| Institute Code | Institute Name | Programme Code | Program Name | Catalog Course Code | Catalog Course Name | Course Type | Batch 2020 | Batch 2021 | Change in T-Code Yes / No | Change in course/Nature | Change in Pedagogy | Change in evaluation | Change in instruction method | Add on course | Changes Yes: Revised No: Not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 301 | SICSR, | 30141 | MBA(IT) | T3198 | Introduction to Python | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3221 | Introduction to Cloud Computing | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3222 | Introduction to Vulnerability Assessment Penetration | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3225 | Network Planning and Design | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3249 | IT Tools and Techniques for Business | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3285 | Analysis of Business Case using Spreadsheets | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3290 | Business Analysis and Modeling | Core | Base PS | Dropped | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3298 | Software Quality Standards I | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3299 | Software Quality Standards II | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3300 | Software Quality Process and Assurance I | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3301 | Software Quality Process and Assurance II | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3302 | IT Solutions to Banking and Financial Markets I | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3303 | IT solutions to Banking and Financial Markets II | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3305 | Financial Services and Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3312 | Project Management Suite | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3321 | Web Development Framework | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3344 | DevOps | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3350 | IT Business Analysis | Core | Base PS | Dropped | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | | | Elective | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3398 | Mobile Analytics | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3418 | Advanced Vulnerability Assessment and Penetration | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3421 | Infrastructure Security | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3425 | Understanding LDAP | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3433 | Introduction to Relational Database Management | Core | Base PS | Dropped | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3440 | Fundamentals of Data Science | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3441 | Web Analytics | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3447 | Machine Learning | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3462 | Cyber Security Analytics | Core | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3490 | Applied Data Analytics with Python | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3491 | Python for Analytics | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3492 | Internet of Things | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3495 | Product Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3496 | Software Versioning | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3497 | Application Packaging | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3499 | Data Analysis Using Python | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3500 | Mastering Pythone for Finance | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3501 | Python for Finance | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3508 | Asset Liability Management (ALM) in Finance | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3539 | Relational Algebra and Calculus | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3656 | AI and ML for Business Management | Elective | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T4005 | Integrated Disaster Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T5518 | Advanced Communication Research Methods | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | TH4272 | Certificate in COVID-19 Care for the Community | Core | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | TM2013 | Trends in Digital Communication Technologies | Elective | | Added | Yes | | | | | | |

1

| Institute Code | Institute Name | Programme Code | Program Name | Catalog Course Code | Catalog Course Name | Course Type | Batch 2020 | Batch 2021 | Change in T-Code Yes / No | Change in course/Nature | Change in Pedagogy | Change in evaluation | Change in instruction method | Add on course | Changes Yes: Revised No: Not |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 301 | SICSR, | 30122 | BBA(IT) | TH4272 | Certificate in COVID-19 Care for the Community | Core | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | GEN003 | Internship | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | GEN005 | Non Catalog Courses | Core | Base PS | Dropped | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T0100 | Research Publication | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2003 | Financial Accounting | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2048 | Mergers and Acquisitions | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2056 | Financial Risk Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2058 | Advanced Topics in Corporate Finance | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2067 | Credit management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2139 | Digital Marketing | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2225 | Research Methodology | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2281 | Talent Acquisition | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2351 | Technological Entrepreneurship | Core | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2467 | Fundamentals of Brand Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2612 | Business Analytics for Marketing | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2613 | Social Media Marketing | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2614 | Integrated Marketing Communication | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2615 | Marketing Strategy | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2683 | Cloud and Big Data | Core | Base PS | Dropped | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2741 | Customer Relationship Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2742 | Digital Marketing | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2744 | Services Marketing | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2746 | Business Analytics for Marketing | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2821 | Marketing Metrics | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T2828 | Six Sigma | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3012 | Java SE | Core | Base PS | Dropped | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3013 | Javascript | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3016 | PHP | Core | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3050 | IS Risk Analysis and System Audit | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3055 | Information Security Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3060 | IT Infrastructure Essentials | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3061 | IT Infrastructure Library | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3062 | IT Service Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3063 | Data Centre Infrastructure Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3070 | Advanced Business Statistics for Decision Making | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3071 | Basic Business Statistics for Data Analysis | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3072 | Business Intelligence I | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3073 | Business Intelligence II | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3075 | E-business Management and Strategy | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3076 | Enterprise Resource Planning | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3078 | Principles and Practice of IT Enabled Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3086 | IT Strategy | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3095 | Requirements Management | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3112 | Data Warehousing Applications and Data Analysis | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3113 | Data Warehousing Architecture and Operations | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3114 | Object Oriented Analysis Design | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3115 | Relational Database Management System | Core | | Added | Yes | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3117 | Software Engineering | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3124 | Software Verification and Validation | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3137 | Advanced Business Process Integration | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3151 | Technology in Business | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3155 | ERP-Business Process Integration | Core | Base PS | No Change | No | | | | | | |
| 301 | SICSR, | 30141 | MBA(IT) | T3172 | IT-Governance | Core | Base PS | No Change | No | | | | | | |

