

Introduction into linear algebra

Course Logistics

Ali Golestani ¹ Alireza Nikpoosh ² Narges Seifi ³

Department of Mathematics
Iran University of Science and Technology

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Textbooks

- Linear Algebra for Computer Science [2021], Thulasidas. (**Course-Main**)
- Linear Algebra and Its Applications [4th ed], Strang. (**CS-Complementary**)
- Linear Algebra [2nd ed], Hoffman. (**TA-Main**)
- Applied Linear Algebra [2nd ed], Olver. (**Math-Complementary**)



Courses

- Linear Algebra 101 [MIT], Strang. (**YouTube, MIT Opencourseware**)
- Linear Algebra 101 [Sharif], Shahshahani. (**Maktabkhooneh, OCW Sharif**)



TA Syllabus

- Mathematical Preliminaries
- Vector Fields and Linearity
- Dimension and Basis
- Linear Transformations
- Matrix Spaces and Dual forms
- Matrix Representation and Matrix Operations
- Linear Equations
- Eigenvalues and Eigenvectors
- Polynomials
- Interpolation
- Inner Product Spaces

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Grading



Dimensionality Reduction Using Principal Component Analysis



Discussion Forms

Telegram Group

Click on the link to join: <https://t.me/+IIT7y5W0MMw4ZWM0>

E-Mails

- Nadjafikhah@IUST
- Golestani@IUST
- Nikpoosh@IUST
- Seifi@IUST



Important Links

Hyper References

- Github Repo
- LMS Page

