# **Principles of Communication Systems Lab**

**Course Objective:** This lab will be run in conjunction with the Principles of Communication course. The lab will run in parallel with the material covered in class. The lab will have software as well as hardware component.

#### **Honour Code:**

Work submitted must be your own.

Sharing work will result will result in 1 level grade downgrade (first offence) for both parties involved.

Any work taken "as is" or minor modification from any source should be credited as such.

### **Grading:**

Exams:

Midterm: 25% Final: 25%

Labs Submission/Oral Exams: 50%

## **TA: Chinmoy Mohapatra**

### Lab Schedule:

Lab1 (Aug 8)	Introduction to Matlab. Functions, plots, convolution and Matched filter
Lab2 (Aug 22)	Fourier Transform, Modelling multipath channel
Lab3 (Aug 30/ Sept 5)	Amplitude Modulation, envelop detection
Lab4 (Sept. 12)	Frequency Modulation (Basics)
Lab5 (Oct. 3/10/17/24)	FM Transmitter (Hardware)
Lab6 (Nov 7/14)	Linear Modulation over AWGN Channel
Lab 7 (Nov 21/28)	Two dimensional constellation