



**CENTRE FOR ENVIRONMENT DEVELOPMENT
THIRUVANANTHAPURAM**

ADVANCED CERTIFICATE COURSE IN GEOINFORMATICS (G1 & G2)

CLASS SCHEDULE-Regular
Calendar Year: 2014

DAY	SESSION	TOPIC	FACULTY
1	10.00am-10.30am	INTRODUCTORY SESSION	ED & ALL FACULTY
	10.30am-11.00am	COURSE OVERVIEW	DR. THRIVIKRAMJI K. P.
	11.00 am-1.00pm	INTRODUCTION TO GIS	DR. VINOD T.R.
	2.00 pm-3.30pm	DATABASE THEORY	DR. THRIVIKRAMJI K. P.
	3.30pm-5.00pm	OVERVIEW OF ARCGIS & ARCGIS INTERFACES	DR. VINOD T.R.
2	10.00am-11.00pm	MAPPING CONCEPTS	DR. VINOD T.R.
	11.00pm-1.00pm	SPATIAL DATA MODELS	DR. THRIVIKRAMJI K. P.
	2.00pm-3.30PM	ARC GIS DATA MODELS (Data input & Georeferencing)	CHRIPS N. R.
	3.30pm-5.00pm	ARC GIS DATA MODELS (Data input & Georeferencing) (LAB)	CHRIPS N. R.
3	10.00am-11.30pm	ARC GIS DATA MODELS (Data input & Georeferencing) (LAB)	CHRIPS N. R.
	11.30pm-1.00pm	GPS	DR. VINOD T.R.
	2.00pm-3.30pm	OUTLINE OF RESEARCH PROJECTS	DR. SABU T.
	3.30pm-5.00pm	GIS CASE STUDIES	DR. THRIVIKRAMJI K. P.
4	10.00am-1.00pm	GEODATABASE	SURESH.S
	2.00pm-3.30pm	GEODATABASE - LAB	SURESH.S
	3.30pm-5.00pm	SUBTYPES & DOMAINS, LABELS & ANNOTATION	DR. VINOD T.R.
5	10.00am-1.00pm	ASSIGNMENT I (STUDENT Presentation on GIS Applications)	ALL FACULTY
	2.00pm-4.00pm	CARTOGRAPHY	DR. THRIVIKRAMJI K P
	4.00pm-5.00pm	DIGITAL CARTOGRAPHY (LAB)	SURESH.S
6	10.00am-12.00pm	VECTOR ANALYSIS	CHRIPS N. R.
	12.00pm – 5.00pm	VECTOR ANALYSIS (LAB)	CHRIPS N. R.
7	10.00am-12.00pm	RASTER ANALYSIS	DR. VINOD T.R
	12.00pm – 5.00pm	RASTER ANALYSIS (LAB)	Dr. RADHAKRISHNAN
8	10.00am-11.30pm	PRINCIPLES AND APPLICATIONS OF REMOTE SENSING	DR. THRIVIKRAMJI K P
	11.30pm-1.00pm	DIGITAL IMAGE PROCESSING & CLASSIFICATION	SURESH.S
	2.00pm-5.00pm	DIGITAL IMAGE PROCESSING & CLASSIFICATION (LAB)	CHRIPS N R
9	10.00am-1.00pm	3D ANALYSIS (LECTURE & LAB)	CHRIPS N R AND SURESH.S

DAY	SESSION	TOPIC	FACULTY
	2.00pm-5.00pm	ASSIGNMENT II (PPT ON PROJECT IDENTIFIED)	ALL FACULTY
10	10.00am-12.00pm	WEB GIS & OPEN GIS	DR. VINOD T R
	12.00pm-1.00pm	NETWORK ANALYSIS	GUEST FACULTY
	2.00pm-3.00pm	LINEAR REFERENCING	GUEST FACULTY
	3.00pm-5.00pm	NETWORK ANALYSIS; LINEAR REFERENCING (LECTURE & LAB)	GUEST FACULTY
11	10.00am -5.00pm	GEOSTATISTICAL ANALYSIS (LECTURE & LAB)	GUEST FACULTY
12	10.00am -5.00pm	PRESENTATION OF PROJECT OUTLINE	ALL FACULTY
13	10.00am-1.00pm	FINAL EXAMINATION (THEORY)	CHRIPS N. R. AND SURESH.S
	2.00 pm-5.00pm	FINAL EXAMINATION (lab.)	
14 - 24	10.00am-5.00pm	PROJECT WORK	
18	10.00am-1.00pm	PRESENTATION: PROGRESS OF PROJECT	
22		REVIEW OF FINAL DRAFT REPORT BY GUIDE (All Chapters)	
23		FINALIZATION OF PROJECT REPORT AND SUBMISSION	
25		PROJECT PRESENTATION AND VIVA VOCE	

Target audience:

The course designed around ArcGIS 10.1 and Erdas IMAGINE 2013, is recommended for those aspiring to acquire salable skills in spatial data analysis and enables them to land in an entry level GIS job. Our program immensely equips PG students, professionals and researchers in Geological- , Geographical- sciences, Archaeology, Demography and Sociology to analyze, understand and infer from spatial data new insights and glean underlying relationships. Equally so are in respect of students, professionals and researchers in the fields of Agricultural and Animal sciences. Graduates in the fields of civil engineering, animal sciences, and agricultural sciences can add this training to their professional skill set.

Prerequisites: Comfortable in working with Microsoft Office suite.

