EE 519 Industrial Communication Networks

COURSE INFORMATION

Prerequisites	Academic Year &Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Lab.	
EE512	5	9,10	2	2		3

COURSE AIM

Provide study behavior of different level of automation hierarchy, Data Communication basics, OSI reference model, Industry Network, Recent networks

COURSE WEEKLY CONTENTS

1	Data Communication basics	
2	OSI reference model	
3	Industry Network	
4	Recent networks	
5	Communication Protocols	
6	Device Networks	
7	Control Networks	+ Midterm Exam
8	Enterprise Networking	
9	Network selection	
10	Network Architectures	
11	Modbus and Fieldbus	
12	Trends Hardware selection	
13	HART	
14	Wireless Protocols	
15	ZigBee and Z-wave	

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	B.G. Liptak, 'Process Software and Digital Networks: (CRC Press ISA- The Instrumentation, Systems, and Automation Society).
Other	B.G. Liptak, 'Process Software and Digital Networks: (CRC Press ISA- The Instrumentation, Systems, and Automation Society).