

Mechanical Engineering Courses (ME)

Mechanical Engineering Courses Group

ME 255 – Computer Aided Drafting

COURSE INFORMATION

Course Title: Computer Aided Drafting

Code: ME 255

Hours: Lecture – 2 Hrs. Tutorial – 4 Hrs. Credit –3.

Prerequisite: CB 221

GRADING

Class Performance/Attendance: 10%

Midterm # 1/Assignments – (7th Week): 30%

Midterm # 2/Assignments – (12th Week): 20%

Final Exam: 40%

COURSE DESCRIPTION

The course includes the auto basics, object construction and manipulation, geometric construction, layers and text generation, section views and hatching, dimensioning techniques, analyzing 2-D drawings, construction of blocks, isometric drawing and 3D surface modeling.

TEXT BOOK & REFERENCES

Mastering AutoCAD by G.Omura Publisher: Tech. Publication LTD, 1st edition 1992.

The Auto CAD Tutor for Engineering Graphics by A.J Kalamja Publisher: Autodesk press, 1st edition 1998.

COURSE AIM

To enable the student to develop the necessary knowledge and skills for using computer in machine drafting and to prepare them for computer Aided Design applications.

SPECIFIC OUTCOMES OF INSTRUCTION

The Student should be able to apply the engineering drawing basics using AutoCAD as a mean of computer aided drafting software to produce detailed and assembly engineering

APPENDIX A-42

drawings in 2 dimensions, with an introduction to use computers to model an object in 3 dimensions.

COURSE OUTLINE

- Week Number 1-2:* AutoCAD Basics
- Week Number 3-6:* Object Construction and Manipulation
- Week Number 7:* Geometric Construction
- Week Number 8:* Layers and Text
- Week Number 9:* Section Views and Hatching
- Week Number 10:* Dimensioning Technique
- Week Number 11:* Analyzing 2-D Drawings, Plot and Configure
- Week Number 12:* Construction of Blocks
- Week Number 13:* Isometric Drawings
- Week Number 14:* 2-D Assembly Views
- Week Number 15:* 3-D Modeling
- Week Number 16:* Final Exam.

COURSE COORDINATOR AND DEMAND

Course Coordinator: Dr Adel M.Belal .

Course Demand: *Required*