



Mathematics

in Science, Engineering & Programming

Preview section (1.5h)

- 1 Teaser: What is beyond school mathematics?
Problems with quadratic, exponential functions & vectors

College-level mathematics (9.5h)

- 3 Limits of functions (1h)
- 4 Derivatives in one dimension (3h)
- 5 Integrals in one dimension (1.5h)
- 6 Vectors in cartesian coordinates (2.5h)
- 7 Stochastics & Probability distributions (1.5h)

University-level mathematics (14h)

- 9 Sequences & Series (1h)
- 10 Taylor expansions (1.5h)
- 11 Complex numbers (1h)
- 12 Derivatives in multiple dimensions (1.5h)
- 13 Integrals in multiple dimensions (2.5h)
- 14 Differential equations (3h)
- 15 Matrix algebra (2.5h)
- 16 Fourier transform & Delta distribution (1h)