

Knowledge Network of Indian Institute of Technology, Gandhinagar Under TEQIP-II Initiative

## Short Course on Digital Signal Processing

Date:06/12/2016 to 09/12/2016 (4-days)Time:10:00 am reporting time on 06 December 2016Venue:IIT GandhinagarTarget group:Faculty members, PG & Senior UG StudentsRegister At:www.iitgn.ac.in/knDead line:30th November, 2016

The focus of this winter short course is on reinforcing the fundamentals of signalprocessing in the context of the new small World. In addition to offering advancedlevel topics in the areas of signal processing, the course is also designed to give equal emphasis on the basic fundamentals of the subject. The tentative topics that will be covered during the winter school include:

Fundamentals of digital signal processing (DSP), digital filter design, adaptive signal processing, frequency and time-frequency analysis, VLSI signalprocessing, statistical signal processing, multirate signal processing, sparse signal processing, signalprocessing applications in other upcoming fields.

"...There will always be signals, they will always need to be processed, and there willalways be new technologies and algorithms for implementing the processing. Thatconviction has given me a feeling of job security ever since I first fell in love withsignal processing as an undergraduate student at MIT in the mid 1950s..."

- A. V. Oppenheim, Ford Professor of Engineering, Massachusetts Institute of Technology (MIT)

Course Coordinator - Prof. Nithin V.George (IIT Gandhinagar) Prof. Shanmuganathan Raman (IIT Gandhinagar)