

**Minutes of the Meeting of Board of Studies (BoS) of Data Science Department was held on 28<sup>th</sup> August, 2021 at 7.00 PM on Zoom platform.**

The following members were present:

1. 1. Dr. Alka Mahajan, Dean, MPSTME
2. Dr. Soumitra Das, Senior Consultant, SAS
3. Dr. Ajaya Kumar Panda, Professor, NITIE
4. Mr. Bhargave, Shreyas, Director (Technology)
5. Prof. Sarada Samantaray, HOD PG Program, Associate Dean, Data Science Department
6. Dr. Siba Panda, HOD UG program, Assistant Professor, Data Science Department
7. Dr. Arindam Chaudhuri, Associate Professor, Data Science Department
8. Prof. Jaykrishna Joshi, Assistant Professor, Data Science Department
9. Dr. Rajni Aron, Assistant Professor, Data Science Department

1. The BoS members confirmed the minutes of meetings of BoS in Data Science held on April 27, 2021.
2. The BoS members considered and deliberated upon the revision in the curricula of B. Tech Data Science (Business Analytics) and MBA. Tech Data Science They approved the following:

A. Minor revision of course structure of Semester I to VIII, Teaching and Examination Scheme & syllabi of the courses in Semester IV for **B. Tech Data Science (Business Analytics)** for the students admitted in 2020-21 onwards and direct second year students admitted in the academic year 2021-22 (**Encl.-I and II**).

- Introduction of the new course on “Android Application Development” in place of ‘Open Elective –I’ in semester IV.
- Introduction of the course on “Professional Ethics” in semester IV, which is approved course by BHS department.

B. Minor revision of course structure of Semester I to VIII for **B. Tech Data Science (Business Analytics)** and **MBA. Tech Data Science** for the students admitted in 2021-22 onwards (**Encl.-III, IV**).

3. The BoS members considered and deliberated upon the revision in the curricula of **M. Tech Artificial Intelligence**. They approved the following:

A. Minor revision in Teaching and Examination Scheme and Syllabi of semester II for the students admitted in academic year 2021-22 onwards and semester IV for the students admitted in academic year 2020-21 onwards (**Encl.-V, VI and VII**).

- ‘Basics of Operations and Supply Chain Management’ is replaced by “Quantitative Insights into Supply Chain and Operations” in semester II
- ‘Marketing’ is replaced by “Computational Analytics for Marketing” in semester II
- For “Internship / Project”, 200 marks are reduced to 100 in semester IV.

B. Minor revision in Teaching and Examination Scheme and Syllabi of semester I for the students admitted in academic year 2022-23 onwards and semester III for the students admitted in academic year 2021-22 onwards (**Encl.-VIII, IX and X**).

- 'Financial Institutions and Markets' is replaced by "Financial Markets and Risk Analytics" in semester I
- 'Marketing Analytics' is renamed as "Advanced Marketing Analytics" in semester III
- 'Finance Analytics' is renamed as "Advanced Finance Analytics" in semester III

4. The BoS members considered and deliberated upon the revision in the curricula of **M. Tech Data Science (Business Analytics)**. They approved the following:

A. Minor revision in Teaching and Examination Scheme and Syllabi of semester II for the students admitted in academic year 2021-22 onwards and semester IV for the students admitted in academic year 2020-21 onwards (**Encl.-XI, XII**)

- 'Advanced Supply Chain Analytics' is replaced by "Supply Chain Analytics" in semester II.
- In subject, "Internship / Project" 16 credit reduced to 15 and introduction of syllabus in semester IV.

B. Minor revision in Teaching and Examination Scheme and Syllabi of semester I for the students admitted in academic year 2022-23 onwards and semester III for the students admitted in academic year 2021-22 (**Encl.-XIII, XIV, XV and XVI**)

- 'Financial Institutions and Markets' is replaced by "Financial Markets and Risk Analytics" in semester I
- 'Basics of Operations and Supply Chain Management' is replaced by "Quantitative Insights into Supply Chain and Operations" in semester I
- 'Basic Marketing' is replaced by "Computational Analytics for Marketing" in semester I
- 'Advanced Operations and Supply Chain Analytics' is renamed as "Advanced Supply Chain Analytics" in semester III.

5. Minor revision of course structure of Semester I to XII of the courses **B. Tech Integrated (Data Science)** for the students admitted in 2021-22 onwards (**Encl.-XVII**).

**Action taken:** All the suggestions are incorporated in syllabi.

*Alka Kulkarni*

Chairperson  
Dean, Board of Studies



## 54th Academic Council Meeting

SVKM's NMIMS Deemed-to-be University  
Mukesh Patel School of Technology Management and Engineering

Minutes of the Meeting of Board of Studies (BoS) of Data Science Department, was held on April, 16, 2022 at 2.00 PM at AI Lab, D J Sanghvi College of Engineering.

