

**BITS PILANI K.K. BIRLA GOA CAMPUS
CENTRE FOR TECHNICAL EDUCATION
COURSE HANDOUT**

COURSE TITLE: Introduction to Electronics in Robotics

COURSE INSTRUCTOR: Apurva Ankleshwaria, Ronak Gupta, Vishal Pathak,
Shikhar Sharma

COURSE DESCRIPTION: This course serves as a formal introduction to basic electronics used in robotics. Without looking at advanced application the course will cover basics of microcontrollers, sensors and interfacing techniques that will be helpful in giving a student the vital start he needs to take up projects at college level and explore the subject later. The course will have hands on sessions along with theory coverage. Classes on practical application will also be taken to strengthen concepts

Sr.no	Title	Sessions
1.	Introduction to Robotics	1
2.	Sensors and IC's	1
3.	Arduino programming and usage	3
4.	AVR development	6
5.	Line following, Grid Solving algorithms	2
6.	Arduino-Python Interfacing	4
7.	Project sessions	2-3

Evaluation Component:

1. Announced Quiz- 40%
2. Assignments- 60%

NOTE: The evaluations components are subject to change. The lecture series order along with time allocated may be changed as the situation demands.

Project sessions will involve making the students work on a small applied problem of the concepts introduced in class.