# SCHOOL OF DATA SCIENCE AND FORECASTING

**PROGRAM CODE:  DS7A**

**PROGRAM TITLE:  Master of Technology (M.Tech.)**

- **Data Science**

- **BATCH: 2021-23**

## PROGRAMME STRUCTURE

**First Semester:**

| Code | Title | Credits (L-T-P) |
|---|---|---|
| **CORE COURSES** | | |
| DS7A-701 | Statistical Research Methods | 4 (3-1-0) |
| DS7A-703 | RDBMS and NOSQL | 3 (2-0-2) |
| DS7A-705 | Data Mining and Data Warehousing | 3 (2-0-2) |
| DS7A-707 | Python for Analytics | 3 (2-0-2) |
| DS7A-709 | Machine Learning | 3 (2-0-2) |
| DS7A-711 | Advanced Excel | 3 (1-0-4) |
| **ELECTIVE COURSES-DISCIPLINE CENTRIC (Any Two)** | | |
| DS7A-721 | Cloud Computing | 3 (2-1-0) |
| DS7A-723 | Statistical Programming in R | 3 (2-0-2) |
| DS7A-725 | Multivariate Analysis | 3 (2-0-2) |
| **ELECTIVE GENERIC:** The students can choose following course or any generic course being offered in other M.Tech. programmes being run in this campus. | | |
| DS7A-741 | Fundamentals of Algorithms | 3 (2-1-0) |

**Second Semester:**

| Code | Title | Credits (L T P) |
|---|---|---|
| **CORE COURSES** | | |
| DS7A-702 | Operations Research | 4 (3-1-0) |
| DS7A-704 | Forecasting Methods | 3 (2-1-0) |
| DS7A-706 | Big Data Technologies | 3 (2-0-2) |
| DS7A-708 | Linear Algebra and Advanced Calculus | 3 (2-1-0) |
| DS7A-710 | Data Visualization | 3 (2-0-2) |
| DS7A-712 | Deep Learning | 3 (2-0-2) |
| **ELECTIVE COURSES-DISCIPLINE CENTRIC (Any Two)** | | |
| DS7A-722 | Computer Vision | 3 (2-1-0) |
| DS7A-724 | Natural Language Processing | 3 (2-0-2) |
| DS7A-726 | Soft Computing | 3 (2-0-2) |
| **ELECTIVE GENERIC:** The students can choose following course or any generic course being offered in other M.Tech. programmes being run in this campus. | | |
| DS7A-742 | Technical Communication | 3 (2-1-0) |

**Third &Fourth Semesters:**

| Code | Title | Credits |
|---|---|---|

| DS7A-802 | M.Tech. Dissertation/ Internship | 24 |

Note: The above course contents can be modified as per requirement from time to time in accordance with University Ordinance No. 14.