

"Digital Engineering in Broadcasting" course guide

1. Objectives

The purpose of this course is to give students, as simply and as completely as possible, the various aspects of the very complex problems that had to be solved in realizing digital broadcasting.

2. Outline of Class and Contents

- 1) A review of current analogue TV,
- 2) Digitization of video signals,
- 3) Compression of video signals using Fourier cosine transform,
- 4) Compression of video signals using motion compensation technique,
- 5) Error correction using Reed-Solomon coding,
- 6) Error correction using Viterbi decoding algorithm,
- 7) Trellis coded 8 PSK modulation scheme,

3. Assessment Policy

Report, the final examination and attendance rate are taken into consideration.