



MAT1141 Geometry I

[45h+30h exercises] 7 credits

This course is taught in the 2nd semester

Teacher(s): Francis Borceux

Language: French
Level: First cycle

Aims

This course completes the skills acquired in the courses of analysis and algebra, by dealing with various situations in the context of plane and space geometry. Students are invited to develop a geometric intuition, as well as to express it in the language of algebra and analysis.

Main themes

Euclidean geometry: euclidean spaces, quadratic forms; curves and surfaces in the three dimensional space

Content and teaching methods

The course has two parts. The first one concerns euclidian and affine spaces, with a particular interest to classifications of conics; the second one will concern the analytic theory of curves and surfaces: the curvature and torsion of a curve, the Gauss curvature of a surface.

Other credits in programs

MAFY11BA Première année polyvalente en sciences mathématiques et (7 credits) Mandatory

physiques