

# Plan

## Synchronous Circuit

- Combinational Circuit
- Sequential Circuit
- Digital Watch

## Binary Algebra

- Boolean Algebra
- Binary z- Transform
- 2-adic Numbers

## Electronic Circuit

- Transistor
- Silicon Process
- MOS Structures

## Silicon Arithmetic

- Counters
- Adders
- Multipliers

## Universal Machines

- Microprocessor
- Programmable Logic
- Computable Functions

## Digital Physics

- Heat Equation
- Radiation Detector

## Information Theory

- Shannon's Theory
- Entropy Coding
- Error Coding

## Audio & Video

- CCD Camera
- JPEG Compression
- Half Toning