# Rajiv Gandhi Institute of Technology (Government Engineering College) Kottayam Department of Civil Engineering



## **Courses offered in Civil Engineering**

- B Tech in Civil Engineering
- M Tech in Transportation Engineering
- M Tech in Structural Engineering and Construction Management (from this academic year onwards)

### **M Tech - Transportation Engineering**



#### RAJIV GANDHI INSTITUTE OF TECHNOLOGY

(GOVT. ENGINEERING COLLEGE, KOTTAYAM)

#### **Department of Civil Engineering**



Transportation is the backbone of the economy of any nation. Transportation Engineering is the application of technology and scientific principles to the planning, functional design, operation and management of facilities for any mode of transportation in order to provide for the safe, efficient, rapid, comfortable, convenient, economical, and environmentally compatible movement of people and goods. Though it is a major stream of study in Civil Engineering, this domain is emerging as highly interdisciplinary with the advancements in information and computing technology. The curriculum of the course is designed to equip the PG scholars with expertise in all major areas like Transportation Planning, Traffic Engineering, Highway Materials, and Construction and Management of Pavement. Our laboratories house globally popular software packages and the state-of-the-art equipments in Pavement Engineering . Training programmes in industry-related software and invited lectures and workshops by experts in industry and research are regularly arranged by the Department to keep our graduates abreast with the frontiers of Transport Technology. Project works are frequently undertaken in collaboration with premier national institutes including CSIR-CRRI, NATPAC and IISC Bangalore.



#### **COURSE HIGHLIGHTS**



#### The curriculum includes Courses like

- . Traffic Engineering
- . Traffic Flow Theory
- · Urban Transportation Planning
- · Transportation System Analysis
- · Intelligent Transportation System
- Transportation Economics
- · Highway Analysis and Design
- · Pavement Analysis and Design
- · Pavement Evaluation and Rehabilitation
- · Advanced Highway Materials
- GIS and GPS Applications in Transportation
- · Road Safety and Environment

#### LAB FACILITIES

- Transporation Engineering Lab
- Traffic Engineering Lab
- · Pavement Engineering Lab
  - CAD Lab

#### **AVAILABLE** SOFTWARE

- \* Transyt
- Trazer
- · Mx Road
- Cube
- Systat
- ArcGIS
- Vissim

Faculty with 15+ years

of experience

The Lab is well equipped with various equipments like Dynamic Shear Rheometer, Gyratory Compactor, TIRTL, ARRB Roughometer, Rolling Thin Film Oven, Brookfield Viscometer





























## M Tech – Structural Engineering and Construction Management



### Rajiv Gandhi Institute of Technology (Government Engineering College)

Kottayam



#### COURSE HIGHLIGHTS

This programme offers advanced courses like Finite Element Analysis, Advanced Design of Structures, Structural Dynamics, Construction Contracts Methods and equipment, Construction Personnel Management, Highrise structures.

#### Contact Us -

email: hod.ce@rit.ac.in

C

**L** 7293731212

#### WHO CAN APPLY?

B.TECH / B.E IN CIVIL ENGINEERING

#### Why M.Tech in SECM?

Acquiring a specialization in Structural Engineering and Construction Management will improve the employability of a Civil Engineer in the industry. It is aimed at exposing the Civil Engg. students to cutting edge knowledge in analysis, design, construction technology and construction management.

#### Why choose Dept of Civil Engg at RIT?

RIT is ranked fourth in KTU based on the recently published final year B. Tech results.

#### Dept of Civil Engg

- Accredited by NBA
- Half of the faculty with 15+ years of teaching experience.
- Six of the faculty having Doctoral degree and are approved research supervisors.
- MOUs: with KHRI, NATPAC
- involved in research, consultancy and testing.
- Well-equipped laboratories of the Department houses Microprocessor Controlled Universal Testing Machine. UV Spectrophotometer, NDT equipments. Total Stations, Digital Theodolites, Automatic Levels, Ultrasound Concrete Flow Detector, Torsion Testing Machines, GPS, Brookefield Viscometer, Digital Marshall stability equipment. Gyratory Compactor, ARRB roughometer, Falling Weight Deflectometer, Triaxial testing machine etc.