**Syllabus revision AY 2020-2021 to 2021-2022**

Name of the Institute : Symbiosis Institute of Computer Studies and Research

Name of the Program : Master of Business Administration (Information Technology)

# INDEX

Dr Sarika Sharma

Professor, MBA(IT) Program Coordinator

# SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under section 3 of the UGC Act 1956)
**Re - accredited by NAAC with 'A' Grade**
**Founder: Prof. Dr. S. B. Mujumdar, M.Sc.,Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)**

---

SIU/U-110(SICSR,Pune)/2020/1705(A)                              Date: 15/05/2020

To
The Director
Symbiosis Institute of Computer Studies & Research, Pune

**Subject: Approval of the Programme Structure/s for the academic year 2020-2021**

Dear Sir/Madam,

This is to inform you that the following Programme Structure has been duly approved by the Academic Council for the Academic Year 2020-2021.

| Sr.No. | Programme | Batch |
|--------|-----------|-------|
| 1 | Master of Business Administration (Information Technology) | 2020-2022 |

You may download the same using your login credentials using the link and the path mentioned-

Link:   http://eduwiz.intechsolutionspune.in/eduwiz/login.html

Path:   Academics->Catalogue->Programme Structure-> View Course Structure -> Select Institute -> Select Academic Year -> Select Programme -> Select Batch -> Show Course Structure -> Print Programme Structure.

Thanking you.

Sincerely,

Dr. Pravin Dange
Head- Academics

Copy to: Controller of Examinations, SIU

# Symbiosis Institute of Computer Studies and Research, Pune
# Master of Business Administration (Information Technology)
# Programme Structure 2020-22

| 1. | OBJECTIVE | To prepare students in applications of information technologies to deliver software solutions. The program focuses on * Imparting training in latest technologies. * Exposure to best business practices. * Building team leadership qualities and management skills As programme relates to current professional practice and the work place, the students are best suited for entry-level positions as: * Application Programmer: Using latest methodologies, development tools, languages. * Business Analyst: Business development, Pre-sales, Selection & Implementation of software solutions. * Quality Analyst: Implementation of enterprise level quality models, design / implementation of software development processes, testing and technical documentation. | | |
|---|---|---|---|---|
| 2. | DURATION (IN MONTHS) | 24 (Full Time) | | |
| 3. | INTAKE | 90 | | |
| 4. | RESERVATION | **I. Within the sanctioned intake** | **a) SC (In Percentage)** | **b) ST (In Percentage)** | **c) Differently abled (In Percentage)** |
| | | | 15 | 7.5 | 3 |
| | | **II. Over and above the sanctioned intake** | **a) Kashmiri Migrants (In Seats)** | **b) International Students (In Percentage)** | |
| | | | 2 | 15 | |
| 5. | ELIGIBILITY | Graduate from any recognised 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 PROCEDURE | Symbiosis National Aptitude Test, Group Exercise, Personal Interaction and Writing Ability Test (GE-PIWAT) | | |
| 7. | MEDIUM OF INSTRUCTION | English | | |
| 8. | PROGRAMME PATTERN | Semester | | |
| 9. | COURSE & SPECIALIZATION | As per Annexure A | | |
| 10. | FEE | | **Academic Fee p.a** | **Institute Deposit** | **Total** |
| | | | | | |

## Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Information Technology)
## Programme Structure 2020-22

|  |  |  |  |  |
|---|---|---|---|---|
| **Indian Students** | 425000 | 20000 | 445000 |
| **International Students (USD equivalent to INR)** | 640000 | 20000 | 660000 |

| 11. | **ASSESSMENT** | All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 60% internal component and 40% component as external (University) examination. |
|---|---|---|
| 12. | **STANDARD OF PASSING** | The assessment of the student for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10 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 corresponding to Grade P. 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/ DIPLOMA/ CERTIFICATE** | Master of Business Administration (Information Technology) will be awarded at the end of Semester IV examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA out of 10.00 CGPA |
| 14. | **NATURE WISE DISTRIBUTION OF CREDITS** | |

| Semester | Generic Core | Generic Elective | Specialization Core | Specialization Elective | Open Elective | Audit | Total |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| 1 | 24 | 0 | 0 | 0 | 0 | 1* | 24 |
| 2 | 16 | 0 | 17 | 0 | 0 | 0 | 33 |
| 3 | 14 | 0 | 17 | 0 | 0 | 1* | 31 |
| 4 | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| **Total** | **66** | **0** | **34** | **0** | **0** | **0** | **100** |

* Satisfactory completion of the non letter- grade courses 'Integrated Disaster Management' and 'Research Publication' is mandatory for award of degree.

