

MAT202: Introduction to Mathematics for Digital Signal Processing

Time & Venue

Mondays 2-4 pm MAT-K

Course Syllabus

- **Signals & Systems Basics:** Classification of Signals and Systems, Common Signal Functions, Properties of Signals and Systems, Operations on Signals.
- **Complex Numbers:** Definition, Rectangular and Polar representation, Euler and Inverse Euler Formula, Operations with Complex Numbers.
- **Z-transform:** Mathematical definition, Properties, Applications in DSP.
- **Fourier Series:** Basic principle and mathematical definition, Properties of Fourier Series
- **Fourier Transform:** Mathematical definition, Properties of Fourier transform.
- **Matrices:** Definition, Types and properties, Operations on matrices, Inverse of a Matrix, Determinant of a Matrix.
- **Discrete Fourier Transform (DFT):** Definition, Properties of DFT, Computational examples of DFT using matrices/Matlab.

Contact

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