Master of Technology Program in Bioscience and Bioengineering

| Semester 1 | | | | Semester 2 | | | | | |
|---------------------|---------------------|----------------------|---|------------|-----------------|---------------|-------------------|-------|---------|
| Cat. | Course | | L-T-P | Credits | Cat. | . Course | | L-T-P | Credits |
| С | BB611 | Introduction to | duction to 3-0-3 4 C BB620 Advanced Genet | | 3-0-0 | 3 | | | |
| | | Numerical methods | | | | | engineering | | |
| | | and data analysis | | | | | | | |
| С | BB612 | Bioprocess & | 3-1-0 | 4 | С | BB621 | Disease, Process, | 3-0-0 | 3 |
| | | Fermentation | | | | | Diagnostic & | | |
| | | Technology | | | | | Therapeutics | | |
| С | BB613 | Biochemical | 3-0-0 | 3 | С | BB619 | Bioinformatics & | 3-0-0 | 3 |
| | | Engineering | | | | | Computational | | |
| | | | | | | | Biology | | |
| E | E | Elective 1 | 3-0-0 | 3 | E | E | Elective 2 | 3-0-0 | 3 |
| С | BB614 | Microbiology & | 1-0-3 | 2 | С | BB622 | Biochemical & | 1-0-3 | 2 |
| | | diagnostic | | | | | Computational | | |
| | | techniques-1 | | | | | techniques | | |
| C | BB615 | Introduction to | 0-0-0 | 0 | С | BB616 | Biosafety and IPR | 0-0-0 | 0 |
| | | profession | | | | | | | |
| | Total Credits 16 16 | | | | Total Credits | | | | 14 |
| Seme | ster 3 | | | | Seme | ester 4 | | | |
| TH | BB698 | 698 Thesis 15 | | 15 | TH BB699 Thesis | | 1 | 15 | |
| | Total Credits 15 | | | | | Total Credits | | | 15 |
| GRAND Total Credits | | | | | | | 60 | | |

Table 4: Share of compulsory and Elective courses to be credited as part of the Proposed *M.Tech.* (*Bioscience and Bioengineering*) Program at IIT Jodhpur

| Category | Course Category Title | Courses | Credits |
|----------|-----------------------|---------|---------|
| С | Compulsory | 8 | 24 |
| E | Electives | 2 | 6 |
| TH | Thesis | 2 | 30 |
| | | Total | 60 |

Elective courses for $1^{\rm st}$ and $2^{\rm nd}$ semester were decided based on course load on existing faculty members in respective semesters.

Semester 1-elective courses

| Category | Courses | Course Category Title | L-T-P | Credits |
|----------|---------|---------------------------|-------|---------|
| E | BL758 | Neuro Engineering Systems | 3-0-0 | 3 |
| E | BB627 | Animal Biotechnology | 3-0-0 | 3 |
| E | BB628 | Physiology & Neuroscience | 3-0-0 | 3 |

Semester 2-elective courses

| Category | Courses | Course Category Title | L-T-P | Credits |
|----------|---------|-----------------------------|-------|---------|
| Е | BB629 | Environment biotechnology & | 3-0-0 | 3 |
| | | Bioremediation | | |
| E | BB630 | Bioimaging | 3-0-0 | 3 |
| Е | BB631 | Bioenergy systems Structure | 3-0-0 | 3 |