Digital Design Technologies

Aim

• Introduce and compare IC technologies

Topics covered

- Introduction to ICs
- Introduction to FPGAs
- Technology-specific features and considerations
- Choosing a technology

Design Practices

Aim

To introduce design techniques and best practices

Topics covered

- Expressing logic using HDLs
- Managing complex designs

Introduction to VHDL

Aim

Provide a brief introduction to VHDL

Topics covered

- Entities and architectures
- std_logic and std_logic_vector
- Processes and concurrent signal assignments
- Hierarchy
- Test benches