| Name of the course | Elements of engineering mathematics |
|---|--|
| Number of instruction hours | 20 |
| Outline of course/module | |
| content | Topics include ordinary and partial differential equations, linear systems and corresponding numerical methods, matrix decomposition, vector and matrix norms, eigenvalues and eigenvectors, and their applications in numerical analysis. A connection with concrete engineering problems and their solving is stressed, as well as a connection with nonlinear problems. An application of suitable computer software packages in numerical and symbolic calculations is demonstrated. |
| Description of instruction methods | Lecturing , demonstrations, consultations |
| Description of course/module requirements | seminar, presentation, report, oral exam |