

1. Introduction to GIS & Installation ArcGIS 10.5
2. Data Preparations and folder connection.
3. Basic features of ArcMap, Arc Catalog and ArcToolbox.
4. Exploring the ArcMAP Window, Understanding Toolbars and Menus.
5. Exploring the features of layer properties.
6. Working with attributes
 - Selection by attributes.
 - Delete selected rows.
 - Invert selection feature.
 - Join and relate the attribute table with different non-spatial data
7. Using Symbolology in Map.
 - Visualization with categories.
 - Visualization with quantity.
 - Normalization for large numbers.
 - Generate data visualization graphs and charts.
8. Dynamic Map Generation for reporting with different layouts.
 - Map layout design
 - Label, Scale Bar, Grid, North arrow, title, text.
 - Charts with visualization
 - Index map
 - Map Export
9. Geoprocessing
 - Clip
 - Buffer
 - Merge
 - Intersect
 - Union
 - Search
 - Result
 - Dissolve
10. Overlay
 - Erase
 - Identity
 - Symmetric difference
 - Update

11. Data processing with Attributes.

- Advance sort
- Summarize
- Statistics
- Field Calculator
- Calculate geometry
- Turn off, freeze, delete
- Export attribute table to excel.

12. Statistics

- Frequency
- Summary statistics

13. Georeferencing the paper map, undefined dataset.

14. Vector data creation and vector analysis.

15. Map digitization (Polygon, Polyline, Point).

16. Working with Google Earth.

- Layer conversion
- Map conversion
- Google earth map generation
- Coordinate system in google earth

17. Real time Survey Sampling/Project area selection technique.

- Calculate grid, coordinates of all areas.
- Conversion to Google earth for real time data processing.
- Remove certain areas if needed.
- Selection by location.
- Select the random household/area for project.

18. Working with Coordinate systems.

- World coordinate system
- Projected coordinate system.

19. Projection and Transformation features for different dataset.

20. Working with GPS, plotting GPS point and generate map.

21. Manual Editing of vector dataset and Editors tool in ArcGIS .

22. Spatial adjustments.

23. Class test

24. Using the advance query for calculation and selection.

- Develop query for multi-level selection.
- Working with string functions
- Learn to use functions for others miscellaneous problems.

25. Remote sensing

- Introduction to remote sensing
- Unsupervised and supervised classification
- Overlay
- Majority Filter
- Suitability analysis