

| | | |
|-------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Chapter 2. | Digital signal processing impulse response, convolution, system function, Fourier, z-transforms | page 7-20 |
| | Matrix description. | page 20-52 |
| | Hints. | page 8-18, 21, 49. |
| Chapter 3. | Random processing, such as correlation functions, correlation matrices. | |
| | Random variables | page 58-74 |
| | Random Processes | page 74-119 |
| | Hints. | page 77, 79, 80, 85, 95, 99, 100, 101, 106 |
| Chapter 4. | Signal models, Deterministic and Stochastic approach. | |
| | Padé, Prony | page 133-154 |
| | Shank | page 154-160 |
| | All-pole Modeling | page 160,165 |
| | Linear prediction | page 165-174 |
| | | 4.5 not included |
| | 4.6 | page 178-188 |
| | 4.7 Stochastic Models | page 188-200 |
| | Hints. | page 130, 135, 138, 147, 148,149 195, 195 |
| Chapter 5. | Levinson-Durbin recursion. | page 215-225, 233-241 |
| | | page 242 – 276 not included |
| | Hints. | Table 5.1 – 5.4, figure 5.10 |
| Chapter 6. | Lattice FIR and IIR filters, only 6.2 and 6.4.1, 6.4.3 | page 289-293, 297, 298, 304-307 |
| | 6.5 | page 308-324 |
| Chapter 7. | Optimal filters. Linear prediction. Wiener filters. Specially FIR filters. | |
| | FIR- Wiener filter | page 335-345 |
| | IIR- Wiener filter | page 353-371 |
| | Kalman filters | page 371-379 |
| | Hints. | page 337-339, 354, 355, 358-363, 370 |
| Chapter 8. | Spectrum estimation. | |
| | Nonparametric methods | page 393-399, 408-425 |
| | 8.3 (8.5 see chap 4) , 8.6 | page 426-429, 451-472 |
| | Hints. | page 394, 408 |