- Note:** 1. In part-time mode, the forgoing content will be re-arranged over the duration 52 days.
2. Min. Class strength: Regular =10; Part-time = 10. Own laptop added advantage.
3. Course fee = Rs.10, 000/-

TWELVE DAYS ORIENTATION TO GEOINFORMATICS (G3)
CLASS SCHEDULE, 2014

Day	Session	Topic	Faculty
1	10.00am-10.15am	Inauguration	
	10.15 am-11.30am	Introduction to GIS	DR. VINOD T.R.
	11.30am-1.00pm	Overview of ArcGIS & ArcGIS Interfaces	DR. VINOD T.R.
	2.00pm-5.00pm	Principles and Applications of Remote Sensing	DR. THRIVIKRAMJI K. P.
2	10.00 am-11.30pm	Mapping Concepts	DR. VINOD T.R.
	11.30am-1.00am	Data inputting & Georeferencing	CHRIPS N. R.
	2.00pm-5.00pm	Data input & Georeferencing (LAB)	CHRIPS N. R.
3	10.00am-12.00am	Vector Analysis	DR. RADHAKRISHNAN P.V.
	12.00pm-5.00PM	Vector Analysis (LAB)	DR. RADHAKRISHNAN P.V.
4	10.00am-12.00pm	Geodatabase Concepts	SURESH.S / DR. RADHAKRISHNAN P.V.
	12.00pm – 5.00pm	Geodatabase (LAB)	SURESH.S / DR. RADHAKRISHNAN P.V.
5	10.00am-12.00pm	Raster Analysis	DR. VINOD T.R
	12.00pm – 5.00pm	Raster Analysis (LAB)	DR. VINOD T.R / CHRIPS N. R.
6	10.00am-1.00pm	3D Analysis (LECTURE & LAB)	CHRIPS N R
	2.00pm-3.30pm	GPS	DR. VINOD T.R
	3.30pm-5.00pm	Research Methods	DR. T SABU
7	10.00am-1.00pm	Emerging Trends of GIS & RS in Watershed Management	DR. THRIVIKRAMJI K. P.
	2.00pm-5.00pm	Hydrology in ArcGIS	SURESH.S
8	10.00am-1.00pm	Network Analysis	SURESH.S
	2.00pm-3.30pm	WEB GIS & Open GIS	DR. VINOD T.R
	3.30pm-5.00pm	Cartography	DR. THRIVIKRAMJI K P
9	10.00am-12.00pm	Digital Image Interpretation	DR. THRIVIKRAMJI K P
	12.00pm-5.00pm	Digital Image Classification (LAB)	CHRIPS N. R.
10	10.00am-5.00pm	Demo-Project	
11	10.00am-5.00pm	Mini-Project	
12	10.00am-1.00pm	Finalization of Mini- Project Work	
	2.00pm -3.00pm	Presentation of Project	
	3.00pm-4.00pm	Valedictory function	

The course (built around ArcGIS 10.1 and Erdas IMAGINE 2013), is meant to impart GIS skills (in a fast-track mode) to students engaged in project work in M.Tech. (Civil Engineering), M.Phil. (Geographical-, Geological Sciences), M.Sc. (Agricultural Sciences, and Animal Sciences), M.P.H. (Public Health) and other similar areas. This short training adequately equips the participants to carry out data analysis, visualization, modeling and map making.

Note: Offering only on demand; Min. class strength 10; Own a Laptop an advantage.
 Course Fee, Rs.5, 000/-

SIX DAYS INTRODUCTION TO GEOINFORMATICS (G4)

CLASS SCHEDULE, 2014

Day	Session	Topic	Faculty
1	10.00am-10.15am	Inauguration	
	10.15am-11.30am	Overview of ArcGIS	DR. VINOD T.R.
	11.30am-1.00pm	Digital Cartography	DR. THRIVIKRAMJI K. P.
	2.00pm-5.00pm	Georeferencing (Theory & LAB)	CHRIPS N. R.
2	10.00 am-12.00pm	Mapping Concepts and Map Projection	DR. VINOD T.R.
	12.00am-1.00am	Geodatabase Concepts	SURESH.S
	2.00pm-5.00pm	Geodatabase (LAB)	SURESH.S / CHRIPS N. R.
3	10.00am-11.30am	GPS	DR. VINOD T.R.
	11.30am-1.00pm	Vector Analysis	DR. RADHAKRISHNAN P.V.
	2.00pm-5.00pm	Vector Analysis (LAB)	DR. RADHAKRISHNAN P.V. / CHRIPS N. R.
4	10.00am-1.00pm	Raster Analysis	DR. VINOD T.R / CHRIPS N. R.
	2.00pm – 5.00pm	Digital Image Processing (Mosaic & Extract)	CHRIPS N. R.
5	10.00am-11.30pm	WEB GIS & Open GIS	DR. VINOD T.R
	11.30am-1.00pm	Hydrology in ArcGIS	SURESH.S
	2.00pm-5.00pm	Network Analysis	SURESH.S
6	10.00am-12.00pm	GIS Application in Watershed	DR. THRIVIKRAMJI K. P.
	12.00pm-1.00pm	Quiz	
	2.00pm-4.00pm	Interactive Session	
	4.00pm-5.00pm	Closing Session	

Introduction to Geoinformatics, in the ArcGIS 10.1 and Erdas IMAGINE 2013 environment, is recommended to graduates and postgraduates in any discipline (including Civil Engineering) to get a feel of problem solving potential of the GIS science in a wide variety of spatial data domains or types. Teachers in Secondary and Higher secondary classes may discover this training as a useful skill in their class room environment.

Note: Course on demand only; Min. class strength, 10; Own laptop an advantage.
Course Fee= Rs.3, 000/-