

CCS2102 Digital Logic Design

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laboratory	
CCS1101	1	2	2	2	2	3

COURSE AIM

- Know the basic differences between analog and digital systems.
- Use binary numbers and codes.
- Describe the operation of logic gates.
- Apply Boolean algebra and K-map to simplify functions
- Design combinational and sequential logic circuits.

COURSE WEEKLY CONTENTS

- 1 Introduction to Digital Concepts
- 2 Numbering systems, Operations and Codes
- 3 Logic Gates
- 4 Combination Logic Circuits
- 5 Truth Tables and Standard Forms
- 6 Boolean algebra and Logic simplification
- 7 Simplification using K-map
- 8 Basic Adders and Comparators
- 9 Decoders
- 10 Encoders
- 11 MUX
- 12 DMUX
- 13 Latches and Flip-Flops
- 14 Asynchronous Counters
- 15 Synchronous Counters

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	←		30	MARKS		→	30
8 to 12	←		20	MARKS		→	20
1 to 15	←		10	MARKS		→	10
16 or 17	40	Final					40

REFERENCES

Textbook Thomas L. Floyd, Digital Fundamentals, Prentice Hall.