EE 211 Electrical Measurements and Instrumentation (1)

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Lab.	
EE 231	2	4	2	2	2	3

COURSE AIM

The course aims to inform the students with accuracy of measurement anal error analysis – deflecting torque , control torque and damping torque, PMMC movement, Moving iron, Dynamometer, DC & AC meters – AC, DC bridge Instrument transformers

COURSE WEEKLY CONTENTS

1 Accuracy of Measurement and error analysis
2 Absolute and Secondary instruments
3 Secondary circuit instrumentation
4 Moving coil instruments
5 Moving iron instruments
6 Dynamometer type instruments.
7 Induction instruments + Midterm Exam
8 Measuring of Active power
9 Measuring of power factor
10 DC Bridges
11 AC Bridges
12 Current and Potential transformers
13 Operational Amplifiers basics
14 Operational Amplifiers Applications
15 Oscilloscope

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	**20 Midterm**	←	10 MARKS To be freely distributed among possible assessments			→	**30**
8 to 12	←		20 MARKS			→	**20**
13 to 15	←		10 MARKS			→	**10**
16 or 17	**40 Final**						**40**
Total	**Exams**	**Assign.**	**Quizzes**	**Reports**	**Present.**	**Lab.**	100

REFERENCES

Textbook J.B. Gupta, "A Course in Electronic and Electrical Measurements and Instrumentation", Prentice- Hall

Other E. Golding and F. Widdis " Electrical Measurement and Measuring Instruments " Putman latest edition
W. Dally, F. Riley and G. McConnel, "Instrumentation for Engineering Measurements", John Wiley and Sons, N.Y., latest edition