Proposed Course for M. Sc. in STATISTICS AND COMPUTING DST-CENTRE FOR INTERDISCIPLINARY MATHEMATICAL SCIENCES (CIMS), BANARAS HINDU UNIVERSITY, VARANASI Distribution of Different Courses and Credits in Various Semesters

SEMESTER - I

| Course Code | Title | Credit |
|-------------|---|--------|
| MSMS-101 | Statistical Inference: Point Estimation | 3 |
| MSMS-102 | Measure and Probability Theory | 3 |
| MSMS-103 | Sampling Techniques and Designs of Experiment | 3 |
| MSMS-104 | Functions & Numerical Computing | 3 |
| MSMS-105 | Computing with R | 3 |
| MSMS-106 | Practical based on above papers | 4 |
| | Total | 19 |

SEMESTER - II

| Course Code | Title | Credit |
|-------------|---|--------|
| MSMS – 201 | Data Mining and Statistical Pattern Recognition | 3 |
| MSMS - 202 | Advanced Statistical Inference | 3 |
| MSMS – 203 | Linear Algebra and Basics of Linear Regression | 3 |
| MSMS - 204 | Distribution Theory & Stochastic Process | 3 |
| MSMS – 205 | Operations Research | 3 |
| MSMS – 206 | Practical based on above Papers | 4 |
| MSMS - 207 | SWAYAM Course | 2 |
| | | |
| | Total | 21 |

SEMESTER - III

| Course Code | Title | Credit | | |
|---|--------------------------------------|--------|--|--|
| MSMS - 301 | Time Series Analysis | 3 | | |
| MSMS - 302 | Statistical Machine Learning | 3 | | |
| MSMS - 303 | Multivariate Analysis | 3 | | |
| Any TWO papers out of the Paper Nos. MSMS – 304 to MSMS – 307 | | | | |
| MSMS - 304 | Biostatistics | 3 | | |
| MSMS – 305 | Non-Parametric Statistical Inference | 3 | | |
| MSMS – 306 | Lifetime data Analysis | 3 | | |
| MSMS - 307 | SAS and Statistical Computing | 3 | | |
| MSMS - 308 | Practical based on above papers | 4 | | |
| MSMS – 309 | SWAYAM Course | 2 | | |
| | Total | 21 | | |

SEMESTER - IV

| Course Code | Title | Credit |
|-------------|---|--------|
| MSMS401 | Bayesian Statistics and Computation | 3 |
| MSMS - 402 | Computational Statistics | 3 |
| MSMS - 403 | Advanced Regression Analysis | 3 |
| | Any ONE paper out of the Paper Nos. MSMS – 404 - MSMS – 407 | |
| MSMS - 404 | Geostatistics | 3 |
| MSMS - 405 | Official Statistics | 3 |
| MSMS - 406 | Statistical Quality Control | 3 |
| MSMS - 407 | Longitudinal Data Analysis | 3 |
| MSMS - 408 | Practical based on above papers | 3 |
| MSMS - 409 | Project Work | 4 |
| | Total | 19 |
| | GRAND TOTAL | 80 |
| | | |