

1.	Title of the course	Statistical Methods for Engineers
2.	Course number	MA504L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To MA5103/3
6.	To be offered by	Department of Mathematics and Statistics
7.	To take effect from	July 2022
8.	Prerequisite	CoT
9.	Course Objective(s): The main objective of this course is to introduce statistical concepts and methods for solving engineering problems. Students will learn to organize, describe, analyse, and present data. It will develop students' ability in statistical modelling, inferring unknown parameters, and predicting future observations using existing data.	
10.	Course Content: Descriptive Statistics, Sampling Distributions, Point Estimation, Interval Estimation, Testing of Hypothesis, Linear Regression Models, Analysis of Variance, Complete Randomized Designs, Randomized Block Designs, Factorial experiments.	
11.	Textbook(s): 1. Walpole R E, Myers R H, Myers S L and Ye K E, <i>Probability & Statistics for Engineers & Scientists</i> , 9th Edition, Prentice Hall, Boston (2012).	
12.	Reference(s): 1. Montgomery D C, Runger G C and Hubele N F, <i>Engineering Statistics</i> , 5th Edition, Wiley, Hoboken N J (2012). 2. Draper N R and Smith H, <i>Applied Regression Analysis, Series in Probability and Statistics</i> , John Wiley and Sons (Asia) Pvt. Ltd. (2003).	