

Introduction to tensor calculus

Professor

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Institution

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General Information

Finite-dimensional vector spaces, scalar products, norms, bases, subspaces, maps, functionals, convergence of vectors, projections, differentiation. Second-order tensors, symmetric and skew-symmetric tensors, orthogonal tensors, eigenvalues, eigenvectors, spectral theorem, square-root theorem, polar decomposition theorem, Cayley-Hamilton theorem, coaxial tensors. Third and fourth-order tensors. Isotropic functions. Derivatives of tensor functions.

Schedule

Dates	Description
09/02/2023, 10:00-12:00	Online course
14/02/2023, 10:00-12:00	Online course
16/02/2023, 10:00-12:00	Online course
21/02/2023, 10:00-12:00	Online course
23/02/2023, 10:00-12:00	Online course
02/03/2023, 10:00-12:00	Online course
09/03/2023, 10:00-12:00	Online course
16/03/2023, 10:00-12:00	Online course
Total 16 Hours – 8 Credits	

Other information

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