BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE-PILANI
HYDERABAD CAMPUS
FIRST SEMESTER 2016-17

Course Handout (Part II)

Date: 01/08/2016

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

Course No : **BITS F110**
Course Title : ENGINEERING GRAPHICS
Instructor-in-charge : **KURRA SURESH**
Team of Instructors : Ansua Guharay, Ashok kumar, C P Kiran, K Rajitha, M Mounika, M Swagatika, MD Abdul Wahed, Naveen James, Prakash Mohan, Surya Prakash, VN Surendra Kamadi.

1. Course Description:

Introduction to AutoCAD commands, simple drawings, orthographic projections, projections of points, lines, planes; auxiliary projections; projections and sections of solids; development of surfaces; isometric projections.

2. Scope and objective of the course:

Engineering Graphics is the primary medium for development and communicating design concepts. Through this course the students are trained in Engineering Graphics concepts with the use of AutoCAD. The latest ISI code of practice is followed. Computerized drawing is an upcoming technology and provides accurate and easily modifiable graphics entities, easy data storage and retrieval facility and enhances creativity.

3. Text Book: D.M. Kulkarni, A.P. Rastogi and A.K. Sarkar., *Engineering Graphics with AutoCAD*, PHI Learning Private Limited, New Delhi 2009.

4. Reference Books:

a) Dhananjay A Jolhe, *Engineering Drawing: With an Introduction to AutoCAD*, Tata McGraw Hill, 2008.
b) Warren J. Luzadder & Jon M. Duff, *Fundamentals of Engineering Drawing*, 11th edition, Prentice Hall of India, New Delhi.
c) N.D.Bhatt & V.M.Panchal, Engineering Drawing, Charotar Publishing House, 2006.

5. Course Plan

Lecture No.	Learning Objectives	Topics to be covered	Practical Classes	Chapter
1-2	Introduction to AutoCAD	Basic commands	3	1 & 2
3-4	Orthographic projections	Theory, techniques, first and third angle projections, Multi view drawing from pictorial views.	2	3 & 5
5	Projections of Points	Positions, notation system and projections procedure	-	9

6-7	Projections of Lines	Positions, terms used, different cases, traces of a line and projections procedure	2	9
8	Projections of Planes	Positions, terms used, different cases, traces of a line and projections procedure	1	10
9-10	Projections of Solids and Sections of Solids	Construction of right, regular, oblique solids; section planes and sectional view.	2	12 & 13
11-12	Development of surfaces	Radial line, parallel line; anti-development	1	14
13-15	Isometric Projection	Theory of isometric drawing, construction of isometric projection from orthographic.	2	6

6. Evaluation Scheme:

EC No.	Evaluation component	Duration	Weightage (%)	Date, Time	Remarks
1	Mid – Test (CBT)	60 min	25	21/10, 8.00 AM - 4.30 PM	Closed Book
2	Comprehensive (CBT)	90 min	35	14/12 FN	Closed Book
3	Assignments	-	40	-	Open Book

CBT – Computer Based Test

7. Chamber Consultation Hours: To be announced by respective instructors.

8. Notices: Concerned notices will be displayed on CMS.

9. Make – up policy:

Make-up for practical class will be granted only on medical reasons. For medical cases, a certificate from the physician of the Institute Medical Centre must be produced. Request for evaluation of makeup should be made to the practical section in-charge on the immediate subsequent practical class which is attended.

INSTRUCTOR-IN-CHARGE

BITS F110