The following members were present:

1. Dr. Prasad Ramathan, Senior Director, Capgemini - Industry Expert
2. Mr. Bhargave Shreyas, Director (Technology), Capgemini - Industry Expert
3. Dr. Ajaya Kumar Panda, Associate Professor, NITIE, Mumbai - Academic expert
4. Dr. Rakesh Verma, Professor of Analytics and Data Science, NITIE, Mumbai- Academic expert
5. Ekta Shah, Senior Machine Learning Engineer, Quantiphi -Alumni
6. Prof. Sarada Samantaray, HOD (PG) and Associate Dean, Data Science Department
7. Dr. Siba Panda, HOD (UG), Assistant Professor, Data Science Department
8. Prof. Jaykrishna Joshi, Assistant Professor, Data Science Department
9. Dr. Rajni Aron, Assistant Professor, Data Science Department

Leave of absence is granted to the following member:

1. Dr. Alka Mahajan, Dean, MPSTME, NMIMS University
2. Soumitra Das, Senior Analytical training consultant, SAS Institute - Academic expert

1. The BoS members confirmed the minutes of meetings of BoS in Data Science held on August 28, 2021.
2. The BoS members considered and deliberated upon the revision in the curricula of B Tech. in Data Science and MBA Tech in Data Science. They approved the following:
  - A. A minor revision of curricula of B Tech in Data Science and MBA Tech in Data Science by way of
    - I. The course structure of B Tech Data Science and MBA Tech Data Science for the students admitted in AY 2022-23 and direct second year students admitted in AY 2023-24 onwards (Encl. - Ia)
      - Introducing of course of 'Technical Communication', in SEM III for B Tech Data Science and MBA Tech Data Science
      - Renaming the course of Android application Development by 'Mobile Application Development', in SEM IV for B Tech Data Science and MBA Tech Data Science
      - Reducing the credit from 4 to 3 of course 'Introduction to Modern Application Development', in SEM V for B Tech Data Science and MBA Tech Data Science
      - Renaming the course of Artificial Intelligence by 'Applied Artificial Intelligence' and increasing the credit to 3 to 4, in SEM V for B Tech Data Science and MBA Tech Data Science
      - Renaming the course of Computer Vision by 'Computer Vision and Applications' and reducing the credit from 4 to 3, in SEM VI for B Tech Data Science and MBA Tech Data Science
      - Introducing of course of 'Advance Data Structure for Analytics', in SEM VI for B Tech Data Science and MBA Tech Data Science
      - Shifting of a course 'Big Data', from SEM VII to VI and reducing the credit from 4 to 3, for MBA Tech Data Science
      - Reducing the credit from 4 to 3 of course 'Department Elective - III', for SEM VI of B Tech Data Science and MBA Tech Data Science
      - Introducing of course of 'Employability Skills', in SEM VI of B Tech Data Science and MBA Tech Data Science
      - Shifting of a course 'Department Elective - IV' from SEM VI to VII and reducing the credit from 4 to 3 of B Tech Data Science
      - Shifting of a course 'Department Elective - IV' from SEM VI to VIII and reducing the credit from 4 to 3 of MBA Tech Data Science

## 54th Academic Council Meeting

SVKM's NMIMS Deemed-to-be University  
Mukesh Patel School of Technology Management and Engineering

- Reducing the credit from 4 to 3 of course 'Department Elective - V', in SEM VII of B Tech Data Science
- Shifting of a course 'Department Elective - V' from SEM VII to VIII and reducing the credit from 4 to 3 of MBA Tech Data Science
- Renaming the course of Deep Learning by 'Neural Networks and Deep Learning' and reducing the credit from 4 to 3, in SEM VII of B Tech Data Science and MBA Tech Data Science
- Reducing the credit from 4 to 3 of course 'Natural Language Processing', in SEM VII of B Tech Data Science and MBA Tech Data Science
- Reducing the credit from 4 to 3 of course 'Big Data', in SEM VII for B Tech Data Science
- Introducing of course of 'Machine Learning Engineering', in SEM VII of B Tech Data Science and MBA Tech Data Science
- Renaming the course Minor Project to 'Capstone Project' with increase in credits from 2 to 4 in SEM VII for B Tech Data Science
- Removing "Minor Project" from Semester VII for MBA Tech Data Science
- Removing course "Technical Internship" from SEM VII for B Tech Data Science
- Increase in credits for course 'Technical Internship' from 0 to 5 in SEM VII for MBA Tech Data Science
- Renaming the course Major Project to 'Project based Internship' with reducing the credits from 12 to 10 in SEM VIII of B Tech Data Science
- Reducing the credit from 12 to 5 of course "Major Project" from SEM VIII for MBA Tech Data Science