The revised programme structure supersedes the previously approved programme structure dated 03/12/2020 for the programme.

Programme Structure is approved by the Academic Council subject to its norms & conditions. Any provision in the Programme Structure which violates the basic rules & regulations is deemed to be termed "Null & Void".

Head-Academics

THIS IS SYSTEM GENERATED DOCUMENT AND REQUIRES NO SIGNATURE.

# Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Information Technology)
## Programme Structure 2020-22

### Annexure A

| Catalog Course Code | Course Code | Course Title | Specialization | Credit | Internal Marks | External Marks | Total Marks |
|---|---|---|---|---|---|---|---|
| | | | **Semester : 1** | | | | |
| | | | **Generic Core Courses** | | | | |
| T3012 | 0301410101 | Java SE | | 4 | 120 | 80 | 200 |
| T3114 | 0301410102 | Object Oriented Analysis Design | | 4 | 120 | 80 | 200 |
| T3117 | 0301410103 | Software Engineering | | 4 | 120 | 80 | 200 |
| T3071 | 0301410104 | Basic Business Statistics for Data Analysis | | 2 | 60 | 40 | 100 |
| T3198 | 0301410105 | Introduction to Python | | 2 | 100 | 0 | 100 |
| T3433 | 0301410106 | Introduction to Relational Database Management | | 2 | 60 | 40 | 100 |
| T3013 | 0301410107 | Javascript | | 2 | 100 | 0 | 100 |
| T2225 | 0301410108 | Research Methodology | | 2 | 100 | 0 | 100 |
| T3321 | 0301410109 | Web Development Framework | | 2 | 100 | 0 | 100 |
| T4005 | 0301410110 | Integrated Disaster Management * | | 0 | 0 | 0 | Non Letter Grade |
| | | | **Total** | 24 | 880 | 320 | 1200 |
| | | | **Semester : 2** | | | | |
| | | | **Generic Core Courses** | | | | |
| T3078 | 0301410201 | Principles and Practice of IT Enabled Management | | 3 | 90 | 60 | 150 |
| T2683 | 0301410202 | Cloud and Big Data | | 3 | 150 | 0 | 150 |
| T3070 | 0301410203 | Advanced Business Statistics for Decision Making | | 2 | 60 | 40 | 100 |
| T3076 | 0301410204 | Enterprise Resource Planning | | 2 | 100 | 0 | 100 |
| T3350 | 0301410205 | IT Business Analysis | | 2 | 60 | 40 | 100 |
| T2281 | 0301410206 | Talent Acquisition | | 2 | 100 | 0 | 100 |
| T3492 | 0301410207 | Internet of Things | | 2 | 100 | 0 | 100 |
| | | | **Total** | 16 | 660 | 140 | 800 |
| | | **Specialization Core Courses : Banking and Financial Markets** | | | | | |
| T2058 | 0301410208 | Advanced Topics in Corporate Finance | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T3285 | 0301410209 | Analysis of Business Case using Spreadsheets | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T3302 | 0301410210 | IT Solutions to Banking and Financial Markets I | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T3508 | 0301410211 | Asset Liability Management (ALM) in Finance | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T3501 | 0301410212 | Python for Finance | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T2003 | 0301410213 | Financial Accounting | Banking and Financial Markets | 2 | 60 | 40 | 100 |

# Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Information Technology)
## Programme Structure 2020-22

