| 1.  | OBJECTIVE                | Master of Business Administration (Data Sciences and Data Analytics) aims at developing Management professionals for Data Sciences and Data Analytics stream. The program will enable students to approach data using scientific methods. This program will develop the ability to think about the real problems that need to be solved, not to simply find technical solutions. Students will learn the theory behind the tools, which in turn will make you a more versatile data scientist. Data Sciences and Data Analytics will enable the candidates gain analytics competencies and hands on the tools used in data sciences thereby preparing them for business and techno-functional roles in data sciences and analytics projects. |  |                               |                   |              |  |  |  |
|-----|--------------------------|--|--|-------------------------------|-------------------|--------------|--|--|--|
| 2.  | DURATION (IN<br>MONTHS)  | 24 (Full Time)   |  |                               |                   |              |  |  |  |
| 3.  | INTAKE                   | 60   |  |                               |                   |              |  |  |  |
| 4.  | RESERVATION              | I.Within the sanctioned intake   | a) SC<br>(In<br>Percentage)                        | d) Defence<br>(In Percentage) |                   |              |  |  |  |
|     |                          |  | 15   | 7.5                           | 3                 | 0            |  |  |  |
|     |                          | II.Over and above<br>the sanctioned<br>intake  | la) Kachmiri Migrante - Ih) International Studente |                               |                   |              |  |  |  |
|     |                          |  | :  | 2                             |                   | 20           |  |  |  |
| 5.  | ELIGIBILITY              | Graduate from any recognized University/ Institution of National Importance with a minimum of 50% marks or equivalent grade (45% marks or equivalent grade for Scheduled Caste/ Scheduled Tribes).   |  |                               |                   |              |  |  |  |
| 6.  | SELECTION<br>PROCEDURE   | Symbiosis National   | Aptitude Test                                      | , Group Exe                   | cise and Personal | interaction. |  |  |  |
| 7.  | MEDIUM OF<br>INSTRUCTION | English  |  |                               |                   |              |  |  |  |
| 8.  | PROGRAMME<br>PATTERN     | Semester   |  |                               |                   |              |  |  |  |
| 9.  | COURSE & SPECIALISATION  | As per Annexure A  |  |                               |                   |              |  |  |  |
| 10. | FEE                      |  | Academic   | Fee p.a I                     | nstitute Deposit  | Total        |  |  |  |
|     | 1                        | •  | ·  | <b>L</b>                      |                   | •            |  |  |  |



|     | Indian Students<br>(Amount in INR) |  | 728000 | 20000 | 748000 |  |  |  |
|-----|------------------------------------|--|--------|-------|--------|--|--|--|
|     | International Students             | NRI/ PIO/ OCI<br>Category<br>(Amount in US\$)  | 13950  | 275   | 14225  |  |  |  |
|     | International Students             | Foreign National<br>Category<br>(Amount in US\$)   | 2600   | 275   | 2875   |  |  |  |
| 11. | ASSESSMENT                         | The courses will have 60% Continuous Assessment and 40% Term End [University] examination however, some courses (not more than 30% of the total programme credits) may have 100% Continuous Assessment.  |        |       |        |  |  |  |
| 12. | STANDARD OF<br>PASSING             | The assessment of the students for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10.000 corresponding to O (Outstanding). For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 4.000 corresponding to Grade P (Pass). Students securing less than 40% absolute marks in each head of passing will be declared FAIL. The University awards a degree to the student who has achieved a minimum CGPA of 4 out of maximum of 10 CGPA for the programme. |        |       |        |  |  |  |
| 13. | AWARD OF DEGREE                    | Master of Business Administration (Data Sciences and Data Analytics) will be awarded at the end of semester 4 examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA of 10 CGPA.  |        |       |        |  |  |  |

