



DEPARTMENT OF CIVIL ENGINEERING

TESTING, CONSULTANCY & INDUSTRY INTERACTION



SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

VISHWOTHAMA NAGAR, BANTAKAL - 574 115, UDUPI DISTRICT, KARNATAKA.

(A Unit of Shri Sode Vadiraja Mutt Education Trust ®, Udupi)
(Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka
and Affiliated to the Visvesvaraya Technological University, Belgaum)



The Institute

Shri Madhwa Vadiraja Institute of Technology & Management (SMVITM), promoted by the Shri Sode Vadiraja Mutt Education Trust (R.), Udupi, came into being in the year 2010 and has already carved a niche for itself in the technical education landscape in the Coastal Karnataka region. Situated in a scenic village called Bantakal, a few kilometers away from the world renowned temple town of Udupi, the Institute offers quality technical education to the aspiring young engineers in the region. Born out of the dream of a young and progressive thinking holy man, Shri Shri Vishwvallabha Theertha Swamiji of the Shri Sode Vadiraja Mutt, Udupi, SMVITM aims at the noble goal of empowerment of underprivileged sections of society through basic education in general and technical education in particular. The Institute campus is on the Katapady-Belman road, about 6 km off NH 66, 12 km away from Udupi and well connected to Kundapura, Karkala and Mangalore by road.

Laboratory & Testing Facilities



The Department always remains in the forefront owing to R&D, planning, design, construction and consultancy services. It also has well equipped laboratories with all modern equipments in the specialized areas to cater to the needs of students as well as R&D and consultancy works. **State-of-the-art testing facilities related to Civil Engineering are provided in these laboratories to fulfill the need of industries, external agencies as well. The faculty members of the Department have expertise in carrying out the necessary testing & consultancy services.**

Material Testing



- Compressive strength, water absorption and efflorescence of bricks.
- Compressive and flexural strength of timber and ceramic/roofing tiles.
- Tensile strength, percentage elongation, weight and other properties of mild & TOR steel.
- Fineness modulus, crushing and impact values, flakiness and elongation indices, abrasion and water absorption of coarse aggregate.
- Fineness modulus, silt content and bulking of fine aggregates.

Civil Engineering @ SMVITM – Building a better future



The Civil Engineering Department in the Institute, with an approved annual intake of 60 students, has set new benchmarks for quality and efficiency both in terms of human resources and infrastructural facilities. The Department has a dedicated team of eminently qualified and vastly experienced faculty both within the academia and industry. The Department aims to produce civil engineers of high professional acumen and technical competence to meet the growing demands for civil engineering professionals in the backdrop of a booming globalised economy.

The Department has set up state-of-the-art laboratories on par with Institutions of high repute in the field of Basic Material Testing, Geotechnical Engineering, Concrete & Highway Material Testing and Environmental Engineering. The Department is also offering Testing & Consultancy services in these areas and has already offered the services to various Government Departments and Contractors. With the existing facilities, the Department intends to develop itself as a promising testing & consultancy centre in the region and cater to the demands of the society.

Faculty

The Department has highly qualified faculty members in various areas of specializations. It believes in imparting quality education to the students and frequently invites eminent personalities and academicians from other prestigious Institutions and industries on regular basis to share their experiences and thereby supplement teaching, research and consultancy.

Soil Investigation



- Index properties, grain size distribution, standard and modified compaction characteristics.
- Shear strength parameters, permeability values, consolidation characteristics
- California bearing ratio (CBR) value and determination of safe bearing capacity (SBC) etc.
- Soil investigation report with recommendations.



Tests on Cement/Concrete



- Mix Design of concrete for varieties of works.
- Compressive strength of concrete cubes and solid/ hollow blocks, bricks etc.
- Concrete air permeability (Blain Type)
- Specific Gravity, Normal consistency and setting time of cement
- Soundness of cement using autoclave
- Workability of concrete using flow table as well as slump test
- Permeability of concrete as per DIN standards
- Flexure strength of hardened concrete
- Non Destructive Testing.



Tests on Highway Materials



- Flash and fire point of bitumen.
- Ductility of bitumen.
- Quantification of percentage of bitumen used in road construction.
- Measurement of resistance to plastic flow .
- Bitumen consistency testing.
- Viscosity testing.
- Crushing strength of aggregates.



Water Quality Analysis



- General Drinking water quality parameters (Total Dissolved Solids, pH, Hardness, Chlorides, Fluorides, Sulphates, Dissolved Oxygen, Residual Chlorine, Chlorine Demand, Iron etc.) Sodium, potassium, trace elements like cadmium, zinc, lead, copper etc.
- Waste water and industrial effluent analysis such as solids, Dissolved oxygen (DO), Biochemical Oxygen Demand (BOD), Chemical Oxygen demand (COD), Relative stability test, Trace elements etc.
- Design of water supply and sanitary systems for villages and towns.
- Rain water harvesting- Analysis and Design.
- Identification of rocks, ground water exploration.

And we also undertake:

- **Surveying works** including mapping and preparation of layout plans, contour maps and earth work estimations.
 - **Analysis, design and drawing** of all Civil Engineering sub structures and super structures.
 - **Estimation, costing and valuation** of proposed and existing structures.
- **Third party inspection** for flood damage, drought and other infrastructure works sanctioned under various heads, executed by different Government agencies such as PWD, Panchayathraj, Irrigation department, and Municipal authorities etc.

For Testing, Consultancy and R&D Works/Needs contact :

The Head

Department of Civil Engineering

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