DIGITAL CIRCUIT AND LOGIC DESIGN

Number System

- Base 2, 8, 10, 16
- Conversion
- Arithmetic

Basic Logic Gate

- Basic Logical Operation
- Symbols
  - ○ ASA
  - ○ IEEE
  - ○ Inverted Logic
- Truth Table
- Equation
  - ○ POS
  - ○ SOP
- Boolean Algebra
  - ○ Analysis/Systhesis -> Circiut -> Equation -> Truth Table -> Wave From
  - ○ Design -> Top-Down -> โจทย์ -> Block -> Truth Table -> Equation ->Simplify: Boolean,K-

    MAP, Q.M. -> CCT: Basic Gate, Symbol
- Combinational Design
  - ○ Dx, Encoder, MUX/DeMUX
  - ○ Parity
  - ○ 7-Seg
    - ▪ HA
    - ▪ FA
    - ▪ PA
  - ○ Adder/Subtraction
    - ▪ 1's Complement
    - ▪ 2's Complement