

Elementary Differential Equations and Linear Algebra

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Instructors

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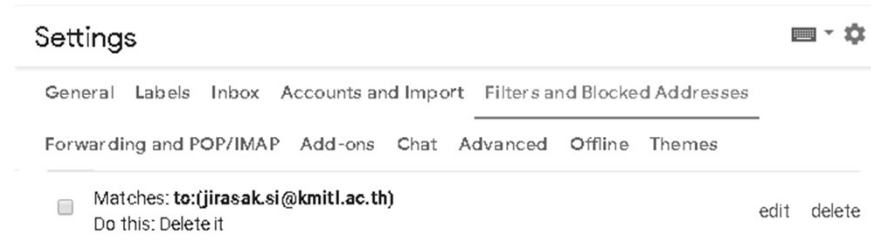
- Email : ksjirasa@gmail.com

- เว็บไซต์รายวิชา (Pass : ComEngr)

- http://www.ce.kmitl.ac.th/management.php?action=sj_edit&SUBJECT_ID=44

- Online course

- <https://www.edx.org/course/linear-algebra-foundations-frontiers-utaustinx-ut-5-05x-0>



Grading Policy

- แบบฝึกหัด/สอบย่อย 10%
- สอบกลางภาค 40%
- สอบปลายภาค 50%

Course Syllabus

- Vectors in Linear Algebra
- Linear Transformations and Matrices
- Matrix-Vector Operations
- From Matrix-Vector Multiplication to Matrix-Matrix Multiplication
- Matrix-Matrix Multiplication
- Gaussian Elimination

Course Syllabus

- More Gaussian Elimination and Matrix Inversion
- More on Matrix Inversion
- Vector Spaces
- Vector Spaces, Orthogonality, and Linear Least Squares
- Orthogonal Projection, Low Rank Approximation, and Orthogonal Bases
- Eigenvalues, Eigenvectors, and Diagonalization

Reference

- Linear Algebra: Foundations to Frontiers (Robert van de Geijn and Maggie Myers)
 - <https://courses.edx.org/courses/course-v1:UTAustinX+UT.5.05x+2T2017/course/>
- College Level Advanced Linear Algebra Theory & Programming
 - <https://www.udemy.com/college-level-linear-algebra-theory-and-practice/>
- LAFF-On Programming for Correctness
 - <https://courses.edx.org/courses/course-v1:UTAustinX+UT.PQ.14.01x+1T2017/course/>