Course Title: Differential Geometry	**Number of Units:1**
SSD : MAT03	**CFU:** 6
Course aims: To provide students with a good understanding of the concepts and methods of differential geometry aimed at solving engineering problems.	
Course Description: space. Tangent bundle and vector fields. Vector bundles. Differentials. Cotangent bundle and differential forms. Tensor algebra. Tensor bundles and tensor fields. Flux of a vector field. Lie derivative and Lie bracket. Integration on manifolds. Closed and exact forms. Stokes Theorem. Connections on a vector bundle. Covariant derivative. Riemannian structures and Levi-Civita connection. Geodetics.	
Assumed Background: Linear Algebra at undergraduate level	
Assessment methods: : Oral examination.	