



cooperative
governance

Department:
Cooperative Governance
REPUBLIC OF SOUTH AFRICA

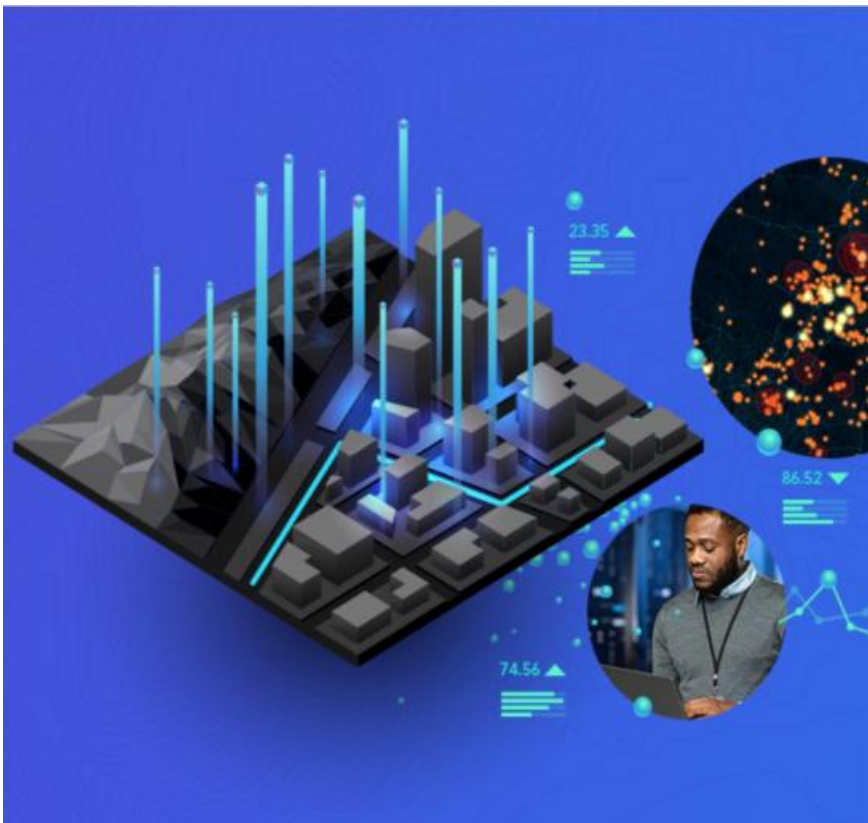
MUNICIPAL INFRASTRUCTURE SUPPORT AGENT (MISA)



CPD (SAGC)

Essential GIS Workflows for Local Government

The Municipal Infrastructure Support Agent (MISA) in partnership with SAICE Professional Development & Projects (SAICE-PDP) invites you to attend this 2-day course to **achieve simplified essential workflows in data management in ArcGIS.**



This course is designed to empower everyone from staff to managers to use maps, data and tools, including Data Conversion, Analysis to Sharing from the whole ArcGIS ecosystem.

This course will address the need of understanding how the components of GIS work together to solve organizational problems and facilitate better decision-making.

In addition, the course will provide Local Government personnel with the skills needed to plan, capture, coordinate and monitor field activities using the ArcGIS suite of field apps.

The course is taught using ArcGIS Pro and ArcGIS Online.

Esri presenters include:

Malwande Galada (Geospatial Lecturer)
Lutendo Zwedzi (Geospatial Lecturer)

COURSE SCHEDULE

Venue: Virtual Instructor-Led Online Training
Dates: 24 – 25 February 2026
Time: 08:30 for 09:00 to 16:30

REGISTRATION

To register, visit www.saicepdp.org
For more details contact Phathi Masimirembwa:
Email phathi@saicepdp.org / Tel: 011 476 4100

WHO SHOULD ATTEND

The course helps municipal attendees to apply their theoretical training in practice.

It is therefore recommended for:

- GIS practitioners
- Planners
- Infrastructure asset managers
- Anyone wishing to map municipal features and data

COURSE OUTLINE – DAY 1

LESSON 1: PREPARING TO EDIT GIS DATA

- Preparing data for editing
- Configuring the app for editing
- Configuring the project for editing
- Exercise 1A: Investigate coordinate systems
- Exercise 1B: Prepare a map for editing

LESSON 2: CREATING 2D FEATURES

- Feature creation workflow
- Feature templates creation and construction tools
- Placement tools and editing constraints
- Exercise 2: Creating 2D features using feature templates and explore the editing workflow

LESSON 3: CREATING FEATURES FROM TABULAR DATA

- Creating point features from XY locations
- Geocoding address locations
- Exercise 3: Creating point features from XY locations

LESSON 4: ASSOCIATING TABULAR DATA

- Table relationships
- Managing tabular data
- Connecting tables using joins and relates
- Exercise 4: Creating table associations

COURSE OUTLINE – DAY 2

LESSON 5: COORDINATING WORK ASSIGNMENTS

- ArcGIS field applications
- Comparing Collector and Survey123
- Describing components of Workforce project
- Understanding Workforce user roles
- Creating a Workforce project
- Exploring the Workforce mobile app
- Exercise 5: Use Workforce mobile app

LESSON 6: CREATING A WEB MAP FOR USE WITH COLLECTOR FOR ArcGIS

- Attribute domains
- Creating a web layer for data collection
- Creating a web map for data collection
- Exercise 6A: Creating a web layer for data collection
- Exercise 6B: Creating a web app for data collection

LESSON 7: CREATING A SMART FORM

- Functionality of a smart form
- Configuring smart form components
- Creating a form on the web
- Exercise 7: Creating a survey on the web

LESSON 8: CREATING A DASHBOARD FOR FIELD MONITORING

- Functionality of Operations Dashboard
- Exploring components of operational Dashboards (Elements, Data sources, Filters)
- Creating an Operations Dashboard
- Applying the field data monitoring workflow
- Exercise 8A: Creating a dashboard
- Applying the field data monitoring workflow
- Exercise 8B: Perform field data monitoring

THE PARTNERS



This course is presented in collaboration with Esri South Africa – proud suppliers of the world's most powerful mapping and analytics software SAGI – South African Geomatics Institute | SAGC – South African Geomatics Council | GISSA – Geo-Information Society of South Africa

SAICE-PDP's Municipal Academy was established to support practitioners employed in local government with applying theoretical knowledge and relevant legislation in practice.

municipal academy
the road to service delivery



MISA's mandate is to provide technical support and advice to municipalities, whilst strengthening their capacity, for effective infrastructure planning, delivery, operations and maintenance.