Faculty of Life Science & Technology

Study and Evaluation Scheme Of Master of Technology in Biotechnology



AKS UNIVERSITY, SATNA (M.P.)

Study and Evaluation Scheme

** The University Authorities reserve all the rights to make any additions/ deletions or changes/ modifications to this syllabus as deemed necessary.

(Applicable w.e.f Academic Session 2020-21 till revised)

AKS University, Satna Sherganj, Panna Road, Satna (MP) 485001

Study & Evaluation Scheme of Master of Technology in Biotechnology SUMMARY

| Programme : | M.Tech (Biotech) |
|-------------------------------|-------------------------------------|
| Duration : | Two year full time (Four Semesters) |
| Medium : | English |
| Minimum Required Attendance : | 80 % |
| Maximum Credits: | 96 |

Evaluation Assessment :

| Internal | External | Total |
|-------------|-------------|-----------------------|
| 50 | 100 | 150 |
| Sessional-I | Sessional-I | Continuous Assessment |
| | | &attendance |
| 10 | 10 | 10+20=30 |
| Duration of | External | Internal |
| Examination | | |
| | 3 Hrs | 1.5 Hrs |

To qualify the course a student is required to secure a minimum of 40% marks in aggregate including the semester end examination, internal assessment evaluation (Both theory & Practical Papers)

A candidate who secures less than 36% or Grade **'D'** of marks in a Subject/Paper(s) shall be deemed to have failed in that Subject/Paper(s). In case a student has secured less than 36% or Grade **'R'** in Subject/Paper(s), he/she shall be deemed to re-appear (ATKT Examination) in Subject/Paper(s) to achieve the required percentage (Min. 36%) or grade (Min. D) in the Subject/Paper(s).

Faculty of Life Science & Technology Master of Technology (Biotechnology)

Semester-I

Teaching & Examination scheme

| S.No. | Subject Code | Subject | Periods | | | Credit |
|-------|-----------------|---|---------|---|----|--------|
| | | | L | Т | Р | |
| 1 | 55MBT101 | Advance Bioanalytical techniques | 4 | | - | 4 |
| 2 | 55MBT102 | Bioreactor Engineering | 3 | 1 | - | 4 |
| 3 | 55MBT103 | Genetic engineering | 3 | - | - | 3 |
| 4 | 55MBT104 | Advance Biochemistry | 4 | - | - | 4 |
| 5 | 55MBT105- | Applied Immunology and Vaccine Technology | 3 | - | - | 3 |
| 6 | 55MBT153 | Microbial and Immunotechnology (Lab) | - | - | 6 | 3 |
| 7 | 55MBT152 | Preparative and analytical Technology in Biotechnology (Lab) | - | - | 6 | 3 |
| | | TOTAL | 17 | 1 | 12 | 24 |

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Master of Technology (Biotechnology)

Semester-II

Teaching & Examination scheme

| S.No. | Subject Code | Subject | Periods | | | Credit |
|-------|-----------------|---|---------|---|----|--------|
| | | | L | Т | Р | |
| 1 | 55MBT201 | Industrial Enzymes and Its Application | 3 | 1 | - | 4 |
| 2 | 55MBT202 | Quality control Management in Biotechnology | 3 | | - | 3 |
| 3 | 55MBT203 | Applied bioinformatics and Molecular Modelling | 3 | 1 | - | 4 |
| 4 | 55MBT204 | Waste Management | 3 | - | - | 3 |
| 5 | 55MBT205, | Bioprocess Equipment Design | 3 | 1 | | 4 |
| 6 | 55MBT251 | Industrial Enzymes and Its Application (Lab) | - | - | 6 | 3 |
| 7 | 55MBT252 | Applied bioinformatics and Molecular Modelling (Lab) | _ | - | 6 | 3 |
| | | TOTAL | 15 | 3 | 12 | 24 |

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Semester-III

Teaching & Examination scheme

| S.No. | Subject Code | Subject | Periods | | | Credit |
|-------|-----------------|---|---------|---|----|--------|
| | | | L | Т | Р | |
| 1 | 55MBT301 | Research methodology and statistical analysis | 4 | 0 | 0 | 4 |
| 2 | 55MBT302 | Entrepreneurship and bioethics | 4 | 0 | 0 | 4 |
| 3 | 55MBT351 | Project Work(synopsis submission and presentation) | 0 | 0 | 20 | 10 |
| | | TOTAL | 8 | 0 | 20 | 18 |

Note : Students should submit synopsis of project with following contents

- 1. Title of the project
- 2. Review of literature
- 3. Aim and Objective followed by rationale of study
- 4. plan of work (Methodology)
- 5. Expected outcome
- 6. References

Faculty of Life Science & Technology Master of Technology (Biotechnology) Semester-IV

Teaching & Examination scheme

| S.No. | Subject Code | Subject | Р | Credit | | |
|-------|-----------------|--|---|--------|---|----|
| | | | L | Т | Р | |
| 1 | 55MBT451 | Project Work(Viva voce and presentation) | 0 | 0 | 0 | 20 |
| | | TOTAL | 0 | 0 | 0 | 20 |