

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
(ACADEMIC YEAR: 2019-20)

## **REPORT ON BRIDGE COURSE**

TITLE : COORDINATE SYSTEMS

DATE : 04/01/2020 & 06/01/2020

**BRANCH**: ECE

YEAR/SEM: II/II

Department of ECE conducted a bridge course entitled "Coordinate Systems" for II-B.Tech ECE students on O4/O1/2020 & O6/O1/2020. The course was conducted for two days from 9:00AM to 12:40PM and 2:00PM to 5:00PM on the scheduled dates. The course was handled by Mr.C.LeelaMohan, Associate Professor, department of ECE. The objective of this course is to give basic knowledge on Co-ordinate Systems, Transformations and Vector Calculus.

The topics covered under this bridge course are:

- Why Co-ordinate Systems?
- Types of Co-ordinate Systems.
- Cartesian Co-ordinate Systems
  - (i) Differential Increments
  - (ii) Relation b/w Cartesian to Other Co-ordinates
- Circular Cylindrical Co-ordinate Systems
  - (i) Differential Increments
  - (ii) Relation b/w Circular Cylindrical to Other Co-ordinates

- Spherical Co-ordinate Systems
  - (i) Differential Increments
  - (ii) Relation b/w Spherical to Other Co-ordinates
- Del Operator
  - (i) Gradient of a Scalar
  - (ii) Divergence of a Vector
  - (iii) Curl of a Vector
  - (iv) Laplacian of a Scalar



Resource Person giving introduction about Coordinate systems



Resource person explaining about Transformations



**Mr.C.LeelaMohan**, Associate Professor, department of ECE explaining about Vector Algebra and Vector Calculus