### Annexure A

| Catalog Course Code | Course Code | Course Title | Specialization | Credit | Internal Marks | External Marks | Total Marks |
|---|---|---|---|---|---|---|---|
| | | | Total | 17 | 510 | 340 | 850 |
| | | **Specialization Core Courses : Data Analytics** | | | | | |
| T3072 | 0301410214 | Business Intelligence I | Data Analytics | 3 | 90 | 60 | 150 |
| T3113 | 0301410215 | Data Warehousing Architecture and Operations | Data Analytics | 3 | 90 | 60 | 150 |
| T3447 | 0301410216 | Machine learning | Data Analytics | 3 | 90 | 60 | 150 |
| T3491 | 0301410217 | Python for Analytics | Data Analytics | 3 | 90 | 60 | 150 |
| T3499 | 0301410218 | Data Analysis Using Python | Data Analytics | 3 | 90 | 60 | 150 |
| T3539 | 0301410219 | Relational Algebra and Calculus | Data Analytics | 2 | 60 | 40 | 100 |
| | | | Total | 17 | 510 | 340 | 850 |
| | | **Specialization Core Courses : IT Infrastructure Management** | | | | | |
| T3221 | 0301410220 | Introduction to Cloud Computing | IT Infrastructure Management | 4 | 120 | 80 | 200 |
| T3222 | 0301410221 | Introduction to Vulnerability Assessment Penetration Testing | IT Infrastructure Management | 4 | 120 | 80 | 200 |
| T3062 | 0301410222 | IT Service Management | IT Infrastructure Management | 3 | 90 | 60 | 150 |
| T3060 | 0301410223 | IT Infrastructure Essentials | IT Infrastructure Management | 2 | 60 | 40 | 100 |
| T3061 | 0301410224 | IT Infrastructure Library | IT Infrastructure Management | 2 | 60 | 40 | 100 |
| T3225 | 0301410225 | Network Planning and Design | IT Infrastructure Management | 2 | 60 | 40 | 100 |
| | | | Total | 17 | 510 | 340 | 850 |
| | | **Specialization Core Courses : Marketing** | | | | | |
| T3075 | 0301410226 | E-business Management and Strategy | Marketing | 3 | 90 | 60 | 150 |
| T2741 | 0301410227 | Customer Relationship Management | Marketing | 3 | 90 | 60 | 150 |
| T2746 | 0301410228 | Business Analytics for Marketing | Marketing | 3 | 90 | 60 | 150 |
| T2744 | 0301410229 | Services Marketing | Marketing | 3 | 90 | 60 | 150 |
| T2742 | 0301410230 | Digital Marketing | Marketing | 3 | 90 | 60 | 150 |
| T2821 | 0301410231 | Marketing Metrics | Marketing | 2 | 60 | 40 | 100 |
| | | | Total | 17 | 510 | 340 | 850 |
| | | **Specialization Core Courses : Software Process Management** | | | | | |
| T3300 | 0301410232 | Software Quality Process and Assurance I | Software Process Management | 3 | 90 | 60 | 150 |
| T3298 | 0301410233 | Software Quality Standards I | Software Process Management | 3 | 90 | 60 | 150 |

# Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Information Technology)
## Programme Structure 2020-22

## Annexure A

| Catalog Course Code | Course Code | Course Title | Specialization | Credit | Internal Marks | External Marks | Total Marks |
|---|---|---|---|---|---|---|---|
| T3124 | 0301410234 | Software Verification and Validation | Software Process Management | 3 | 90 | 60 | 150 |
| T3495 | 0301410235 | Product Management | Software Process Management | 3 | 90 | 60 | 150 |
| T3496 | 0301410236 | Software Versioning | Software Process Management | 3 | 90 | 60 | 150 |
| T3312 | 0301410237 | Project Management Suite | Software Process Management | 2 | 60 | 40 | 100 |
| | | | **Total** | **17** | **510** | **340** | **850** |
| | | **Semester : 3** | | | | | |
| | | **Generic Core Courses** | | | | | |
| T3155 | 0301410301 | ERP-Business Process Integration | | 3 | 90 | 60 | 150 |
| T3290 | 0301410302 | Business Analysis and Modeling | | 3 | 150 | 0 | 150 |
| T3137 | 0301410303 | Advanced Business Process Integration | | 2 | 60 | 40 | 100 |
| T3249 | 0301410304 | IT Tools and Techniques for Business | | 2 | 60 | 40 | 100 |
| T3172 | 0301410305 | IT-Governance | | 2 | 100 | 0 | 100 |
| T3151 | 0301410306 | Technology in Business | | 2 | 60 | 40 | 100 |
| T0100 | 0301410307 | Research Publication * | | 0 | 0 | 0 | Non Letter Grade |
| | | | **Total** | **14** | **520** | **180** | **700** |
| | | **Specialization Core Courses : Banking and Financial Markets** | | | | | |
| T2067 | 0301410308 | Credit management | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T3305 | 0301410309 | Financial Services and Management | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T3303 | 0301410310 | IT solutions to Banking and Financial Markets II | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T2048 | 0301410311 | Mergers and Acquisitions | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T3500 | 0301410312 | Mastering Python for Finance | Banking and Financial Markets | 3 | 90 | 60 | 150 |
| T2056 | 0301410313 | Financial Risk Management | Banking and Financial Markets | 2 | 60 | 40 | 100 |
| | | | **Total** | **17** | **510** | **340** | **850** |
| | | **Specialization Core Courses : Data Analytics** | | | | | |
| T3073 | 0301410314 | Business Intelligence II | Data Analytics | 3 | 90 | 60 | 150 |
| T3112 | 0301410315 | Data Warehousing Applications and Data Analysis | Data Analytics | 3 | 90 | 60 | 150 |
| T3440 | 0301410316 | Fundamentals of Data Science | Data Analytics | 3 | 90 | 60 | 150 |

# Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Information Technology)
## Programme Structure 2020-22

### Annexure A

| Catalog Course Code | Course Code | Course Title | Specialization | Credit | Internal Marks | External Marks | Total Marks |
|---|---|---|---|---|---|---|---|
| T3441 | 0301410317 | Web Analytics | Data Analytics | 3 | 90 | 60 | 150 |
| T3490 | 0301410318 | Applied Data Analytics with Python | Data Analytics | 3 | 90 | 60 | 150 |
| T3398 | 0301410319 | Mobile Analytics | Data Analytics | 2 | 60 | 40 | 100 |
| | | | **Total** | **17** | **510** | **340** | **850** |
| **Specialization Core Courses : IT Infrastructure Management** | | | | | | | |
| T3063 | 0301410320 | Data Centre Infrastructure Management | IT Infrastructure Management | 3 | 90 | 60 | 150 |
| T3050 | 0301410321 | IS Risk Analysis and System Audit | IT Infrastructure Management | 3 | 90 | 60 | 150 |
| T3425 | 0301410322 | Understanding LDAP | IT Infrastructure Management | 3 | 90 | 60 | 150 |
| T3418 | 0301410323 | Advanced Vulnerability Assessment and Penetration Testing | IT Infrastructure Management | 2 | 60 | 40 | 100 |
| T3344 | 0301410324 | DevOps | IT Infrastructure Management | 2 | 60 | 40 | 100 |
| T3055 | 0301410325 | Information Security Management | IT Infrastructure Management | 2 | 60 | 40 | 100 |
| T3421 | 0301410326 | Infrastructure Security | IT Infrastructure Management | 2 | 60 | 40 | 100 |
| | | | **Total** | **17** | **510** | **340** | **850** |
| **Specialization Core Courses : Marketing** | | | | | | | |
| T2467 | 0301410327 | Fundamentals of Brand Management | Marketing | 3 | 90 | 60 | 150 |
| T2614 | 0301410328 | Integrated Marketing Communication | Marketing | 3 | 90 | 60 | 150 |
| T2615 | 0301410329 | Marketing Strategy | Marketing | 3 | 90 | 60 | 150 |
| T2612 | 0301410330 | Business Analytics for Marketing | Marketing | 2 | 60 | 40 | 100 |
| T2139 | 0301410331 | Digital Marketing | Marketing | 2 | 60 | 40 | 100 |
| T2613 | 0301410332 | Social Media Marketing | Marketing | 2 | 60 | 40 | 100 |
| T5518 | 0301410333 | Advanced Communication Research Methods | Marketing | 2 | 60 | 40 | 100 |
| | | | **Total** | **17** | **510** | **340** | **850** |
| **Specialization Core Courses : Software Process Management** | | | | | | | |
| T3086 | 0301410334 | IT Strategy | Software Process Management | 3 | 90 | 60 | 150 |
| T3095 | 0301410335 | Requirements Management | Software Process Management | 3 | 90 | 60 | 150 |
| T3301 | 0301410336 | Software Quality Process and Assurance II | Software Process Management | 3 | 90 | 60 | 150 |

**Symbiosis Institute of Computer Studies and Research, Pune**
**Master of Business Administration (Information Technology)**
**Programme Structure 2020-22**

