Civil Engineering Material Testing Services

Department of Civil Engineering | CECOS University of IT & Emerging Sciences, Peshawar

Ensuring Quality, Safety, and Reliability in Construction

The Department of Civil Engineering at CECOS University of IT & Emerging Sciences, Peshawar, offers construction material testing, geotechnical assessment, and water and wastewater quality analysis to support infrastructure development, engineering research, and construction quality assurance.

Our testing services support contractors, consultants, industries, government departments, environmental organizations, researchers, and individual clients.

Our Testing Services

1. Concrete and Cement Testing

- Concrete compressive strength and slump/workability tests
- Concrete mix design and proportioning
- Cement fineness, consistency, and setting time
- Concrete constituent material evaluation

2. Soil and Geotechnical Testing

- Soil classification, sieve analysis, and Atterberg limits
- Standard and modified Proctor compaction
- California Bearing Ratio (CBR)
- Permeability, specific gravity, shear strength, and consolidation testing

3. Steel and Structural Materials

- Steel tensile strength, yield strength, and elongation
- Construction material quality assessment

4. Water and Wastewater Quality Testing

- Physical parameters: pH, temperature, turbidity, electrical conductivity (EC), total dissolved solids (TDS), and total suspended solids (TSS)
- Chemical parameters: dissolved oxygen (DO), biochemical oxygen demand (BOD_5), chemical oxygen demand (COD), alkalinity, hardness, chlorides, sulphates, and nitrates
- Microbiological parameters: total coliforms, fecal coliforms, and E. coli
- Drinking water, groundwater, surface water, municipal and industrial wastewater analysis
- Water and wastewater treatment performance evaluation

5. Aggregates and Building Materials

- Aggregate gradation, crushing, and impact value
- Los Angeles abrasion, specific gravity, and water absorption

- Brick compressive strength and water absorption

6. Highway and Pavement Materials

Bitumen penetration and softening point

Marshall stability and flow

Asphalt, subgrade, and base course material evaluation

Comprehensive Testing List and Fee Schedule (List)

A comprehensive list of civil engineering material testing services, including individual test descriptions and applicable testing charges, is available for download.

Download Complete Testing List and Fee Schedule (PDF)

Website administrator: Link the text above to the approved fee schedule PDF. The download link is a placeholder until the PDF URL is added.

For additional information regarding testing procedures, sample requirements, charges, and scheduling, please contact the Department of Civil Engineering.

Our Commitment

The Department emphasizes accurate testing, technical reliability, and clear reporting. Applicable ASTM, AASHTO, BS, APHA Standard Methods, and relevant national water and environmental quality standards guide testing as appropriate to each service and available equipment.

Testing Requests and Inquiries

For material testing, water and wastewater quality analysis, laboratory services, and technical inquiries, please contact:

Department of Civil Engineering
CECOS University of IT & Emerging Sciences
F-5, Phase-VI, Hayatabad, Peshawar, Pakistan

University Telephone: +92-91-5860291-3 | Extensions: 131, 132

Prof. Dr. Muhammad Tariq Bashir (PhD, PE)
Head, Department of Civil Engineering
Mobile: +92 334 2229897
Email: hod.ce@cecos.edu.pk

Engr. Faizan Farid
Mobile: +92 302 8027871
Email: faizan.farid@cecos.edu.pk

Testing scope, fees, sampling requirements, and timelines are confirmed by the Department. Individual tests are subject to laboratory equipment and personnel availability.