Mathematics I - Video course

1. Calculus of Functions of One Variable

2. Calculus of Functions of Several Variables
Scaler fields, Limit and Continuity, Partial derivatives, Chain rules, Implicit differentiation, web Gradient, Directional derivatives, Total differential, Tangent planes and normals, Maxima, Minima and Saddle Points, Constrained maxima and minima, Double Integrals, Applications to Areas and Volumes, Change of variables.

3. Vector Calculus
Vector fields, divergence and curl, Line Integrals, Green's Theorem, Surface integrals, Divergence Theorem, Stoke's theorem and application.

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