

Advanced Digital Image Processing



Credit Hours: 3

Pre-requisite:

Undergraduate course in Signal Processing
Familiarity with Computer Programming

Target Audience

MS/Ph.D students wishing to pursue research in the areas of signal processing, image processing. Students majoring in embedded system design may also register as a breadth course.

Synopsis:

Starting from the fundamentals of Digital Image Processing the course provides in-depth coverage of spatial domain filtering, frequency domain filtering, wavelet-based image processing, spatiochromatic image processing and image compression. The course also covers the ideas of morphological image processing.

Instructor:

The course will be taught by Dr. S. M. Monir (monir@pafkiet.edu.pk). Dr. Monir holds a PhD degree with specialization in Signal Processing from Nanyang Technological University, Singapore. His research interest include time-series analysis and image processing.

Recommended Books:

- R. C. Gonzalez, *Digital Image Processing* 3rd ed.
- R. C. Gonzalez, *Digital Image Processing using Matlab*