

**ADDIS ABABA UNIVERSITY**  
**ADDIS ABABA INSTITUTE OF TECHNOLOGY**  
**SCHOOL OF CIVIL AND ENVIRONMENTAL ENGINEERING**

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Course: -CENG-3112, *Building Construction*

**CHAPTER 1: INTRODUCTION**

- 1.1 General
  - ❖ Definition of terms
- 1.2 Building Classifications
- 1.3 Components of a Building
- 1.4 Design and performance requirements
- 1.5 Project life cycle of a building
- 1.6 Main Parties in Building Construction
- 1.7 Resource for Building Construction

**CHAPTER 2: BUILDING DRAWINGS**

**CHAPTER 3: BUILDING STRUCTURAL SYSTEMS**

- 3.1 Introduction
- 3.2 Reinforced concrete structures
- 3.3 Steel framed structures
- 3.4 Timber structures
- 3.5 Prefabricated building systems
- 3.6 Shell and dome structures

**CHAPTER 4: PLANNING OF BUILDINGS**

**CHAPTER 5: BUILDING ELEMENTS**

- 5.1 Foundations-I
  - ❖ Introduction
  - ❖ Functions of foundation
  - ❖ Types of foundation
  - ❖ Excavation for foundation
- 5.1 Foundations-II
  - ❖ Introduction
  - ❖ Site reconnaissance
  - ❖ Site exploration

- ❖ Bearing capacity of a soil
- ❖ Soil samples
- 5.2 Floor System
  - ❖ Introduction
  - ❖ Components of a floor
- 5.3 Wall System
  - ❖ Types of walls
  - ❖ External walls
  - ❖ Internal walls
  - ❖ Cavity walls
  - ❖ Opening in walls
- 5.4 Stairs
- 5.5 Doors and Windows
- 5.6 Roof and Roof coverings
- 5.7 Finishing
- 5.8 Damp Proofing
- 5.9 Fire place
- 5.10 Formwork and scaffolding

**CHAPTER 6: SAFETY AND HEALTH AT CONSTRUCTION SITE**

**Reference :**

- Abebe Dinku, Building Construciton, AAU printing press
- Roy Chudley & Toger Greeno, Building Construction Handbook
- Francis D.K. Ching, Building Construction Illustrated