## **Advanced laboratory services**

Concrete durability testing laboratory

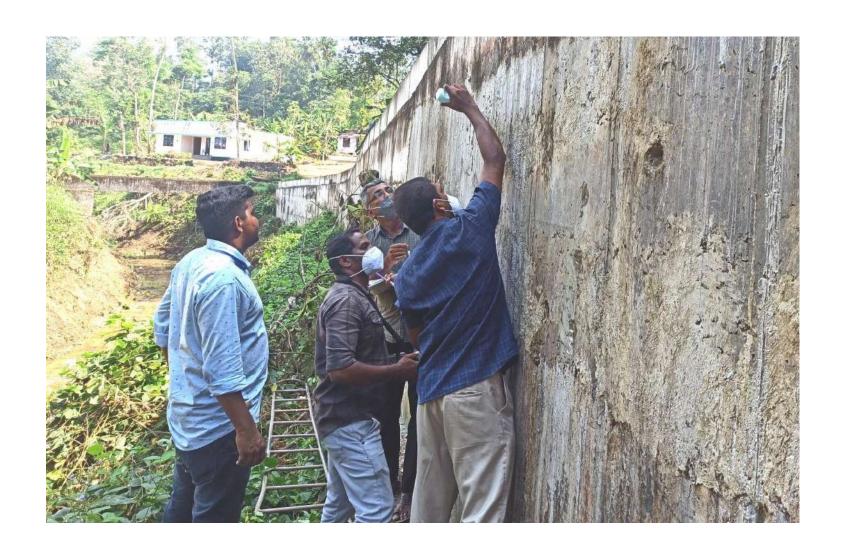


Pavement Engineering
Laboratory





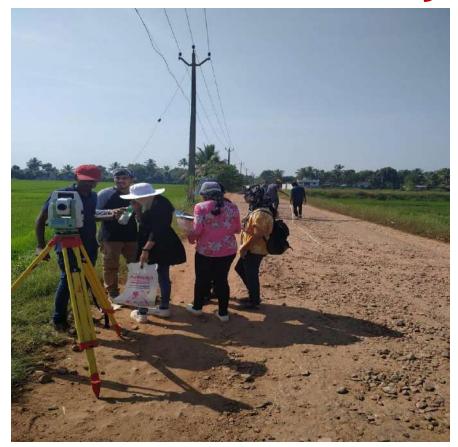
## Consultancy and testing done by CE department







## Service to society





Participation in Rebuild Kerala Initiative in association with LSGD at Ramankary Grama Panchayat, Alappuzha, involved in soil investigation, Total Station surveying and L/S & C/S preparation of flood affected roads and new roads proposed



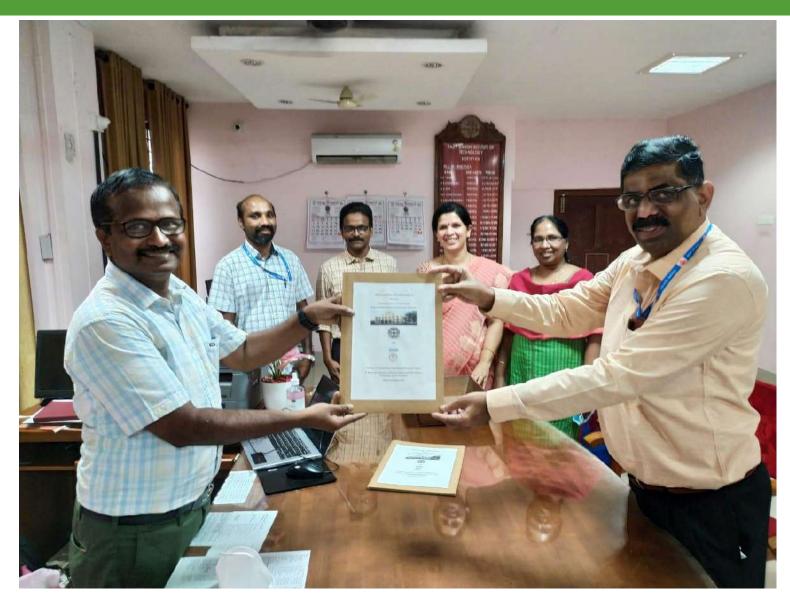
Participated in Abatement of Pollution in Manimala River as part of Project "Abatement of pollution in most polluted 21 rivers of Kerala State" floated by Ministry of Water Resources. Involved in water quality sampling and testing, assessment of pollution levels and in preparation of River Action Plan/DPR

## MoU's signed with industries

A Memorandum of Understanding (MoU) is signed on 28-02-2022 between Rajiv Gandhi Institute of Technology, Kottayam (RIT) and Kerala Highway Research Institute (KHRI).



A Memorandum of Understanding between the Department of Civil Engineering, Rajiv Gandhi Institute of Technology, Kottayam and KSCSTE-National Transportation Planning and Research Centre, Thiruvananthapuram was signed on 17-01-2022.



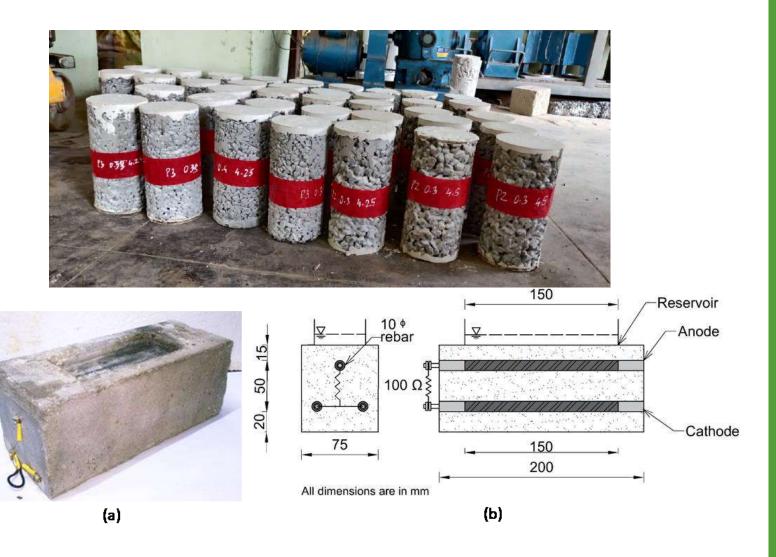
A Memorandum of Understanding between the Centre for Continuing Education, Dept of Civil Engineering, Rajiv Gandhi Institute of Technology, Kottayam and Radhe Structorepair Private Limited, Ahmedabad was signed on 29-09-2018.

## Research and development activities

- No. of Research guides 6
- No. of Research scholars 20
- Ongoing funded projects 4

## Some ongoing research projects..





## Civil Engineering Association activities – Vastheya

