Value Added Course on Applied GPS and Mobile Data Collection Techniques

Successfully Conducted at JSS AHER

The Division of Geoinformatics, School of Life Sciences, JSS Academy of Higher Education & Research (JSS AHER), Mysuru, successfully conducted a Value-Added Course (VAC) on "Applied GPS and Mobile Data Collection Techniques" from 18th to 23rd May 2026. The Five-day programme was designed to provide participants with practical exposure to GPS technology, mobile GIS applications, digital field surveys, and spatial data management workflows.

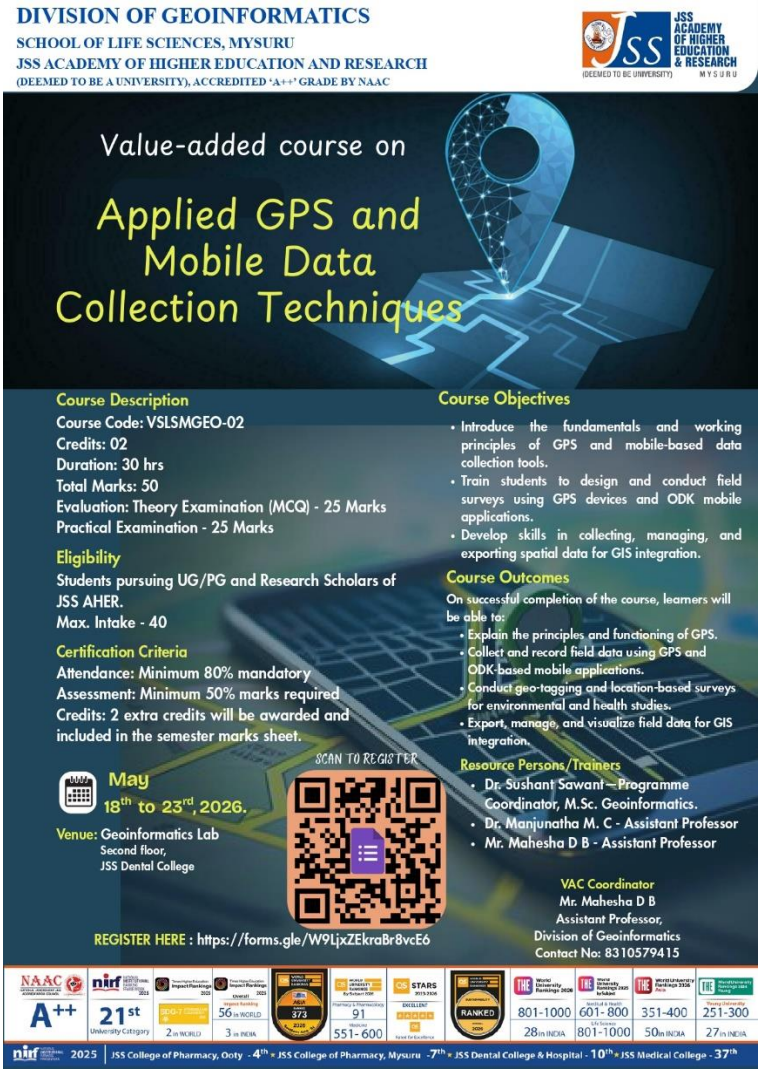

Figure 1. *Programme brochure of the Value Added Course on Applied GPS and Mobile Data Collection Techniques organized by the Division of Geoinformatics, School of Life Sciences, JSS AHER.*

The course was coordinated by Mr. Mahesha D.B., Assistant Professor, Division of Geoinformatics, with active support from Dr. Sushant A. Sawant, Associate Professor and Division Coordinator, and Dr. M.C. Manjunatha, Assistant Professor. Students from various disciplines participated in the programme and gained hands-on experience in geospatial technologies.

The course covered key topics including Global Navigation Satellite Systems (GNSS), GPS principles, coordinate systems, coordinate reference systems (CRS), GPS accuracy assessment, georeferencing, digitization, satellite imagery interpretation, Google Earth Pro applications, mobile GIS, KoboToolbox-based survey design, field data collection, and spatial data integration using QGIS.

A major highlight of the programme was the emphasis on practical learning. Participants worked extensively with QGIS software, imported and visualized GPS datasets, created spatial layers, performed georeferencing and digitization exercises, designed mobile survey forms using KoboToolbox, and conducted field-based data collection activities. Students also learned thematic mapping, hotspot visualization, buffer analysis, and professional map layout preparation.

The course concluded with a theory examination and a practical assessment carrying 25 marks each. Students were evaluated on both conceptual understanding and practical competencies related to GPS operations, mobile data collection, GIS integration, and spatial visualization. The assessment results demonstrated strong performance across the cohort, reflecting the effectiveness of the practical-oriented teaching methodology adopted during the programme.

Feedback collected from participants indicated a very high level of satisfaction. The course received an overall mean rating of 4.59 out of 5, with students particularly appreciating the hands-on training, field exercises, GPS data collection activities, and KoboToolbox-based mobile survey workflows. More than 90% of participants recommended the course, highlighting its relevance for academic, research, and professional applications.

By the end of the programme, participants were able to understand the principles of GPS and GNSS technologies, design mobile-based survey forms, collect and manage geospatial data, integrate field-collected information into GIS software, and generate meaningful spatial outputs for analysis and decision-making. The course successfully strengthened students' practical competencies in modern geospatial technologies and contributed significantly to skill development, interdisciplinary learning, and digital field survey capabilities.

The Division of Geoinformatics remains committed to offering similar skill-oriented programmes that promote experiential learning and equip students with emerging geospatial and digital technology skills relevant to contemporary academic and professional environments.

. ***Figure 2.*** *Group photograph of participants and resource persons who successfully completed the Value Added Course on Applied GPS and Mobile Data Collection Techniques conducted by the Division of Geoinformatics, School of Life Sciences, JSS AHER.*