

**INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI
PROFORMA FOR NEW COURSE**

1.	Title of the Course	Statistical Methods for Engineers
2.	Course Number	MA5103
3.	Status of the Course	Elective
4.	Structure of Credits	3-0-0-3
5.	Offered to	PG
6.	New Course/ Modification to	New Course
7.	To be offered by	Dr. Ishapathik Das
8.	To take effect from	July 2018
9.	Prerequisite	CoT
10.	Whether approved by the Program	Yes
11.	<p>Course Objective (Max 70 words): 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.</p>	
12.	<p>Course Content (Max 100 words): 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.</p>	
13.	<p>Text Book(s): 1. R. E. Walpole, R. H. Myers, S. L. Myers, K. E. Ye, Probability & Statistics for Engineers & Scientists, 9th Edition, Prentice Hall, Boston, 2012.</p>	
14.	<p>References(s): 1. D. C. Montgomery, G. C. Runger, N. F. Hubele, Engineering Statistics, 5th Edn, Wiley, N.J. Hoboken, 2012. 2. N. R. Draper, H. Smith, Applied Regression Analysis, John Wiley and Sons (Asia) Pvt. Ltd., Series in Probability and Statistics, 2003.</p>	