

## Department of Statistics

### Curriculum Mapping of the courses to employability / entrepreneurship / skill development

<b>Class</b>	<b>Paper code</b>	<b>Title of the paper</b>	<b>Unit No. and topics focusing on employability / entrepreneurship / skill development</b>	<b>employability / entrepreneurship / skill development</b>
FYBSC SEM I	RJSUSTA101	Descriptive Statistics-I	Unit 2. Classification and Presentation of data and Measures of central tendency Unit 3. Measures of Dispersion, Skewness & Kurtosis.	1. Data collection and presentation skills 2. Employability in the field of Data Science
	RJSUSTA102	Statistical Methods-I	Unit 1. Elementary Probability Theory Unit 2. Concept of Discrete random variable and properties of its probability distribution Unit 3. Some Standard Discrete Distributions	1. Employability in the field of sports, weather reports etc. 2. Problem solving abilities
FYBSC SEM 2	RJSUSTA201	Descriptive Statistics-II	Unit 1. Correlation and regression analysis Unit 2. Time series Unit 3. Index Numbers	1. Data Analysis skills 2. Employability in the field of Stock Market/ BSE
	RJSUSTA202	Statistical Methods-II	Unit 3. Estimation and Testing of hypothesis	1. Critical thinking 2. Problem solving abilities

FYBCOM SEM 1	RJCUCOM106	Mathematical and Statistical Techniques-I	Unit I : Shares and Mutual Funds Unit II : Permutation, Combination and Linear Programming Problems Unit III: Summarization Measures Unit IV: Elementary Probability Theory Unit V: Decision Theory	<ol style="list-style-type: none"> <li>1. Employability in Insurance sector and Banking sector</li> <li>2. Data collection and presentation skills</li> <li>3. Employability in the field of Data Science</li> <li>4. Employability in the field of sports, weather reports etc.</li> <li>5. Problem solving abilities</li> <li>6. Decision making skills</li> </ol>
FYBCOM SEM 2	RJCUCOM206	Mathematical and Statistical Techniques-II	Unit I : Functions, Derivatives and Their Applications Unit II : Interest and Annuity Unit III: Bivariate Linear Correlation and Regression Unit IV : Time series and Index Numbers Unit V: Elementary Probability Distributions	<ol style="list-style-type: none"> <li>1. The profit and loss in business using graphs.</li> <li>2. Employability in Insurance sector and Banking sector</li> <li>3. Data Analysis skills</li> <li>4. Employability in the field of Stock Market/ BSE</li> <li>5. Problem solving abilities</li> </ol>
SYBSC SEM 3	RJSUSTA301	Probability Distributions	Unit 1. Univariate Random Variables. (Discrete and Continuous)	<ol style="list-style-type: none"> <li>1. Problem solving abilities</li> </ol>

			Unit 2. Standard Discrete Probability Distributions. Unit 3. Bivariate Probability Distributions.	
	RJSUSTA302	Theory of Sampling	Unit 1- Concepts of Sampling and Simple Random Sampling Unit 2- Stratified Sampling Unit 3 -Ratio and Regression Estimation	1. Employability in the field of NSSO, WHO, FAO
	RJSUSTA303	Operations Research-1	Unit 1. LPP Unit 2. Transportation Problem Unit 3. Assignment Problem	1. Critical thinking 2. Problem solving abilities 3. Decision making skills
SYBSC SEM 4	RJSUSTA401	Probability and Sampling distributions	Unit 1. Standard Continuous Probability Distributions Unit 2. Normal Distribution Unit 3. Exact Sampling Distributions	1. Employability in the field of Quality Control.
	RJSUSTA402	Analysis of Variance and Design of Experiments	Unit 1- Analysis Of Variance Unit 2 - Design Of Experiments Unit 3 - Factorial Experiments	1. Data Analysis skills 2. Employability in the field of Agriculture
	RJSUSTA403	Operations Research-2	Unit 1. PERT CPM Unit 2. Game Theory Unit 3. Decision Theory	1. Critical thinking 2. Problem solving abilities 3. Decision making skills
TYBSC SEM 5	RJSUSTA501	Probability and Distribution Theory	Unit 1. Probability-I Unit 2. Probability-II	1. Employability in the field of sports, weather reports etc.

	RJSUSTA502	Theory of Estimation	Unit 1. Point estimation and Properties of estimator -1 Unit 2. Methods of point estimation  Unit 4. Introduction to Linear models	1. Model building skills
	RJSUSTA503	Biostatistics	Unit 3. Clinical Trials Unit 4. Bioequivalence	1. Employability in the field of Clinical Research
	RJSUSTA504	Regression Analysis Using R software	Unit 1- Fundamental of R Unit 2 - Simple Linear Regression Model Unit 3 - Multiple Linear Regression Model Unit 4- Validity of Assumptions	1. Computer Programming skills 2. Employability in the field of Machine learning and data science
	RJSUMATSAC505	Computer Programming and System Analysis	Unit 1- Relational Database management system Unit 2- Algorithm & Flowcharts Unit 3- Introduction to Python Programming Unit 4 - Java Programming Concepts	1. Computer Programming skills 2. Employability in the field of IT and Machine learning.
TYBSC SEM 6	RJSUSTA601	Distribution theory and Stochastic Processes	Unit 3. Stochastic processes Unit 4. Queuing theory	1. Critical thinking 2. Problem solving abilities
	RJSUSTA602	Testing of Hypothesis	Unit 1. MP Test Unit 2. UMP Test and LRT Unit 3. SPRT Unit 4. Non Parametric Tests	1. Analytical Skills 2. Critical thinking
	RJSUSTA603	Operations Research Techniques	Unit 1- LPP Unit 2- Inventory Control Unit 3- Replacement Theory Unit 4- Simulation and Reliability	3. Critical thinking 4. Problem solving abilities 5. Decision making skills

	RJSUSTA604	Elements of Actuarial Science	Unit 1. Mortality tables Unit 2. Compound interest and Annuities Certain Unit 3. Life Annuities Unit 4. Assurance Benefits	1. Employability in Insurance sector and Banking sector
	RJSUMATSAC605	Computer Programming and System Analysis	Unit 1. Java Exception Handling and Applets Unit 2. Java AWT and Event Handling Unit 3. Python Programming Unit 4. Strings, list and Dictionaries	1. Computer Programming skills 2. Employability in the field of IT and Machine learning.

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