ITU Centers of Excellence Network for Arab Region

Centre International des Technologies de l'Environnement de Tunis (CITET)

Face-to-Face Training on
"Application of Geographic Informatics System to manage Environment resources"
Tunis - Tunisia, March 23 to 26, 2020
COURSE OUTLINE

COURSE DESCRIPTION

Title	Application of GIS in environmental management and resources protection
Objectives	1. To introduce GIS and Remote Sensing in environmental management 2. To expose participants to data capture, input, manipulation and display by GIS 3. To expose participants to applications of GIS and remote sensing in environmental management 4. Familiarizing with different methods and techniques for Spatial Analysis 5. Understanding the role played by technical experts, stakeholders and decision-makers 6. To demonstrate to participants, use of GIS in identifying and analyzing potential impacts 7. To demonstrate case studies
Date	From March 23 to 26, 2020.
Duration	4 Days
Registration deadline	**17 March 2020**
Training fees	**1150**

LEARNING OUTCOMES

This training aims at providing all participants with extensive insights on "Geographic informatics System".
The main purpose of this training is to:
- ✓ Comprehend fundamental concepts and practices of Geographic Information Systems (GIS)
- ✓ Apply basic GIS functionalities.
- ✓ Demonstrate organizational skills in file and database management.

- ✓ Apply GIS analysis to address geospatial problems and/or research.
- ✓ Demonstrate proficiency in the use of GIS tools to create maps.
- ✓ Demonstrate confidence in undertaking new analysis using GIS
- ✓ Give examples of interdisciplinary applications of Geospatial Information in relation with Environment.

TARGET POPULATION

Staff of companies, consultants, engineers, technicians, managers and anyone who wishes to deepen their knowledge on environmental management.

TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Mr. Lotfi LAMTI	Mail: lotfi.lamti@gmail.com Mobile: (+216) 22 789 705

EVALUATION

There will be a pre-assessment test to evaluate the prior knowledge of the participants (30 Minutes test).
There will daily short quizzes (10 minutes – 10 questions) at the end of each day to measure the progress of knowledge acquisition.
There will be a final test (MCQ of 50 different questions – 1 hour).
A final report will be drawn up stressing out the progress of knowledge acquisition for each participant.

TRAINING SCHEDULE AND CONTENTS / AGENDA

Date for 1st day	Time	Topics/Activities
23/03/2020	08:00 - 08:30	Registration
	09:00 - 10:30	Brief welcome and overview of the session Team presentation CHAP 1 : Introduction to GIS and remote sensing in Sensing in environmental management - Knowledge recap: environmental sustainability and GIS.
	10:30 - 11:00	Coffee break
	11:00 - 12:00	Introduction to GIS software (Open Source, Desktop and Web based)
	12:00 - 13:00	CHAP 2 : Geospatial technologies and techniques for environmental mapping - Components of GIS - GIS Data sources for environmental management,

	13:00 - 14:00	Lunch Break
	14:00 - 15:30	- Working with GIS data - Rasterization and vectorization - Projection and coordinate system
	15:30 - 16:00	Coffee break
	16:00 - 17:00	- GPS data collection for environmental management - GIS data collection using mobile devices
Date for 2nd day	Time	Topics/Activities
24/03/2020	09:00 - 10:30	- Data output / Data presentation - Relating information from different sources
	10:30 - 11:00	Coffee break
	11:00 - 12:00	- GIS database creation - Map preparation and presentation
	12:00 - 13:00	Basic GIS functionalities requesting data
	13:00 - 14:00	Lunch break
	14:00 -15:30	Working on produced data
	15:30 -16:00	Coffee break
	16:00 -17:00	Making cartographic outputs
Date for 3rd day	Time	Topics/Activities
25/03/2020	09:00 - 12:00	CHAP 3 : GIS as a tool for spatial Analysis - Spatial and attributes Request - Site location - Land use/Land Suitability analysis
	10:30 - 11:00	Coffee break
	11:00 - 12:00	Distance to areas of population
	12:00 - 13:00	Local area demographics/ Proximity to transport and road infrastructure
	13:00 - 14:00	Lunch break
	14:00 -15:30	Environmentally sensitive areas
	15:30 -16:00	Coffee break
	16:00 -17:00	Spatial Multi-Criteria Decision Analysis using GIS Methodological steps in MCA and Spatial Analysis
Date for 4th day	Time	Topics/Activities

26/03/2020	09:00 - 10:30	CHAP 3 : Use of GIS and Remote sensing to identify and analyze potential impacts
	10:30 - 11:00	Coffee break
	11:00 - 12:00	- Introduction to monitoring and change detection - Geographic Data for Environmental Modeling and Assessment
	12:00 - 13:00	Open Source web based resources such for decision support in environmental management
	13:00 - 14:00	Lunch time
	14:00 - 15:30	Case studies
	15:30 - 16:00	Coffee break
	16:00 - 16:30	Case studies
	16:00 - 17:00	Final evaluation and closing ceremony

METHODOLOGY

- The training will be mainly presented in the form of group workshops and exercises.
- There will be also interactive instructor-led presentations.
- Practical situations, real examples and case studies will be presented and discussed.
- An electronic support of the training content will be distributed by e-mailing.
- Daily assessments will be made to monitor progress.
- Daily pre-start refresher quizzes with competition between groups
- Mindmapping.

COURSE COORDINATION

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REGISTRATION AND PAYMENT

Training registration

to take part in this training just fill in the registration form as an attachment

Payment

You shall pay your participation fees before the deadline of the inscription at the CITET administrative services