LEARNING OBJECTIVE

This course presents the basics of real-time signal processing using general purpose DSP and VLSI architecture. The concept of real-time processing would be emphasised in the course. Various software and hardware architectures and approaches for processing signals in real time would be discussed. Optimum general purpose DSP and VLSI system design and the trade-offs would be elaborated.

CONTENT


LAB DESCRIPTION (if applicable)

Nil

LEARNING OUTCOME

The student would understand the need of different architecture for implementing hardware systems for real-time processing. Techniques for designing systems to achieve required throughput using general purpose DSP and VLSI architecture would be acquired. In particular, basic skills required for developing and debugging of software algorithms and hardware architecture for system design would be achieved. These skills are useful in real-time system design in industrial applications.

STUDENT ASSESSMENT

Continuous Assessment  30%
Final Examination 70%

TEXTBOOKS


REFERENCES