



**POSTGRADUATE INSTITUTE OF SCIENCE (PGIS), UNIVERSITY OF PERADENIYA**  
**102<sup>nd</sup> Short Course (77<sup>th</sup> Basic Course) on “GIS and Applications**  
*6-day Residential Program 12 – 17 March 2018*

**103<sup>rd</sup> Short Course (26<sup>th</sup> Advanced Course) on “GIS and Applications”**  
*6-day Residential Program 2 – 7 April 2018*

**PGIS** has offered more than **101 short courses on GIS & Applications** within the last 8 years (**76 Basic Courses and 25 Advanced Courses**) and has trained more than 3,200 professionals in all the disciplines. Apart from that, being the first Institute in Sri Lanka to start the Postgraduate MSc programs in GIS and Remote Sensing, PGIS has conducted GIS & RS MSc program for **9 batches** each with 50 - 88 postgraduate students. The expert panel of lecturers in GIS, Remote Sensing and GPS having wide experience in selected subject areas are conducting these Short Courses and MSc programs.

**102<sup>nd</sup> SHORT COURSE (77<sup>th</sup> Basic Course) on “GIS and Applications”** Basic Course is designed to introduce the capabilities & strength of Geographic Information Systems (GIS) & Global Positioning Systems (GPS) for efficiency in management and planning. It will provide the basic theoretical concepts and comprehensive hands-on training with GIS and GPS. The topics to be covered include the Introduction to GIS and its application areas, software and hardware requirements for GIS, data input, Introduction to Coordinate Systems, Map Projection, Geo-referencing, GIS Database Creation (GIS Functions, Input of geospatial data – Digitizing etc.), GIS Analysis (Single Layer/ Multi Layer Analysis, DEM generation, 3-D Analysis etc.), Map output generation, Overview of Remote Sensing & its applications, Introduction to Global Positioning Systems (GPS) & Applications, Application of GIS in various disciplines - Case Studies, etc.

**103<sup>rd</sup> SHORT COURSE (26<sup>th</sup> Advanced Course) on “GIS and Applications”** is designed for professionals, researchers or academicians who have already attended basic courses/training programs in GIS or already having a good working experience of GIS. Topics to be covered include Building Geodatabases, Modeling spatial relationships and Data validations, Topology building and editing, Spatial referencing, Geo-referencing, Auto and Semi-Auto raster to vector conversions, Translate, Transform and Integrate Spatial Data including Data Interoperability, Raster-based spatial modeling and analysis, Surface Interpolation, Density measurements, Multi-criteria Analysis and modeling, Surface hydrology and stream generation, Cleaning and Building network datasets and Network analysis, 3D visualizations and Simulations, Digital Elevation Models and Surface Analysis, Integrating ArcGIS, Google Earth and Google SketchUp for Photorealistic 3D Modeling, Integrating ArcGIS and graphic software for High-quality Cartographic Designs, Temporal data analysis and will provide hands-on training to work with other ArcGIS Extensions. A basic theoretical knowledge and hands on experiences on applications of Open Source Web GIS, advanced applications of GPS technology and Basics of Satellite image processing, image analysis and interpretation, etc. will also be given during this course.

**Venue:** “GIS and Remote Sensing Laboratory”, PGIS, University of Peradeniya.

**Duration:** Six days - Hands-on sessions will be continued till late evenings.  
*(Residential facilities will be provided at University guest houses on shared basis).*

**Target Group:** State and Private Sector Professionals, (Academia, Researchers, Administrators, Managers, Planners, Geologists, Valuers, Statisticians, Surveyors, Medical Officers, Engineers, Agriculturists, Geographers, Sociologists, Environmentalists, Veterinary Surgeons, Technical Officers, Draftsmen, Officers of the Armed Forces of Army, Navy, Air force, Police Department and any other professionals dealing with GIS and Remote Sensing).

**Course Fees:**

**102<sup>nd</sup> or 103<sup>rd</sup> Short Course** Rs. 30,000 for Local participants (Foreign Participants; 600 US\$)

This includes the cost of study materials, accommodation, meals (breakfast, lunch, dinner and refreshments) and transport facilities etc.

**Application Forms:** Application forms can be downloaded from the PGIS Website or obtained from the PGIS Office. The completed application forms along with payment of course fee (by cheques) drawn in favor of “Postgraduate Institute of Science” should be sent to the “Course Coordinator, *Short Course on GIS and Applications, Postgraduate Institute of Science (PGIS), University of Peradeniya, P.O. Box 25, Peradeniya*”.

**For Further Details, Please Contact:**

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Prof. HMTGA Pitawala, Director – PGIS