**Annexure A**

| Catalog Course Code | Course Code | Course Title | Specialization | Credit | Internal Marks | External Marks | Total Marks |
|---|---|---|---|---|---|---|---|
| T3299 | 0301410337 | Software Quality Standards II | Software Process Management | 3 | 90 | 60 | 150 |
| T3497 | 0301410338 | Application Packaging | Software Process Management | 3 | 90 | 60 | 150 |
| T2828 | 0301410339 | Six Sigma | Software Process Management | 2 | 60 | 40 | 100 |
| | | | **Total** | **17** | **510** | **340** | **850** |
| | | **Semester : 4** | | | | | |
| | | **Generic Core Courses** | | | | | |
| T3912 | 0301410401 | Industry Internship | | 12 | 360 | 240 | 600 |
| | | | **Total** | **12** | **360** | **240** | **600** |

# Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Information Technology)
### Programme Structure 2020-22

| Semester | Internal Credits | External Credits | Total Credits | Total Marks |
|---|---|---|---|---|
| Banking and Financial Markets | | | | |
| Semester1 | 8 | 16 | 24 | 1200 |
| Semester2 | 9 | 24 | 33 | 1650 |
| Semester3 | 5 | 26 | 31 | 1550 |
| Semester4 | 0 | 12 | 12 | 600 |
| Total | 22 | 78 | 100 | 5000 |
| Data Analytics | | | | |
| Semester1 | 8 | 16 | 24 | 1200 |
| Semester2 | 9 | 24 | 33 | 1650 |
| Semester3 | 5 | 26 | 31 | 1550 |
| Semester4 | 0 | 12 | 12 | 600 |
| Total | 22 | 78 | 100 | 5000 |
| IT Infrastructure Management | | | | |
| Semester1 | 8 | 16 | 24 | 1200 |
| Semester2 | 9 | 24 | 33 | 1650 |
| Semester3 | 5 | 26 | 31 | 1550 |
| Semester4 | 0 | 12 | 12 | 600 |
| Total | 22 | 78 | 100 | 5000 |
| Marketing | | | | |
| Semester1 | 8 | 16 | 24 | 1200 |
| Semester2 | 9 | 24 | 33 | 1650 |
| Semester3 | 5 | 26 | 31 | 1550 |
| Semester4 | 0 | 12 | 12 | 600 |
| Total | 22 | 78 | 100 | 5000 |
| Software Process Management | | | | |
| Semester1 | 8 | 16 | 24 | 1200 |
| Semester2 | 9 | 24 | 33 | 1650 |
| Semester3 | 5 | 26 | 31 | 1550 |
| Semester4 | 0 | 12 | 12 | 600 |
| Total | 22 | 78 | 100 | 5000 |

5|10|2021

Dr. Sarika Sharma.
Prog. Head MBA-IT.

# SYMBIOSIS
### INTERNATIONAL UNIVERSITY

**head academics <head_academics@siu.edu.in>**

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## First Approval Lettter

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**head_academics@siu.edu.in** <head_academics@siu.edu.in>                    Wed, May 12, 2021 at 5:43 PM
To: director@sicsr.ac.in, coe@siu.edu.in, ar@siu.edu.in, head_academics@siu.edu.in, ar_academics@siu.edu.in,
pradipkumar.borate@siu.edu.in

SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)
(Established under section 3 of the UGC Act 1956)
Re - accredited by NAAC with 'A' Grade
Founder: Prof. Dr. S. B. Mujumdar, M.Sc.,Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

SIU/U-110(SICSR,Pune)/2021/1901                                Date:    12/05/2021

To
The Director
Symbiosis Institute of Computer Studies & Research, Pune

Subject: Approval of the Programme Structure/s for the academic year 2021-2022

Dear Sir/Madam,

This is to inform you that the following Programme Structure has been duly approved by the Academic Council for the Academic Year 2021-2022.

Academic Year : 2021-2022

| Sr.No. | Programme | Batch |
|---|---|---|
| 1 | Master of Business Administration (Information Technology) | 2021-2023 |

You may download the same using your login credentials using the link and the path mentioned-

Link:
http://eduwiz.intechsolutionspune.in/eduwiz/login.html

Path:
Academics->Catalogue->Programme Structure-> View Course Structure -> Select Institute -> Select Academic Year -> Select Programme -> Select Batch -> Show Course Structure -> Print Programme Structure.

Thanking you.

