

## Läsanvisningar för EITF75

Kursbok: 'Digital Signal Processing. Principles, Algorithms and Applications' fjärde upplagan av John G. Proakis, Dimitris G. Manolakis, Pearson  
Prentice Hall ISBN 0-13-187374-1

Sidhänvisningarna avser de olika upplagorna av boken.

OBS! Underlaget i den 2:a upplagan skiljer sig åt i flera delar och rekommenderas inte som kursmaterial.

|  | Content                | 4th edition (US)    | 4th edition         | 4th new international |
|--|------------------------|---------------------|---------------------|-----------------------|
| <b>Introduction</b>                      |                        | p. 1-37             | (International)     | edition               |
| Read carefully                           |                        | p. 14-17, 21-26     | p. 14-17, 21-26     | p. 14-17, 21-26       |
| Important                                |                        | Table 1.1, p. 23    | Table 1.1, p. 23    | Table 1.1, p. 23      |
| <b>Discrete-time signals and systems</b> |                        | p. 41-129           | p. 40-127           | p. 43-131             |
| Read carefully                           | definitions            | p. 42-49            | p. 41-48            | p. 44-51              |
| Read carefully                           | convolution definition | p. 73-80            | p. 72-79            | p. 75-82              |
| Read carefully                           | convolution properties | p. 80-83            | p. 79-82            | p. 82-85              |
| Read carefully                           | diff. eq. 1 order      | p. 93-98            | p. 92-97            | p. 95-100             |
| Not included                             |                        | section 2.4.3       | section 2.4.3       | section 2.4.3         |
| Read summarily                           | correlation            | p. 118-120, 125-128 | p. 117-119, 124-127 | p. 120-122, 127-130   |

|                          | Content                  | 4th edition (US)  | 4th edition        | 4th new international |
|--------------------------|--------------------------|-------------------|--------------------|-----------------------|
| <b>Z-transform</b>       |                          | p. 147-214        | p. 141-200         | p. 151-218            |
| Read carefully           | z-transform definition   | p. 148-157        | p. 142-151         | p. 152-161            |
| Read carefully           | z-transform properties   | p. 157-170        | p. 151-165         | p. 161-174            |
| Important                |                          | Table 3.2, p.169  | Table 3.2, p. 164  | Table 3.2, p. 173     |
| Important                |                          | Table 3.3, p.170  | Table 3.3, p. 165  | Table 3.3, p. 174     |
| Important                |                          | Figures p.175-176 | Figures p. 170-171 | Figures p. 179-180    |
| Not included             |                          | section 3.4.1     | section 3.4.1      | section 3.4.1         |
| Read summarily           |                          | p. 182-214        | p. 186-197         | p. 186-218            |
| <b>Fourier transform</b> |                          | p. 224-291        | p. 229-275         | p. 230-297            |
| Read summarily           | Fourier series, analog   | p. 224-234        | p. 229-240         | p. 230-240            |
| Important                | Analog Fourier Transform | p. 234-238        | p. 240-246         | p. 240-244            |
| Read summarily           | Fourier series, discrete | p. 238-248        | p. 247-254         | p. 244-254            |
| Important                |                          | p. 248-254        | p. 254-267         | p. 254-260            |
| Not included             | The Cepstrum             | section 4.2.7     | p. 267-268         | section 4.2.7         |
| Read summarily           |                          | p. 262-271        | p. 268-277         | p. 268-277            |
| Important                | Symmetry properties      | p. 271-279        | p. 277-285         | p. 277-285            |

|   | Content            | 4th edition (US)       | 4th edition            | 4th new international  |
|---|--------------------|------------------------|------------------------|------------------------|
| Important                               | Properties         | p. 279-291             | p. 285-297             | p. 285-297             |
| Important                               | Tables             | Table 4.5-6 p. 290-291 | Table 4.5-6 p. 296-297 | Table 4.5-6 p. 296-297 |
| <b>Frequency analysis of signals</b>    |                    | p. 300-362             | p. 307-371             | p. 308-370             |
| Read carefully                          |                    | p. 300-317             | p. 307-321             | p. 308-325             |
| Important                               | Frequency response | p. 317-321             | p.325-329              | p.325-329              |
| Read summarily                          |                    | p. 321-362             | p. 302-371             | p. 329-370             |
| <b>Sampling and reconstructions</b>     |                    | p. 384-440             | p. 395-452             | p. 396-452             |
| Important                               | Sampling           | p. 384-394             | p. 395-406             | p. 396-406             |
| Important                               | Reconstruction     | p. 395-401             | p. 407-413             | p. 407-413             |
| Not included                            |                    | 6.3 - 6.6              | 6.3 - 6.6              | 6.3 - 6.6              |
| <b>Discrete Fourier transform (DFT)</b> |                    | p. 449-501             | p. 461-513             | p. 461-513             |
| Read summarily                          |                    | p. 449-464             | p. 461-476             | p. 461-476             |
| Important                               | DFT, IDFT          | eq. 7.1.20-21 p. 456   | eq. 7.1.20-21 p. 423   | eq. 7.1.20-21 p. 468   |
| Read summarily                          |                    | p. 464-495             | p. 476-507             | p. 476-507             |
| Important                               | Convolution, DFT   | p. 471-480             | p. 483-492             | p. 483-492             |
| Not included                            |                    | 7.5                    | 7.5                    | 7.5                    |
| <b>FFT not included</b>                 |                    |                        |                        |                        |

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|--|---------|------------------|-------------|-----------------------|
| <b>Implementation of discrete-time systems</b> |         | p. 563-640       | p. 577-655  | p. 577-655            |
| Read summarily                                 |         | p. 565-568       | p. 579-582  | p. 579-582            |
| Not included                                   |         | p. 569-640       | p. 531-655  | p. 583-655            |