### II. Revision in course structure of B Tech Data Science and MBA Tech Data Science for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23 (Encl. - Ib)

- Renaming the course of Android application Development by 'Mobile Application Development', in SEM IV of B Tech Data Science and MBA Tech Data Science
- Reducing the credit from 4 to 3 of course 'Introduction to Modern Application Development', in SEM V of B Tech Data Science and MBA Tech Data Science
- Renaming the course of Artificial Intelligence by 'Applied Artificial Intelligence' and increasing the credit to 3 to 4, in SEM V of B Tech Data Science and MBA Tech Data Science
- Renaming the course of Computer Vision by 'Computer Vision and Applications' and reducing the credit from 4 to 3, in SEM VI of B Tech Data Science and MBA Tech Data Science
- Introducing of course of 'Advance Data Structure for Analytics', in SEM VI of B Tech Data Science and MBA Tech Data Science
- Shifting of a course 'Big Data', from SEM VII to VI and reducing the credit from 4 to 3, for MBA Tech Data Science
- Reducing the credit from 4 to 3 of course 'Department Elective - III', for SEM VI of B Tech Data Science and MBA Tech Data Science
- Introducing of course of 'Employability Skills', in SEM VI of B Tech Data Science and MBA Tech Data Science
- Shifting of a course 'Department Elective - IV' from SEM VI to VII and reducing the credit from 4 to 3 of B Tech Data Science
- Shifting of a course 'Department Elective - IV' from SEM VI to VIII and reducing the credit from 4 to 3 of MBA Tech Data Science
- Reducing the credit from 4 to 3 of course 'Department Elective - V', in SEM VII of B Tech Data Science
- Shifting of a course 'Department Elective - V' from SEM VII to VIII and reducing the credit from 4 to 3 of MBA Tech Data Science

## 54th Academic Council Meeting

SVKM's NMIMS Deemed-to-be University  
Mukesh Patel School of Technology Management and Engineering

- Renaming the course of Deep Learning by 'Neural Networks and Deep Learning' and reducing the credit from 4 to 3, in SEM VII of B Tech Data Science and MBA Tech Data Science
  - Reducing the credit from 4 to 3 of course 'Natural Language Processing', in SEM VII of B Tech Data Science and MBA Tech Data Science
  - Reducing the credit from 4 to 3 of course 'Big Data', in SEM VII for B Tech Data Science
  - Introducing of course of 'Machine Learning Engineering', in SEM VII of B Tech Data Science and MBA Tech Data Science
  - Renaming the course Minor Project to 'Capstone Project' with increase in credits from 2 to 4 in SEM VII for B Tech Data Science
  - Removing "Minor Project" from Semester VII for MBA Tech Data Science
  - Removing course "Technical Internship" from SEM VII for B Tech Data Science
  - Increase in credits for course 'Technical Internship' from 0 to 5 in SEM VII for MBA Tech Data Science
  - Renaming the course Major Project to 'Project based Internship' with reducing the credits from 12 to 10 in SEM VIII of B Tech Data Science
  - Reducing the credit from 12 to 5 of course "Major Project" from SEM VIII for MBA Tech Data Science
- III. Revision in the course structure of B Tech Data Science for the students admitted in AY 2020-21 and direct second year students admitted in AY 2021-22 (Encl. - Ic)
- Reducing the credit from 4 to 3 of course 'Introduction to Modern Application Development', in SEM V
  - Renaming the course of Artificial Intelligence by 'Applied Artificial Intelligence' and increasing the credit to 3 to 4, in SEM V
  - Renaming the course of Computer Vision by 'Computer Vision and Applications' and reducing the credit from 4 to 3, in SEM VI
  - Introducing of course of 'Advance Data Structure for Analytics', in SEM VI
  - Reducing the credit from 4 to 3 of course 'Department Elective - III', for SEM VI
  - Shifting of a course 'Department Elective - IV' from SEM VI to VII and reducing the credit from 4 to 3
  - Shifting of a course 'Department Elective - IV' from SEM VI to VII and reducing the credit from 4 to 3
  - Renaming the course of Deep Learning by 'Neural Networks and Deep Learning' and reducing the credit from 4 to 3, in SEM VII
  - Reducing the credit from 4 to 3 of course 'Natural Language Processing', in SEM VII
  - Reducing the credit from 4 to 3 of course 'Big Data', in SEM VII
  - Introducing of course of 'Machine Learning Engineering', in SEM VII
  - Reducing the credit from 4 to 3 of course 'Department Elective - V', in SEM VII
  - Renaming the course Minor Project to 'Capstone Project' with increase in credits from 2 to 4 in SEM VII.
  - Removing course "Technical Internship" from SEM VII
  - Renaming the course Major Project to 'Project based Internship' with reducing the credits from 12 to 10 in SEM VIII

