

# University of Pretoria Yearbook 2016

## Linear algebra 152 (MAT 152)

**Qualification** Undergraduate

**Faculty** [Faculty of Natural and Agricultural Sciences](#)

**Module credits** 8.00

**Prerequisites** MPR 193 and MPR 194

**Contact time** 2 lectures per week, 1 discussion class per week

**Language of tuition** English

**Academic organisation** Mathematics and Applied Maths

**Period of presentation** Semester 2

### Module content

Geometry of the two and three-dimensional Euclidean spaces: Vectors, dot and cross products, lines and planes. Euclidean  $m$ -spaces, systems of linear equations, row reduction of linear systems, linear dependence and independence, subspaces, basis and dimension. Matrices: Operations on matrices, matrix equations and inverses, determinants, Cramer's rule, rank of a matrix

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