THE UNIVERSITY OF SYDNEY

GIS Course: Introduction

Centre for Continuing Education

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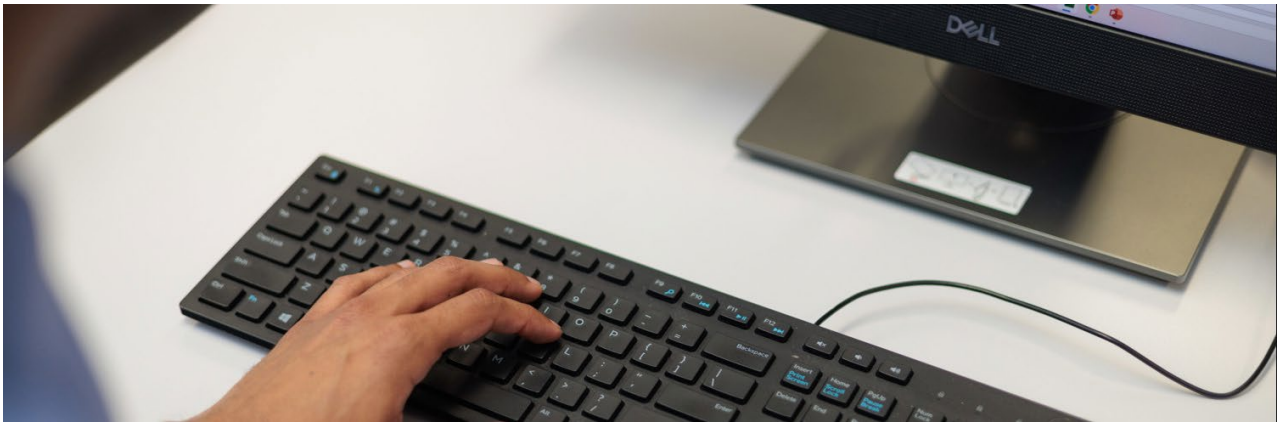

In the digital age, understanding spatial data is critical in making informed business decisions. Generating insights from location data requires special tools – Geographic Information Systems (GIS). By combining spatial information, computer technology, and geography, GIS enables analysts, managers, and researchers to create intuitive knowledge capturing the spatial dimension.

This GIS introductory course will show you fundamental Geographic Information Systems skills. Learning GIS will take place using “industry standard” software suite ESRI ArcGIS Pro and will also introduce its free, open-source alternative QGIS. You will learn spatial data types, prepare ArcMap documents, import/export spatial data, apply geoprocessing tools and create beautiful maps.

By the end of the course, you will have solid mapping and spatial analytics skills. Regardless of your skill level, you will gain a newfound confidence using ArcGIS Pro and QGIS.

Prerequisites

While no programming is required for this class, some basic proficiency working with data is required.

Course duration
1 session, 8 hours total

Time
9am - 5pm

Format
Face-to-face
or
Online in real-time

Dates
Browse available
course dates

Intended audience

Analysts, business professionals, managers, IT knowledge workers and lifelong learners looking to master spatial data will find this course advantageous.

Upon completion

Every participant receives a University of Sydney certificate of completion.

Aims

This course aims to provide a hands-on introduction to Geographic Information Systems (GIS) using industry-standard software, ESRI ArcGIS Pro. We want to empower you to confidently work with spatial data and GIS software.

Outcomes

By the end of this course, you should be able to:

- describe what a Geographic Information System (GIS) is
- operate ArcGIS Pro software packages
- work with spatial data
- differential between .shp, .gdb, and raster files
- make beautiful and informative maps
- geoprocess spatial data
- find, download, and use ABS statistical geography.

Content

- Geographic Information Systems
- ESRI ArcGIS Pro software
- Brief overview of QGIS
- Types of spatial data – vector and raster
- File types - .shp vs geodatabase
- Coordinate systems
- Geoprocessing and spatial data manipulation techniques
- Creating maps using principles of cartography

Additional information

This course uses the ESRI ArcGIS Pro software, supplied in CCE's computer lab. Note that ArcGIS Pro is ESRI's latest GIS software platform, replacing ArcMap.

Materials

Taught over one day, through a series of concepts, examples, problem exercises, and in-class knowledge challenges. The material is presented so that participants of varying backgrounds, skills and abilities can all move together in a brisk but comfortable learning pace.

Organisational training and development

This course can be delivered as a private session for groups, and tailored to meet the needs of your business. Contact us to discuss our range of organisational training solutions.

Learn more

THE UNIVERSITY OF SYDNEY

We recognise and pay respect to the Elders and communities – past, present, and emerging – of the lands that the University of Sydney's campuses stand on. For thousands of years they have shared and exchanged knowledges across innumerable generations for the benefit of all.

Empower ambition,
inspire leadership

For more information

Centre for Continuing Education
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