Learning Objective
1. To understand the key theoretical principles underpinning DSP in a design procedure through design examples and case studies.
2. To learn how to use a powerful general-purpose mathematical package such as MATLAB to design and simulate a DSP systems.
3. To understand the architecture of a digital signal processor and some programming issues in fixed-point digital signal processor in real-time implementation.
4. To learn to design a real-time signal processing algorithms using the latest fixed-point processor.

Course Contents
This subject introduces the basic rules, procedures, techniques and components for designing a DSP system. The subject also includes an assignment for the students to apply the knowledge and techniques learnt. DSP Architectures, Addressing Mode, DSP fixed-point programming style, real-time implementation issues, DSP integrated development environment.

Assessment Modes
- Continuous Assessment (50%)
- Written Examination (50%)

References