

# ***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***

- CCD Camera
- Radiation Detector
- Heat Equation

## ***Information Theory***

- Shannon's Theory
- Entropy Coding
- Error Coding

## ***Audio & Video***

- Digital Audio
- JPEG Compression
- Half Toning