#### 14. | CLASSIFICATION OF CREDITS

| Semester | Generic<br>Core | Generic<br>Elective | Specialisa-<br>tion Core | Specialisa-<br>tion<br>Elective | Open<br>Elective | Mandatory<br>Non-Credit<br>Course/s | Non-Letter<br>Grade Audit<br>Course/s | Total |  |
|----------|-----------------|---------------------|--------------------------|---------------------------------|------------------|-------------------------------------|---------------------------------------|-------|--|
|          | Common          |                     |                          |                                 |                  |                                     |                                       |       |  |
| 1        | 18              | 9                   | 0                        | 0                               | 0                | 0                                   |                                       | 27    |  |
| 2        | 20              | 0                   | 0                        | 0                               | 9                | 1                                   | As per the<br>student's<br>choice     | 29    |  |
| 3        | 18              | 0                   | 0                        | 0                               | 9                | 1                                   |                                       | 27    |  |
| 4        | 8               | 9                   | 0                        | 0                               | 0                | 0                                   |                                       | 17    |  |
| Total    | 64              | 18                  | 0                        | 0                               | 18               | 0                                   |                                       | 100   |  |

The revised programme structure supersedes the previously approved programme structure dated 07/09/2024 for the programme.



This Programme Structure is aligned with the norms laid down by the University and is approved by the Academic Council.

Hereafter changes (if any) which conform to the policy on "Curriculum Development and Review" would be permissible, subject to revision of the Programme Structure, following the specified processes.

Director - Academics

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# Annexure A

| Catalog<br>Course<br>Code | Course<br>Code | Course Title                                       | Specialisation                    | Credit | Continu<br>ous<br>Assess<br>ment | Term<br>End<br>Examina<br>tion | Total<br>Marks |  |  |  |
|---------------------------|----------------|--|-----------------------------------|--------|----------------------------------|--------------------------------|----------------|--|--|--|
|                           | Semester : 1   |  |                                   |        |                                  |                                |                |  |  |  |
| Generic Core Courses      |                |  |                                   |        |                                  |                                |                |  |  |  |
| T2778                     | 0302420101     | Basics of Financial Management                     |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T2216                     | 0302420102     | Business Statistics                                |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3445                     | 0302420103     | Data Mining  |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3443                     | 0302420104     | Data preparation and Data management               |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T2560                     | 0302420105     | Principles and Practices of Management             |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T2225                     | 0302420106     | Research Methodology                               |                                   | 2      | 100                              | 0                              | 100            |  |  |  |
| T3436                     | 0302420107     | Domain Study(Manufacturing and Logistics)          |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3637                     | 0302420108     | <del>,                                      </del> |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3683                     | 0302420109     | Operations Research and Optimization Techniques    |                                   | 2      | 100                              | 0                              | 100            |  |  |  |
|                           |                |  | Total                             | 18     | 620                              | 280                            | 900            |  |  |  |
|                           |                |  | /e Course Group<br>three courses) |        |                                  |                                |                |  |  |  |
| T3446                     | 0302420111     | Advance Data Mining                                | ,                                 | 3      | 90                               | 60                             | 150            |  |  |  |
| T3331                     | 0302420112     | Cloud Computing                                    |                                   | 3      | 90                               | 60                             | 150            |  |  |  |
| T3447                     | 0302420113     | Machine learning                                   |                                   | 3      | 90                               | 60                             | 150            |  |  |  |
| T3448                     | 0302420114     | Text Analytics                                     |                                   | 3      | 90                               | 60                             | 150            |  |  |  |
|                           |                | Total  | Required Credits                  | 9      | 270                              | 180                            | 450            |  |  |  |
|                           |                |  | ester : 2                         |        |                                  |                                |                |  |  |  |
|                           |                | Generic C  | ore Courses                       | _      |                                  |                                |                |  |  |  |
| T3450                     | 0302420201     | 3  |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3070                     | 0302420202     | Advanced Business Statistics for Decision Making   |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3451                     | 0302420203     | Data Visualization and Modeling                    |                                   | 2      | 100                              | 0                              | 100            |  |  |  |
| T2114                     | 0302420204     | Essentials of Marketing<br>Management              |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3449                     |                | , , , , , , , , , , , , , , , , , , ,              |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T2253                     |                | Strategic Management                               |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T6075                     | 0302420207     | Managerial Economics                               |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3437                     | 1              | Domain Study(BFSI)                                 |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3635                     |                | Financial Analytics                                |                                   | 2      | 60                               | 40                             | 100            |  |  |  |
| T3718                     | 0302420210     | Knowledge Graphs                                   |                                   | 2      | 100                              | 0                              | 100            |  |  |  |



