

**Laboratory Name** : Centre of Excellence in Digital Surveying  
**Laboratory In-charge** : Mr.M.Sakthivel & Mr.S.Southamirajan  
**Technical supporting staff** : Mr.A.Naveen Prabu



Figure 1 Centre of Excellence in Digital Surveying

Area of the laboratory: 55.69 m<sup>2</sup>

### Objectives

A Centre of Excellence in Digital Surveying can play a pivotal role in transforming the surveying industry and addressing global challenges through advanced geospatial technologies

### Description

- The Centre of Excellence (CoE) in Digital Surveying aims to foster innovation and excellence in the field of digital surveying by integrating advanced technologies, research, and education. Its primary objective is to develop and refine cutting-edge tools and methodologies that enhance the precision, efficiency, and accuracy of surveying practices. By leveraging technologies such as Total Station, drones, and GNSS, the lab seeks to push the boundaries of geospatial data collection, processing, and visualization.

- The CoE also focuses on providing comprehensive training and equip students to the professional's level with the skills needed to operate these technologies effectively. Furthermore, it strives to drive collaboration with industry stakeholders, ensuring that consultancy work, research and development align with real-world surveying challenges and contribute to the advancement of industry standards. Through continuous innovation and practical application, the lab aims to revolutionize the surveying field and promote sustainable, cost-effective solutions for various sectors such as construction, urban planning, and environmental management

**Table 1 Facilities available in Centre of Excellence in Digital Surveying**

| <b>S. No</b> | <b>Facilities</b>                                                                                                 | <b>Quantity (Nos)</b> |
|--------------|-------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.           | Mapping Drone (Rfly- Micro M1)                                                                                    | 1                     |
| 2.           | Differential Global Positioning System (DGPS) (E survey at base 20 Receiver, E survey eRTWO GNSS Receiver)        | 1                     |
| 3.           | Total Station (Leica TS 07-05 Seconds R5)                                                                         | 1                     |
| 4.           | Auto CAD 2024 (Student Version) Software                                                                          | 2 users               |
| 5.           | SW_DTM (Softwel Digital Terrain Modeling 2019)                                                                    | 1                     |
| 6.           | GEO Solutions                                                                                                     | 1                     |
| 7.           | Agisoft Metashape                                                                                                 | 1                     |
| 8.           | HP Desktop Computers (Intel Core i7 Processor-5, 16GBDDR4 RAM, 1TB Hard Disk, 64 Bit Windows 11 Operating System) | 02                    |

**Total Cost:** Rs. 21,60,845.12/-