## **PROGRAM OVERVIEW**

The M.Sc. programme in GIS & Remote Sensing offered though the Department of Geography by the Faculty of Graduate Studies of University of Sri Jayawardenapura, seeks to provide a sound theoretical and practical Knowledge in the feild of latest Geographic Information Technologies.

The goal of this M.Sc. degree programme is to produce highly qualified, motivated graduates who will be trained in Geographical Information Systems, Remote Sensing, Global Positioning Systems, and all the related state-of-the-art of technologies. In this highly interdisciplinary Master course, the students will be exposed to the cutting edge of understanding from a range of subject areas, taught by well-experienced highly qualified, versatile, and diverse academic staff. The course particularly focuses on conveying new approaches to data processing, analysis, and interpretation as well as the use of innovative technologies.

This is a weekend course, taught over 02 years, and running into four semesters. During the first three semesters, students will establish a breadth of necessary skills in a number of core modules value a total of 42 credits. In the last semester, the learning will be applied in the individual dissertation value an additional 18 credits.

After completing the Master Degree, the students will be able to explain the principles, theories, tools, and techniques of Geographic Information Technologies & Remote Sensing. They will also be skilled in analyzing, planning, modeling, and creatively and strategically solving multifaceted geospatial problems encountered in different fields through the application of specialized knowledge of Geographic Information Technologies and Remote Sensing.



This is an innovative, interdisciplinary Programme combining the areas of remote sensing & spatial analysis (GIS), & is particularly suitable if you wish to obtain a broad overview of the subject, with the scope for specialization.

#### **Course units**

#### **SEMESTER I**

GIS 1110 Fundamentals of Geographic Information Systems (GIS))
GIS 1120 Fundamentals of Remote Sensing
GIS 1130 Fundamentals of GPS & Equivalent Technologies

GIS 1140 Introduction to Database Management Systems

GIS 1150 Cartography for GIS

#### SEMESTER II

GIS 1210 Advanced Technologies in GIS

GIS 1220 Digital Image Processing & Advanced Remote Sensing

GIS 1230 Advanced Database Management Systems

GIS 1240 Applications of GPS & Equivalent Technologies

GIS 1250 Fundamentals of Web GIS

GIS 1260 Geo statistics in GIS

GIS 1270 Research Methodology & Scientific Writing

#### SEMESTER III

GIS 2110 Spatial Analysis & Modeling

GIS 2120 Applications of GIS & Remote Sensing

GIS 2130 Web GIS Applications

GIS 2140 Programming in GIS

GIS 2150 Advanced Mapping Technologies

GIS 2160 Research Methodology & Scientific Reporting

GIS 2170 Seminar on Applications of GIS & Remote Sensing

#### SEMESTER IV

GIS 2290 Research Project on RS &/or GIS Applications (Independent Research Thesis)

### DURATION

TWO ACADEMIC YEARS (04 SEMESTERS)

LECTURES & PRACTICALS ARE CONDUCTED DURING WEEK-ENDS

#### **COURSE FEE**

LKR. 300,000.00

### **ELIGIBILITY**

A DEGREE FROM A RECOGNIZED UNIVERSITY

### **AND**

A good command in both Spoken & Written English

A Special Enrollment: Officers in the rank of Captain & above in Sri Lanka (SL) Army or the Equivalant ranks in the SL Navy & the Air Force & Officers in the rank of Inspector & above in the SL Police, who need professional training on the subject area of GIS to effectively conduct specific tasks in their jobs. They should have at least 15 years of experience after commissioning into the captain in the SL Army or the equivalent ranks in the SL Navy, SL Air Force & Inspectorate in the SL Police.



# **ABOUT UNIVERSITY OF SRI JAYAWARDENEPURA**

The University of Sri Jayawardenepura (USJ) was founded in 1959 and it is highly ranked among the Sri Lanka's top universities. It is one of the most prestigious of academic and research excellence in Sri Lanka. It has housed over 12000 students and is the largest university in Sri Lanka in terms of the student population. The USJ is committed to the pursuit and dissemination of knowledge through teaching, scholarship, research, active service to the community, freedom of intellectual thought and expression, equal opportunity, fairness, and professional growth.



Department of Geography University of Sri Jayawardenepura

# **HOW TO APPLY?**

Applications and more details can be obtained from www.graduate.sjp.ac.lk or by sending an email to the Coordinator.

# CONTACT

Dr. M.A.S. Wijesinghe, (Coordinator). +94(0)718079802

Department of Geography, Faculty of Humanities & Social Sciences, University Of Sri Jayawardenepura, P.O. Box 6, Gangodawila, Sri Lanka.





# OFFERED THROUGH THE

Department of Geography by the Faculty of Graduate Studies University of Sri Jayawardenepura Gangodawila , Nugegoda , Sri Lanka

www.graduate.sjp.ac.lk