Sincerely,

Dr. Pravin Dange
Head- Academics

Copy to: Controller of Examinations, SIU

1 Of 1

14

# Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Digital Transformation)
## Programme Structure 2021-23

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. | **OBJECTIVE** | 1. To prepare students to lead and drive digital transformation initiatives for the business.<br>2. To make students understand best operational and strategic management technology drivers for the business processes.<br>3. To enable students to lead business transformation initiatives by understanding applications of leading technologies including AI, Cloud, Business Intelligence, and Data visualization for the organisations.<br>4. To prepare students to understand and design digital business models. | | | | |
| 2. | **DURATION (IN MONTHS)** | 24 (Full Time) | | | | |
| 3. | **INTAKE** | 30 | | | | |

**4. RESERVATION**

| **I.Within the sanctioned intake** | **a) SC (In Percentage)** | **b) ST (In Percentage)** | **c) Differently abled (In Percentage)** | **d) Defence (In Percentage)** |
|---|---|---|---|---|
| | 15 | 7.5 | 3 | 0 |

| **II.Over and above the sanctioned intake** | **a) Kashmiri Migrants (In Seats)** | **b) International Students (In Percentage)** |
|---|---|---|
| | 2 | 15 |

| | | |
|---|---|---|
| 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 PROCEDURE** | Symbiosis National Aptitude Test, Group Exercise, Personal Interaction and Writing Ability Test (GE-PIWAT) |
| 7. | **MEDIUM OF INSTRUCTION** | English |
| 8. | **PROGRAMME PATTERN** | Semester |
| 9. | **COURSE & SPECIALIZATION** | As per Annexure A |

**10. FEE**

| | **Academic Fee p.a** | **Institute Deposit** | **Total** |
|---|---|---|---|
| **Indian Students** | 550000 | 20000 | 570000 |
| **International Students (USD equivalent to INR)** | 825000 | 20000 | 845000 |

| | | |
|---|---|---|
| 11. | **ASSESSMENT** | All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 60% internal component and 40% component as external (University) examination. |
| 12. | **STANDARD OF** | The assessment of the student for each examination is done, based on relative |

| | | |
|---|---|---|
| | **PASSING** | performance. Maximum Grade Point (GP) is 10 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 corresponding to Grade P. 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/ DIPLOMA/ CERTIFICATE** | Master of Business Administration (Digital Transformation) will be awarded at the end of Semester IV examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA out of 10.00 CGPA |
| **14.** | **CLASSIFICATION OF CREDITS** | |

| Semester | Generic Core | Generic Elective | Specialization Core | Specialization Elective | Open Elective | Audit | Total |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| 1 | 28 | 0 | 0 | 0 | 0 | 2* | 28 |
| 2 | 27 | 3 | 0 | 0 | 0 | 0 | 30 |
| 3 | 27 | 3 | 0 | 0 | 0 | 1* | 30 |
| 4 | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| **Total** | **94** | **6** | **0** | **0** | **0** | **0** | **100** |

\* Satisfactory completion of the non letter grade courses 'Integrated Disaster Management', 'Research Publication''Certificate in COVID-19 Care for the Community' is mandatory for award of degree.

The revised programme structure supersedes the previously approved programme structure dated 27/01/2022 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.

Head - Academics

THIS IS SYSTEM GENERATED DOCUMENT AND REQUIRES NO SIGNATURE.

## Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Digital Transformation)
## Programme Structure 2021-23

### Annexure A

| Catalog Course Code | Course Code | Course Title | Specialization | Credit | Internal Marks | External Marks | Total Marks |
|---|---|---|---|---|---|---|---|
| | | | **Semester : 1** | | | | |
| | | **Generic Core Courses** | | | | | |
| T3665 | 0301440101 | Business Analytics | | 4 | 120 | 80 | 200 |
| T2036 | 0301440102 | Financial Management | | 3 | 90 | 60 | 150 |
| T2742 | 0301440103 | Digital Marketing | | 3 | 90 | 60 | 150 |
| T3682 | 0301440104 | Business Agile Practices | | 3 | 90 | 60 | 150 |
| T3677 | 0301440105 | Digital Business Models | | 3 | 90 | 60 | 150 |
| T3676 | 0301440106 | Electronic Customer Relationship Management | | 3 | 90 | 60 | 150 |
| T2216 | 0301440107 | Business Statistics | | 2 | 60 | 40 | 100 |
| T2843 | 0301440108 | Research Methodology | | 2 | 60 | 40 | 100 |
| TM2031 | 0301440109 | Internet of Things | | 2 | 60 | 40 | 100 |
| T3662 | 0301440110 | Web Design Technologies | | 2 | 60 | 40 | 100 |
| T2219 | 0301440111 | Operations Research | | 1 | 50 | 0 | 50 |
| T4005 | 0301440112 | Integrated Disaster Management * | | 0 | 0 | 0 | Non Letter Grade |
| TH4272 | 0301440113 | Certificate in COVID-19 Care for the Community * | | 0 | 0 | 0 | Non Letter Grade |
| | | | **Total** | **28** | **860** | **540** | **1400** |
| | | **Semester : 2** | | | | | |
| | | **Generic Core Courses** | | | | | |
| T6850 | 0301440201 | Python for Data Science | | 4 | 200 | 0 | 200 |
| T3673 | 0301440202 | Enterprise Resource Planning and Supply Chain Management | | 4 | 120 | 80 | 200 |
| T3674 | 0301440203 | Cloud Applications for Business Processes | | 4 | 120 | 80 | 200 |
| T2618 | 0301440204 | Project Management | | 3 | 90 | 60 | 150 |
| T2758 | 0301440205 | Talent Acquisition and Retention | | 3 | 90 | 60 | 150 |
| T3664 | 0301440206 | Data Management and Visualization | | 3 | 90 | 60 | 150 |
| T3672 | 0301440207 | Blockchain and It's Applications | | 3 | 90 | 60 | 150 |
| T3667 | 0301440208 | Digital transformation in Health Care | | 3 | 90 | 60 | 150 |
| | | | **Total** | **27** | **890** | **460** | **1350** |
| | | **Generic Elective Courses Group** | | | | | |
| T3431 | 0301440209 | DevOps Services | | 3 | 90 | 60 | 150 |
| T3499 | 0301440210 | Data Analysis Using Python | | 3 | 90 | 60 | 150 |
| T3666 | 0301440211 | AI Applications in Business | | 3 | 90 | 60 | 150 |
| | | | **Total Required Credits** | **3** | **90** | **60** | **150** |

