



MATS UNIVERSITY

City Information Centre : MATS Tower, Pandri, Raipur Chhattisgarh, 492 002 INDIA
 Tel: +91 771 407 8995 / 96, Fax: +91 771 407 8997,
 Email: info@matsuniversity.ac.in

Master of Science - Microbiology

| M.Sc (Microbiology) | | SCHEME OF STUDY AND CURRICULUM MATRIX | | | |
|------------------------------|--|---------------------------------------|------------|------------|-------------|
| Semester I | | | | | |
| Code | Subject | Credit | Univ. | Int. Marks | Total Marks |
| | | 1Cr= 10 hrs | Exam Marks | | |
| CORE COURSES | | | | | |
| MSLS/MS(MB)/101 | General Microbiology | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/102 | Biochemistry | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/103 | Computer, Bioinformatics & Biostatistics | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/104 | Instrumentation | 6 | 70 | 30 | 100 |
| CORE BRACKET COURSES | | | | | |
| MSLS/MS(MB)/105 | Management in Practice | 3 | 35 | 15 | 50 |
| LABORATORY | | | | | |
| MSLS/MS(MB)/106 | General Microbiology | 3 | 35 | 15 | 50 |
| MSLS/MS(MB)/107 | Biochemistry | 3 | 35 | 15 | 50 |
| MSLS/MS(MB)/108 | Computer, Bioinformatics & Biostatistics | 3 | 35 | 15 | 50 |
| Value Adds (pre term) | Orientation Program (Yoga, Meditation, Bridge Course, OBL) | | | | |
| | Communication Skills | | | | |
| | Presentation Skills | | | | |
| | Total | 36 | 420 | 180 | 600 |
| Semester II | | | | | |
| Code | Subject | Credit | Univ. | Int. Marks | Total Marks |
| | | 1Cr= 10 hrs | Exam Marks | | |

| | | | | | |
|-----------------------------|---|--------------------|-------------------|-------------------|--------------------|
| CORE COURSES | | | | | |
| MSLS/MS(MB)/201 | Cell & Molecular biology | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/202 | Microbial physiology & metabolism | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/203 | Immunology | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/204 | Microbial genetics | 6 | 70 | 30 | 100 |
| CORE BRACKET COURSES | | | | | |
| MSLS/MS(MB)/205 | Entrepreneurship | 3 | 35 | 15 | 50 |
| LABORATORY | | | | | |
| MSLS/MS(MB)/206 | Cell & Molecular biology | 3 | 35 | 15 | 50 |
| MSLS/MS(MB)/207 | Microbial physiology & metabolism | 3 | 35 | 15 | 50 |
| MSLS/MS(MB)/208 | Immunology | 3 | 35 | 15 | 50 |
| Value Adds | Industrial Visit | | | | |
| | Ethics in Biotechnology | | | | |
| | Technical Writing & Report Presentation | | | | |
| | Total | 36 | 420 | 180 | 600 |
| Semester III | | | | | |
| Code | Subject | Credit | Univ. | Int. Marks | Total Marks |
| | | 1Cr= 10 hrs | Exam Marks | | |
| CORE COURSES | | | | | |
| MSLS/MS(MB)/301 | Environmental microbiology | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/302 | Medical microbiology | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/303 | Industrial microbiology | 6 | 70 | 30 | 100 |
| MSLS/MS(MB)/304 | Food & Dairy microbiology | 6 | 70 | 30 | 100 |
| CORE BRACKET COURSES | | | | | |
| MSLS/MS(MB)/305 | IPR, Bioethics & | 3 | 35 | 15 | 50 |

| | Research Methodology | | | | |
|--------------------|--|--------------------|-------------------|-------------------|--------------------|
| LABORATORY | | | | | |
| MSLS/MS(MB)/306 | Environmental microbiology | 3 | 35 | 15 | 50 |
| MSLS/MS(MB)/307 | Medical microbiology | 3 | 35 | 15 | 50 |
| MSLS/MS(MB)/308 | Industrial microbiology | 3 | 35 | 15 | 50 |
| Value Adds | Personality Development (GD, PI & Leadership Skills) | | | | |
| | Career Orientation & Development | | | | |
| | Total | 36 | 420 | 180 | 600 |
| Semester IV | | | | | |
| Code | Subject | Credit | Univ. | Int. Marks | Total Marks |
| | | 1Cr= 10 hrs | Exam Marks | | |
| | Dissertation | 36 | | | |
| MSLS/MS(MB)/401 | Seminar (Based on Research) | | 100 | - | 100 |
| MSLS/MS(MB)/402 | Dissertation | | 400 | - | 400 |
| MSLS/MS(MB)/403 | Viva Voce (including Feed back from the institution where research carried wherever necessary) | | 100 | - | 100 |
| | Total | 36 | 600 | - | 600 |
| | GRAND TOTAL | 144 | 1860 | 540 | 2400 |