Course title: Multivariate Data Analysis				
Course code: NRE 112	No. of credits: 3		<b>L-T-P: 31</b> -14-0	<b>Learning hours:</b> 45
Pre-requisite course code and title (if any): NRE 115 Environmental Statistics				
<b>Department:</b> Natural and Applied Sciences				
Course coordinator(s):		Course instructor(s):		
Contact details:				
Course type: Elective	Course offered in: Semester 3			

## **Course Description**

Large amount of data is collected on many different variables across disciplines in order to understand the underlying process(es). The multivariate analysis of data deals with examining interrelationship between three or more equally important variables or explaining of variation in, usually one (or more than one) dependent variable(s) on the basis of two or more independent (explaining) variables. With the availability of inexpensive, fast and efficient computing resources and statistical packages there has been a growth in the application of these techniques. This course introduces the student to various multivariate data analysis tools. The focus is on cross-disciplinary application of these techniques.

## **Course objectives**

- Introduce the language of multivariate data analysis
- Understand the characteristics of multivariate quantitative research, including strengths and weaknesses
- Understand the principles and characteristics of the multivariate data analysis techniques