

Topics to be covered (1/2):

Serial No.	Topics
1	Floating-point numbers and machine representation of numbers
2	Round-off errors
3	Root finding methods: Bisection method
4	Secant method and Regula Falsi method
5	Newton-Raphson method
6	Fixed point iteration method
7	Higher order one point methods, revisit Newton-Raphson method
8	Vector and Matrix norms (From linear algebra)
9	Methods to solve system of linear equations: methods for simple structured of matrices
10	Gaussian elimination
11	LU Factorization: Doolittle's
12	LU Factorization: Crout's and Cholesky
13	Sensitivity of linear systems
14	Gauss-Jacobi and Gauss-Seidel method
15	Power method to find eigenvalues
16	Regression
17	Regression continued

*Some of the topic can take more than one lecture.