

# Introduction to tensor calculus

## Professor

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## Institution

Institute of Information  
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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, h 10-12	Online course
14/02/2023, h 10-12	Online course
16/02/2023, h 10-12	Online course
21/02/2023, h 10-12	Online course
23/02/2023, h 10-12	Online course
02/03/2023, h 10-12	Online course
09/03/2023, h 10-12	Online course
16/03/2023, h 10-12	Online course
<b>Total 16 Hours – 8 Credits</b>	

## Other information

To attend, send an email to [dott-dicea@unifi.it](mailto:dott-dicea@unifi.it) more information on [www.indicee.unifi.it](http://www.indicee.unifi.it)