



## MAT1241 Geometry II

[45h+15h exercises] 6 credits

This course is taught in the 2nd semester

**Teacher(s):** Pierre Bieliavsky  
**Language:** French  
**Level:** First cycle

### Aims

The course aims at developing an intuition for geometrical objects that are more general than those met in the course Geometry I.

### Main themes

This course is a continuation of the course Geometry I. It will contain two parts : projective geometry and riemannian geometry of surfaces in the three dimensional space.

### Content and teaching methods

The course will comport two parts. The first part will be a classical introduction to projective geometry : Pappus and Desargues theorems, duality, perspectivities and birapport, link with affine geometry. The second part will concern the metric theory of surfaces in the three dimensional euclidean space : different types of curvature, minimal surfaces and the Gauss-Bonnet theorem.

### Other credits in programs

<b>MATH12BA</b>	Deuxième année de bachelier en sciences mathématiques	(6 credits)	Mandatory
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