



**Birla Institute of Technology & Science, Pilani**  
Hyderabad Campus

**INSTRUCTION DIVISION**  
**SECOND SEMESTER 2021-2022**  
Course Handout Part II

**Date: 03 Jan. 2022**

In addition to Part-I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

*Course No.* : EEE F245  
*Course Title* : **Control systems Laboratory**  
*Instructor-in-Charge* : Dr. Sandeep Kumar  
*Instructors team* : Dr. STP Srinivas, Priyalatha.P, Shrimathi H P, Prof. Alivelu Manga Parimi, and Dr. Sandeep Kumar

**Scope and Objective of the Course:** Feedback automatic control systems are an essential feature of numerous industrial processes, scientific instruments and even commercial, social and management situations. A thorough understanding of the elementary principles of this all embracing technology is of great relevance for all engineers and scientists. This laboratory course gives hands-on experience to the theoretical concepts covered in the theory course.

**Textbooks:**

1. Nagrath I. J. and M. Gopal, Control Systems Engineering, New Age International (P) Limited, 5th ed, 2007.
2. LabVIEW manuals, Quanser-QUBE-Servo manuals.

**Reference books**

1. Kuo, B. C., and Golnaraghi, F., Automatic Control Systems, John Wiley & Sons, 8th ed, 2003.
2. Dorf, R. C., and Bishop, R. H., Modern Control Systems, Addison Wesley, 7th ed, 1995.

**Course Plan:**

The laboratory classes will be conducted in the Control system lab. The practicals are intended to provide hands-on experience in LabVIEW environment upon the concepts learned in the class under Control Systems course. Details of the experiments will be available in the “Laboratory Manual”. Laboratory marks mentioned includes marks for record and attendance in lab practical.



**Evaluation Scheme:**

Component	Duration	Weightage (%)	Date & Time	Nature of Component
Regular Laboratory Practical work	Each lab session of 2 hours	40%	Time Table	Open Book
Lab Quiz (Mid-Sem)	30 minutes	20%	Will be announced	Closed Book
Lab Exam (End-Sem)	1 hour	40%	Will be announced	Closed Book

**Chamber Consultation Hour:** Chamber consultation hours of Instructors will be announced separately.

**Notices:** All notices of this course will be displayed in CMS

**Make-up Policy:** No make-up will be provided without prior permission from the Instructor-Incharge (IC).

**(Dr. Sandeep Kumar)**  
**Instructor-in-charge**

