ABOUT THE INSTITUTION

Sreepathy Institute of Management and Technology (SIMAT) is an initiative of the Sreepathy Trust, a collective of technocrats, engineers, philanthropists, industrialists, and visionaries united by a shared commitment to promoting quality higher education and research. The Trust strives to provide a dynamic platform for academic excellence across diverse professional disciplines, including engineering and technology, medical and paramedical sciences, management studies, agriculture, biotechnology, and cultural studies. The institution is dedicated to ensuring that deserving candidates, irrespective of caste, colour, or creed are given equal opportunities to pursue higher education and achieve their aspirations. Nestled on a picturesque, lush green hillock at Vavanoor, near Pattambi, along the Palakkad– Guruvayoor Highway, SIMAT offers an ideal environment for academic growth and innovation. Established in 2009, the institute is approved by AICTE, accredited by NAAC, NBA and affiliated with APJ Abdul Kalam Technological University (KTU).

VISION

- Striving for excellence in generation and dissemination of knowledge.

MISSION

- To mould engineers of tomorrow, who are capable of addressing the problems of the nation and the world, by imparting technical education at par with international standards.
- To instil a desire in students for research, innovation, invention and entrepreneurship.
- To strive for creative partnership between the industry and the institute.
- To impart the values of environment awareness, professional ethics, societal commitment, life skills and a desire for lifelong learning.

ABOUT THE DEPARTMENT

The Civil Engineering Department of Sreepathy Institute of Management and Technology (SIMAT) was established in 2009. The Civil Engineering Department provides an outstanding academic environment complimented by excellence in teaching. The course curriculum that we follow is the one proposed by APJ Abdul Kalam Technical University.

VISION

To emerge as a department producing graduate professionals in Civil Engineering having quality, leadership and commitment to the profession by keeping stride with new changes and challenges.

MISSION

- To create quality civil engineers with clear understanding of fundamentals of civil engineering subjects.
- To transform the students into highly competent and technologically efficient and creative professionals
- To inculcate among the students a feeling of societal commitment, ownership of profession and ethical values

ADDRESS FOR COMMUNICATION

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TARGETED PARTICIPANTS

Assistant Professors/Associate Professor/Ph.D. scholar's/PG students from the Higher Education Institutions/ Industries.

REGISTER

Link: https://forms.gle/DzXD7WpiWG53wEuC6

Registration Fee Rs.200/Participant

Six Day FDP

On

Emerging Trends in GIS and Artificial Intelligence for Civil Engineering

8th June to 13th June 2026

Coordinated by

Mr. Sreekanth E M

Ms. Anumol Sukumaran

Department of Civil Engineering,

Sreepathy Institute of Management & Technology (SIMAT)

Vavanoor, Palakkad – 679533

OBJECTIVES

- To familiarize participants with the fundamentals and emerging trends in GIS and Artificial Intelligence relevant to Civil Engineering applications.
- To provide exposure to modern geospatial tools, AI techniques, and data analytics methods used in planning, design, construction, and infrastructure management.
- To enhance the technical competency of faculty members and researchers in applying GIS and AI for solving real-world civil engineering problems.
- To promote interdisciplinary research and innovation in areas such as smart cities, transportation systems, environmental engineering, disaster management, and sustainable infrastructure.

OUTCOMES

- Understand the concepts, tools, and applications of GIS and Artificial Intelligence in various domains of Civil Engineering.
- Apply geospatial analysis and AI-based techniques for infrastructure planning, environmental assessment, transportation analysis, and smart engineering solutions.
- Analyze and interpret spatial and engineering data using modern GIS and AI tools for effective decision making.
- Develop interdisciplinary research ideas and academic projects integrating GIS and AI technologies.
- Incorporate emerging technological concepts into teaching, curriculum development, consultancy, and research activities.

RESOURCE PERSONS

1. Dr. Sathish Kumar D, Associate Professor, Department of Civil Engineering, NIT Calicut
2. Dr. Abin Varghese, Co-ordinator, Dr. R Satheesh Centre for Remote Sensing and GIS School of Environmental science, MG University
3. Dr. Harikrishnan P M, Senior Research Scientist, Quantiphi Analytics, Bangalore
4. Dr. Rahul T S, Head of Department, Department of Civil Engineering, Ilahia College of Engineering and Technology, Mulavoor, Kerala
5. Dr. Vineetha P, Assistant Professor, Interuniversity Centre for Geospatial information science and technology, Trivandrum
6. Mr. Rajan M, Scientist, Geospatial Science and Technology Division, Integrated Rural Technology Centre (IRTC), Kerala
7. Ms. Jisha Akkara, Assistant professor, Department of Civil Engineering, Jyothi Engineering college, Thrissur
8. Mr. Anand Sebastian, Senior Scientist and Head, Geospatial Science & Technology Division, Integrated Rural Technology Centre (IRTC), Kerala
9. Dr. Hema P Menon, Professor & Dean, Computer Science Engineering, SIMAT
10. Mr. Nithin M T, Director, Invent Infrastructures

SESSIONS

1. Transforming Civil Infrastructure and Intelligent Mobility with Vision –Language AI
2. Fundamentals of GIS
3. Introduction to Geospatial Techniques: Concepts, Tools, and Real World Applications
4. GIS Application in Hydrology and water resource Engineering
5. Geospatial Intelligence for Sustainable and Resilient Transportation Systems
6. Application of Digital Elevation Model in Civil Engineering
7. Application of Geospatial Tools in Sustainable Devepment
8. Smart Technologies in Civil Engineering: Applications of AI and Virtual Reality
9. Surface Water Quality Assessment using Remote Sensing
10. How to Use AI Tools for Civil Engineering Projects
11. Generative AI and Machine Learning for Modern Construction Practices
12. Geospatial Tools for Water Quality Assessment

8.6.2026	9.6.2026	10.6.2026	11.6.2026	12.6.2026	13.6.2026
09.45 – 10.00 Inauguration 10.00– 12.00 Session 1 "Transforming Civil Infrastructure and Intelligent Mobility with Vision –Language AI" Dr. Harikrishnan P M	10.00– 12.00 Session 3 "Introduction to Geospatial Techniques: Concepts, Tools, and Real World Applications" Dr. Vineetha P	10.00– 12.00 Session 5 "Geo-spatial Intelligence for Sustainable and Resilient Transportation Systems" Ms.Jisha Akkara	10.00– 12.00 Session 7 "Smart Technologies in Civil Engineering: Applications of AI and Virtual Reality" Dr.Hema P Menon	10.00– 12.00 Session 9 "Surface Water Quality Assessment using Remote Sensing" Dr. Rahul T S	10.00– 12.00 Session 11 "Generative AI and Machine Learning for Modern Construction Practices" Dr. Harikrishnan P M
02.00 – 04.00 Session 2 "Fundamentals of GIS" Mr. Rajan M	02.00 – 04.00 Session 4 "GIS Application in Hydrology and water resource Engineering" Dr. Sathish Kumar D	02.00 – 04.00 Session 6 "Application of Digital Elevation Model in Civil Engineering" Dr. Abin Varghese	02.00 – 04.00 Session 8 "Application of Geospatial Tools in Sustainable Devepment" Mr. Anand Sebastian	02.00 – 04.00 Session 10 "How to Use AI Tools for Civil Engineering Projects" Mr. Nithin M T	02.00 – 04.00 Session 12 "Geospatial Tools for Water Quality Assessment" Dr. Rahul T S