## Symbiosis Institute of Computer Studies and Research, Pune
## Master of Business Administration (Digital Transformation)
## Programme Structure 2021-23

### Annexure A

| Catalog Course Code | Course Code | Course Title | Specialization | Credit | Internal Marks | External Marks | Total Marks |
|---|---|---|---|---|---|---|---|
| **Semester : 3** | | | | | | | |
| **Generic Core Courses** | | | | | | | |
| T2529 | 0301440301 | Production/Operations management | | 4 | 200 | 0 | 200 |
| T3675 | 0301440302 | Business Intelligence | | 3 | 90 | 60 | 150 |
| T3668 | 0301440303 | Digital Branding and Promotion with Social Media | | 3 | 90 | 60 | 150 |
| T3679 | 0301440304 | Digital Audit and Quality Control | | 3 | 90 | 60 | 150 |
| T3670 | 0301440305 | Digital Transformation Frameworks | | 3 | 90 | 60 | 150 |
| T3671 | 0301440306 | Smart Industries and Digital Trends | | 3 | 90 | 60 | 150 |
| T2397 | 0301440307 | International Business and Global Strategy | | 2 | 60 | 40 | 100 |
| T3525 | 0301440308 | System Dynamics | | 2 | 60 | 40 | 100 |
| T2561 | 0301440309 | Business Ethics | | 2 | 100 | 0 | 100 |
| T3678 | 0301440310 | Regulatory Perspectives for Digital Business | | 2 | 60 | 40 | 100 |
| T0100 | 0301440311 | Research Publication * | | 0 | 0 | 0 | Non Letter Grade |
| | | | **Total** | 27 | 930 | 420 | 1350 |
| **Generic Elective Courses Group** | | | | | | | |
| T3309 | 0301440312 | Big Data Analytics | | 3 | 90 | 60 | 150 |
| T3490 | 0301440313 | Applied Data Analytics with Python | | 3 | 90 | 60 | 150 |
| T3669 | 0301440314 | Applications of Augmented Reality and Technology Trends | | 3 | 90 | 60 | 150 |
| | | | **Total Required Credits** | 3 | 90 | 60 | 150 |
| **Semester : 4** | | | | | | | |
| **Generic Core Courses** | | | | | | | |
| T3912 | 0301440401 | Industry Internship | | 12 | 360 | 240 | 600 |
| | | | **Total** | 12 | 360 | 240 | 600 |

**Symbiosis Institute of Computer Studies and Research, Pune**
**Master of Business Administration (Digital Transformation)**
**Programme Structure 2021-23**

| Semester | Internal Credits | External Credits | Total Credits | Total Marks |
|---|---|---|---|---|
| | | | | |
| Semester 1 | 1 | 27 | 28 | 1400 |
| Semester 2 | 4 | 26 | 30 | 1500 |
| Semester 3 | 6 | 24 | 30 | 1500 |
| Semester 4 | 0 | 12 | 12 | 600 |
| **Total** | **11** | **89** | **100** | **5000** |