## 54th Academic Council Meeting

SVKM's NMIMS Deemed-to-be University  
Mukesh Patel School of Technology Management and Engineering

- IV. Revision in the course structure of B Tech Integrated (Data Science) for the students admitted in AY 2021-22 onwards (Encl. - Id)
- Increasing the credit from 3 to 5 for the course on "Programming for Problem Solving" in Semester V. Syllabus is approved in BoS of Computer department
  - Reducing the credit from 3 to 1 for the course of "English Communication" in Semester V. Syllabus is approved in BoS of BSH department
  - From semester VII onwards Shuffling of courses, removing of courses and introduction of courses in line with B Tech Data Science program
- B. Minor revision of Teaching and Examination Schemes for B Tech Data Science and MBA Tech Data Science, Semester I & II for the students admitted in AY 2022-23 onwards (Encl. - II)
- Increasing the practical hours from 2 to 4 for the course on "Programming for Problem Solving" in Semester I for B. Tech DS and MBA. Tech DS. Syllabus is approved in BoS of Computer department
  - Increasing the theory hours from 2 to 3 for the course on "Data Structure and Algorithms" in Semester II for B. Tech DS and MBA. Tech DS. Syllabus is approved in BoS of Computer department
  - Introduction of the course "Digital Manufacturing Laboratory" and "Electrical and Electronics Workshop" in place of "Workshop Practice" in Semester II for B. Tech DS and Semester I for MBA. Tech DS. Syllabus is approved in BoS of Mechanical & EXTC department
  - Splitting the course of "English Communication" into three courses of 1 credit each. Syllabus is approved in BoS of BSH department
    - a. "English Communication" in Semester II for B. Tech DS and Semester I for MBA. Tech DS
    - b. "Technical Communication" in Semester III
    - c. "Employability Skills" in Semester VI
  - Shifting the course "Environmental Science" from Semester IV to II for B. Tech DS and Semester I for MBA. Tech DS and syllabus is already approved by Civil department
- C. Minor revision of Teaching and Examination Schemes of B Tech Data Science, Semester III and newly introduce for MBA Tech Data Science, Semester III, the syllabi of all the courses are pre-approved / adopted from B Tech Data Science. This is applicable for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23 onwards (Encl. - III)
- For the course, Optimization Methods, tutorial is changed to laboratory
  - Introduce a new course, 'Python for Data Analysis'
- D. Revision in Teaching & Examination Scheme and Syllabi of B Tech. in Data Science, Semester V for the students admitted in academic year 2020-21 (Encl.- IV)
- E. Introduction of Teaching & Examination Scheme and Syllabi of open elective courses offered by the Data Science Department for Semester V and VI. This will be applicable for the students of B Tech and MBA Tech programs except B Tech CSBS and B Tech CSE (DS), admitted in academic year 2020-21 (Encl.- V)
- a. Data Analytics (Except B Tech/MBA Tech IT, CE, DS, Cyber Security, AI)
  - b. Basic Decision making with Spreadsheet (All Programs)
  - c. Algorithmic Trading (All Programs)

## 54th Academic Council Meeting

SVKM's NMIMS Deemed-to-be University  
Mukesh Patel School of Technology Management and Engineering

3. To consider and deliberate upon the revision in the curricula of M Tech Data Science (Business Analytics) and M Tech Artificial Intelligence by way of-
- A. Minor revision in the course structure of M Tech Data Science for the students admitted in AY 2022-23 onwards (Encl. - Ie)
    - Renaming of course 'Financial Institution & Markets' to 'Financial Markets and Risk Analytics' in semester I
    - Renaming of course 'Basic of Operations and Supply Chain Management' to 'Quantitative Insights into Supply Chain and Operations' in semester I
    - Renaming of course 'Basic Marketing' to 'Computational Analytics for Marketing' in semester I
  - B. Minor revision in the course structure of M Tech Data Science (Business Analytics) for the students admitted in AY 2021-22 (Encl. - If)
  - C. Minor revision of Teaching and Examination Schemes of **M Tech Data Science (Business Analytics), Semester III** for the students admitted in AY 2021-22 (Encl. - VI)
    - Renaming the course, Data Science - III as 'Applied Time Series Analysis' and revision in syllabus Course Objective, Course Outcomes, Text Books and Reference Books.
    - Renaming the course, Advanced Marketing Analytics, Advanced Supply Chain Analytics, Advanced Finance Analytics as "Capstone Project". Change in 4 theory hours to 8 practical hours.
  - D. