Birla Institute of Technology & Science, Pilani
Hyderabad Campus

SECOND SEMESTER 2019-2020

Course Handout Part II

Date: 06-01-2020

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. Ankur Bhattacharjee
Instructors team : Harish V. Dixit, Balasubramaniam

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	50%	Time Table	Open Book
Mid-Sem	During lab hours	10%	Will be announced	Closed Book

End-Sem	During lab hours	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: Make-up for components will be granted for genuine reasons, only when prior-permission is taken from Instructor-in-charge.
Academic Honesty and Integrity Policy: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

INSTRUCTOR-IN-CHARGE