Course Data

Course Title	Engineering Mathematics (2) Code: EMP 102
Academic year / Semester	2016 / 2017, First Semester
Program on which the course is given	Industry – Energy and Sustainable Energy
Major or Minor element of program	Major
Prerequisites	EMP 101
Credit hours	3
Contact hours per week	Lecture: 2 Hours Tutorials: 2 Hours

Course Contents

Calculus

- Implicit differentiation
- Hyperbolic functions, Inverse trigonometric and inverse hyperbolic functions and their derivatives
- Integration by Parts, Partial fractions, Reduction, Substitution
- Definite Integral
- Applications for calculating Area, Volume, Surface area.

Analytical Geometry

- Coordinate systems
- Pairs of straight Lines
- Circle
- Conic sections, parabola, ellipse, hyperbola, Plane , Sphere , Cylinder , Cone.