#### Annexure A

| Catalog<br>Course<br>Code | Course<br>Code | Course Title                          | Specialisation                 | Credit | Continu<br>ous<br>Assess<br>ment | Term<br>End<br>Examina<br>tion | Total<br>Marks                    |  |  |  |
|---------------------------|----------------|---------------------------------------|--------------------------------|--------|----------------------------------|--------------------------------|-----------------------------------|--|--|--|
| TH4788                    | 0302420218     | Health and Wellness Module I          |                                | 0      | 0                                | 0                              | Mandatory<br>Non-Credit<br>Course |  |  |  |
|                           |                |                                       | Total                          | 20     | 680                              | 320                            | 1000                              |  |  |  |
|                           |                |                                       |                                |        |                                  |                                |                                   |  |  |  |
|                           |                |                                       | Course Group<br>three courses) |        |                                  |                                |                                   |  |  |  |
| T3509                     | 0302420211     | Artificial Intelligence               | Artificial Intelligence        | 3      | 90                               | 60                             | 150                               |  |  |  |
| T3568                     |                | Natural Language Processing           | Artificial Intelligence        | 3      | 90                               | 60                             | 150                               |  |  |  |
| T3453                     | 0302420213     | Deep learning                         | Artificial Intelligence        | 3      | 90                               | 60                             | 150                               |  |  |  |
| T3562                     | 0302420214     | Cognitive Computing                   | Artificial Intelligence        | 3      | 90                               | 60                             | 150                               |  |  |  |
| T3309                     |                | Big Data Analytics                    | Data Analytics                 | 3      | 90                               | 60                             | 150                               |  |  |  |
| T3454                     | 0302420216     | Software analytics                    | Data Analytics                 | 3      | 90                               | 60                             | 150                               |  |  |  |
| T3559                     | 0302420217     | Marketing Analytics                   | Data Analytics                 | 3      | 90                               | 60                             | 150                               |  |  |  |
|                           |                | Total                                 | Required Credits               | 9      | 270                              | 180                            | 450                               |  |  |  |
|                           |                | Seme                                  | ster : 3                       |        |                                  |                                |                                   |  |  |  |
|                           |                | Generic C                             | ore Courses                    |        |                                  |                                |                                   |  |  |  |
| T3908                     | 0302420301     | Summer Internship                     |                                | 8      | 240                              | 160                            | 400                               |  |  |  |
| T3455                     | 0302420302     | Data Protection and Privacy           |                                | 2      | 60                               | 40                             | 100                               |  |  |  |
| T2658                     | 0302420303     | Design Thinking                       |                                | 2      | 100                              | 0                              | 100                               |  |  |  |
| T2353                     |                | Entrepreneurship                      |                                | 2      | 60                               | 40                             | 100                               |  |  |  |
| T2572                     | 0302420305     | Human Resource Management             |                                | 2      | 60                               | 40                             | 100                               |  |  |  |
| T3435                     | 0302420306     | Domain Study(Retail)                  |                                | 2      | 60                               | 40                             | 100                               |  |  |  |
| TH4789                    | 0302420317     | Health and Wellness Module II         |                                | 0      | 0                                | 0                              | Mandatory<br>Non-Credit<br>Course |  |  |  |
|                           |                |                                       | Total                          | 18     | 580                              | 320                            | 900                               |  |  |  |
|                           |                |                                       |                                |        |                                  |                                |                                   |  |  |  |
|                           |                | •                                     | Course Group<br>three courses) |        |                                  |                                |                                   |  |  |  |
| T3560                     | 0302420307     | Computer Vision                       | Artificial Intelligence        | 3      | 150                              | 0                              | 150                               |  |  |  |
| T3558                     |                | Reinforcement Learning                | Artificial Intelligence        | 3      | 150                              | 0                              | 150                               |  |  |  |
| T3561                     | 0302420309     | Human Computer Interaction            | Artificial Intelligence        | 3      | 150                              | 0                              | 150                               |  |  |  |
| F0003                     |                | Flexi-Credit Course                   | Artificial Intelligence        | 3      | 150                              | 0                              | 150                               |  |  |  |
| T3716                     | 0302420311     | Generative Adversarial<br>Networks    | Artificial Intelligence        | 3      | 150                              | 0                              | 150                               |  |  |  |
| T3457                     | 0302420312     | Fraud Detection Analytics             | Data Analytics                 | 3      | 150                              | 0                              | 150                               |  |  |  |
| T3134                     | 0302420313     | Social Media and Web<br>Analytics     | Data Analytics                 | 3      | 150                              | 0                              | 150                               |  |  |  |
| T3460                     | 0302420314     | Supply chain and operations analytics | Data Analytics                 | 3      | 150                              | 0                              | 150                               |  |  |  |

