

**1. Syllabus Details (Semester Wise) :**

**COURSE STRUCTURE FOR M.SC. IN STATISTICS**

**SEMESTER-I**

<b>MS101</b>	<b>:</b>	<b>Advanced Analysis &amp; Linear Algebra</b>	<b>(4 Credits)</b>
<b>MS102</b>	<b>:</b>	<b>Probability and Distribution theory</b>	<b>(4 Credits)</b>
<b>MS103</b>	<b>:</b>	<b>Sampling Techniques</b>	<b>(4 Credits)</b>
<b>MS104</b>	<b>:</b>	<b>Official Statistics and R Programming</b>	<b>(4 Credits)</b>
<b>MS105</b>	<b>:</b>	<b>Lab I</b>	<b>(3 Credits)</b>
<b>MS106</b>	<b>:</b>	<b>Lab II</b>	<b>(3 Credits)</b>
<b>MS107</b>	<b>:</b>	<b>Seminar</b>	<b>(2 Credits)</b>
<b>MPDC-105</b>	<b>:</b>	<b>Remedial Language Course</b>	<b>(1 Credit)</b>

**SEMESTER-II**

<b>MS201</b>	<b>:</b>	<b>Measure Theory and Advanced Probability</b>	<b>(4 Credits)</b>
<b>MS202</b>	<b>:</b>	<b>Linear Regression Analysis &amp; Time Series</b>	<b>(4 Credits)</b>
<b>MS203</b>	<b>:</b>	<b>Statistical Inference</b>	<b>(4 Credits)</b>
<b>MS204</b>	<b>:</b>	<b>Design of Experiments</b>	<b>(4 Credits)</b>
<b>MS205</b>	<b>:</b>	<b>Lab I</b>	<b>(3 Credits)</b>
<b>MS206</b>	<b>:</b>	<b>Lab II</b>	<b>(3 Credits)</b>
<b>MS207</b>	<b>:</b>	<b>Seminar</b>	<b>(2 Credits)</b>
<b>MPDC-205</b>	<b>:</b>	<b>Moral Studies</b>	<b>(1 Credit)</b>

**SEMESTER-III**

<b>MS301</b>	<b>:</b>	<b>Multivariate Analysis</b>	<b>(4 Credits)</b>
<b>MS302</b>	<b>:</b>	<b>Demography &amp; Vital Statistics</b>	<b>(4 Credits)</b>
<b>MS303</b>	<b>:</b>	<b>Reliability Theory &amp; Statistical Quality Control</b>	<b>(4 Credits)</b>

<b>MS304</b>	<b>: Stochastic Processes</b>	<b>(4 Credits)</b>
<b>MS305</b>	<b>: Lab I</b>	<b>(3 Credits)</b>
<b>MS306</b>	<b>: Lab II</b>	<b>(3 Credits)</b>
<b>MS307</b>	<b>: Seminar</b>	<b>(2 Credits)</b>
<b>MPDC-305</b>	<b>: Community Service</b>	<b>(1 Credit)</b>

#### SEMESTER-IV

<b>MS401</b>	<b>: Sequential and Bayesian Analysis</b>	<b>(4 Credits)</b>
<b>MS402</b>	<b>: Econometrics</b>	<b>(4 Credits)</b>
<b>MS403</b>	<b>: Operations Research</b>	<b>(4 Credits)</b>
<b>MS404</b>	<b>: Non Parametric Inference and Stochastic Orders</b>	<b>(4 Credits)</b>
<b>MS405</b>	<b>: Lab</b>	<b>(4 Credits)</b>
<b>MS406</b>	<b>: Project Work</b>	<b>(4 Credits)</b>
<b>MPDC-405</b>	<b>: Ambedkar Studies</b>	<b>(1 Credit)</b>

#### COURSE STRUCTURE FOR Ph. D. COURSE WORK IN STATISTICS

<b>Paper Code</b>	<b>Paper Title</b>	<b>Credit</b>
<b>PS 101</b>	<b>Research Methodology</b> (Every department shall offer an advanced course covering the research methodologies/philosophy (or any other relevant advanced course as decided by the DRC) of the discipline concerned. This course shall be compulsory for all students of the department concerned)	Credit-04
<b>PS 102 – PS 108</b>	<b>Optional paper</b> (Every eligible guide of a department shall offer one course related to his/her field to specialization. This course may have a component on reviewing of published research work in the relevant field. Students shall be free to choose one of these courses as per their research interest)	Credit-04
	<b>PS 102- Reliability Theory and Sequential Analysis</b>	

	<b>PS 103- Statistical Inference</b>	
	<b>PS 104- Sampling Theory</b>	
	<b>PS 105- Econometrics and Time Series</b>	
	<b>PS 106- Ordered Random Variables</b>	
	<b>PS 107- Sampling Design &amp; Mathematical Programming Techniques</b>	
	<b>PS 108- Stochastic Orders</b>	
	<b>PS 109- Soft Computing</b>	
<b>PS 110</b>	<b>Presentation &amp; review of literature</b>	<b>Credit-04</b>
<b>PS 111</b>	<b>Synopsis</b>	<b>Credit-04</b>

## COURSE STRUCTURE FOR M. Phil. IN STATISTICS

### SEMESTER I

<b>S/N</b>	<b>COURSE CODE</b>	<b>PAPER TITLE</b>	<b>Credit</b>
<b>1</b>	<b>MPS 101</b>	<b>RESEARCH METHODOLOGY</b>	<b>Credit-06</b>
<b>2</b>	<b>MPS 102-109</b>	<b>OPTIONAL PAPER</b> (Every eligible guide of a department shall offer one course related to his/her field to specialization. Students shall be free to choose one of these courses as per their research interest)	<b>Credit-06</b>
<b>3</b>	<b>MPS 110</b>	<b>STATISTICAL SOFTWARE &amp; LAB SESSIONS</b>	<b>Credit-06</b>

**SEMESTER II**

<b>S/N</b>	<b>COURSE CODE</b>	<b>PAPER TITLE</b>	<b>Credit</b>
<b>1</b>	<b>MPS 201</b>	<b>DISSERTATION</b>	<b>Credit-14</b>
<b>2</b>	<b>MPS 202</b>	<b>SEMINAR PRESENTATION &amp; VIVA-VOCE</b>	<b>Credit-04</b>