

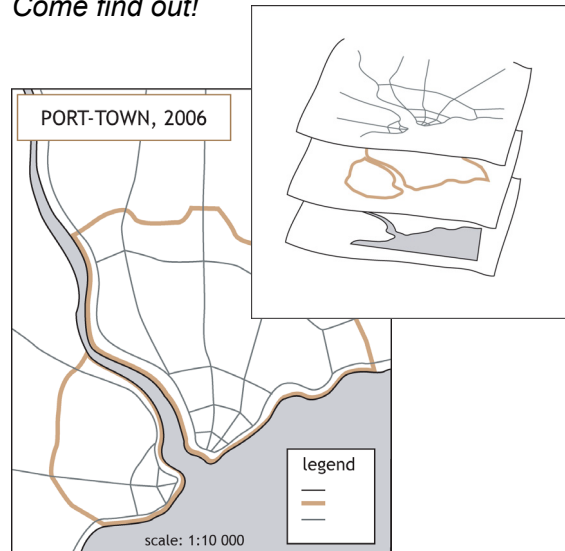
FOUNDATIONS OF GEOGRAPHIC INFORMATION SYSTEMS AND GEOSPATIAL ANALYSIS A TWO-DAY SHORT COURSE AT QUEEN'S UNIVERSITY

August 30-31, 2006
GIS Laboratory
Queen's University
Kingston, Ontario

8:30-4:30

Ever wonder how computers can be used to create maps? How 'Google Maps' works? How you can create, analyze, and publish spatial data?

Come find out!



Course Objectives

Whether you are a user of geographic data, interested in creating geographic data, or merely curious about the technology behind such tools as ArcGIS and Google Maps and Google Earth, this course will provide you with a gentle introduction to Geographic Information Systems ideas and tools.

Blending discussions of general principles of mapping with hands-on exercises geared to get you creating and using geospatial data quickly and correctly, this course includes detailed coverage of the current state of practice in GIS and an introduction to the state of the art in urban analysis with GIS tools. Participants will use real urban data to carry out hands-on exercises, and by the end of the course will be editing and extending this data.

This course is the first of a four-course program in GIS run by the CITIES project, a multi-year training program in urban infrastructure concepts supported by Industry Canada.

Course Details

Participants in this course will:

- Learn the foundations of geographic information systems.
- Develop spatial analysis and critical design skills, and
- Get hands-on experience with industry-standard software tools

Lectures, design exercises, and hands-on work will take place in a comfortable, well equipped electronic classroom and computational laboratory. With snacks and lunch provided, you will be able to focus on learning and developing skills to take back to your workplace. All teaching materials will be provided in convenient printed and electronic form for your use during and after the course.

The course practical exercises will make use of ESRI's ArcGIS software suite, Microsoft Office tools, and Windows XP utilities. *You do not need strong computer skills to participate, but need at least to be familiar with Windows and the use of a desktop computer.*

Course Schedule

Day 1

State-of-Practice

Introductions
Overview of Computer Software
Overview of GIS
GIS Data Types
Knowing Where You Are
Hands-on Exercises with ArcGIS

Lunch

Designing Spatial Datasets
Details of Spatial Datasets
Searching For Things
About Databases and GIS
Hands-on Exercises with ArcGIS and MS-Access

Day 2

Review of Day 1
Spatial Analysis in GIS
Designing Spatial Solutions
Data Entry and Editing
Hands-On Exercises with ArcGIS

Lunch

State-of-the-Art

The Web and GIS
Field Data Collection Systems
Urban Data Collection: LIDAR, Imagery.
Open Discussion
Hands-On Final Exercise with ArcGIS

Please Note: All software and required equipment will be supplied. While you are welcome to bring a laptop, we cannot install the course software on personal computers.

Registration Information

To register, please send this completed information form to:

CITIES
Queen's University-RMC GeoEngineering
Centre
Queen's University
Ellis Hall, 58 University Avenue
Kingston, ON
K7L 3N6

Payment should be made by cheque to
CITIES, c/o Queen's University

Name: _____

Organization: _____

Address: _____

City: _____

Province: _____

Postal Code: _____

Email: _____

Telephone: _____ Fax: _____

Enclosed is my registration fee of: **\$ 830.00**

(We offer substantial discounts for charities, non-governmental organizations, and students, as well as discounts for multiple registrations from one organization. Contact James Dykes for details).

Please inform us of any special dietary requirements.

For more information contact:

James Dykes

CITIES Program Manager
(613) 533-3315, fax (613) 533-2128
james.dykes@ce.queensu.ca

About the Instructors:

Rob Harrap is an adjunct professor of GIS and Geological Engineering at Queen's University. He has been active in GIS teaching, consulting, and research for 15 years, and has given over 20 short courses on GIS internationally.

Shauna Lehtimaki has an in-depth understanding of Geographic Information Systems (GIS) and their technologies. Her 9 years of industry experience includes municipal operations, land information, transportation, utilities, water/wastewater and community development.

A project of the Queen's University-RMC GeoEngineering Centre, CITIES is dedicated to the advancement of innovative civil engineering solutions through the development of comprehensive, multidisciplinary training programs.

By progressively developing curricula based on participant input, CITIES will continue to address concerns facing Canada's civil infrastructure community.

www.geo-cities.ca



Royal Military
College of Canada



Infrastructure Canada

Canada