SIU 25/11/2024 (R-2)



#### Annexure A

| Catalog<br>Course<br>Code | Course<br>Code | Course Title   | Specialisation                    | Credit | Continu<br>ous<br>Assess<br>ment | Term<br>End<br>Examina<br>tion | Total<br>Marks |
|---------------------------|----------------|--|-----------------------------------|--------|----------------------------------|--------------------------------|----------------|
| F0003                     | 0302420315     | Flexi-Credit Course  | Data Analytics                    | 3      | 150                              | 0                              | 150            |
| T3459                     | 0302420316     | Insurance Analytics  | Data Analytics                    | 3      | 150                              | 0                              | 150            |
|                           |                | Total  | Required Credits                  | 9      | 450                              | 0                              | 450            |
|                           |                | Seme   | ester : 4                         |        |                                  |                                |                |
|                           |                | Generic C  | ore Courses                       |        |                                  |                                |                |
| T2236                     | 0302420401     | Corporate Governance and Ethics                                      |                                   | 2      | 60                               | 40                             | 100            |
| T2416                     | 0302420402     | Sustainability Standards -<br>Application, Analysis and<br>Reporting |                                   | 2      | 60                               | 40                             | 100            |
| F0002                     | 0302420403     | Flexi-Credit Course  |                                   | 2      | 100                              | 0                              | 100            |
| T3802                     | 0302420404     | Capstone Project and Defence   |                                   | 2      | 60                               | 40                             | 100            |
|                           |                |  | Total                             | 8      | 280                              | 120                            | 400            |
|                           |                |  | /e Course Group<br>three courses) |        |                                  |                                |                |
| T3462                     | 0302420405     | Cyber Security Analytics   |                                   | 3      | 150                              | 0                              | 150            |
| T3461                     | 0302420406     | IoT analytics  |                                   | 3      | 150                              | 0                              | 150            |
| T3456                     | 0302420407     | Customer analytics   |                                   | 3      | 150                              | 0                              | 150            |
| T3463                     | 0302420408     | Energy analytics   |                                   | 3      | 150                              | 0                              | 150            |
| T3458                     |                | Healthcare analytics   |                                   | 3      | 150                              | 0                              | 150            |
| T3464                     | 0302420410     | HR Analytics   |                                   | 3      | 150                              | 0                              | 150            |
|                           |                | Total  | Required Credits                  | 9      | 450                              | 0                              | 450            |

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| Semester                | Continuous<br>Assessment | Term End<br>Examination | Total Credits | Total Marks |  |  |  |  |  |
|-------------------------|--------------------------|-------------------------|---------------|-------------|--|--|--|--|--|
| Artificial Intelligence |                          |                         |               |             |  |  |  |  |  |
| Semester 1              | 4                        | 23                      | 27            | 1350        |  |  |  |  |  |
| Semester 2              | 4                        | 25                      | 29            | 1450        |  |  |  |  |  |
| Semester 3              | 11                       | 16                      | 27            | 1350        |  |  |  |  |  |
| Semester 4              | 11                       | 6                       | 17            | 850         |  |  |  |  |  |
| Total                   | 30                       | 70                      | 100           | 5000        |  |  |  |  |  |
|                         | -                        | Data Analytics          |               |             |  |  |  |  |  |
| Semester 1              | 4                        | 23                      | 27            | 1350        |  |  |  |  |  |
| Semester 2              | 4                        | 25                      | 29            | 1450        |  |  |  |  |  |
| Semester 3              | 11                       | 16                      | 27            | 1350        |  |  |  |  |  |
| Semester 4              | 11                       | 6                       | 17            | 850         |  |  |  |  |  |
| Total                   | 30                       | 70                      | 100           | 5000        |  |  |  |  |  |

