tank, Multi-test Parameter)



**BOD INCUBATOR APPARATUS**



**KJELDAHL APPARATUS**



**JAR TEST APPARATUS**



**PH METER APPARATUS**

## 5. Placement Highlights

The Civil Engineering department actively conducts training and placement activities to enhance students' employability and industry readiness. These include aptitude training, technical skill development, resume building and mock interviews.

### GLIMPSES OF TRAINING AND PLACEMENT ACTIVITIES CONDUCTED BY THE DEPARTMENT-



**Offer letter Distribution**



**Mock Interview**



**Group photo after Placement Drive (Pi-infocom)**



**Group photo after Placement Drive (Rudra Abhishek Ltd)**



**Online Interview**

## Innovations.

The Civil Engineering department actively promotes research and innovation among final year students by encouraging them to undertake project work that addresses real-world engineering challenges. Students are guided to explore topics in structural design, sustainable materials and smart infrastructure. This approach not only enhances research aptitude but also prepares students for higher studies.

KMCLU has been active on the innovation front with patents in areas such as:

- AI-powered personalized learning platforms
- AI and ML-based humanoid robots for industry
- AI-based health-monitoring car seats
- Devices for pest control and smart refrigeration to prevent spoilage.



Smart Building Model



Model of Water absorption road

## Industry Engagement-

The Civil Engineering Department organized a series of **industrial and educational visits** to provide students with practical exposure and hands-on learning beyond the classroom.

These visits collectively enhanced students' understanding of **construction materials, public utility services, and industrial practices**, bridging the gap between theoretical knowledge and real-world applications.



**Industrial Visit on M/S PKS Foam Concrete, AAC Block Manufacturing**



**Education Visit on Jal Kal Vibhag Nagar Nigam Aishbagh Lucknow**



**Industrial Visit on Sai Infracon, manufacturing of ready-mix concrete**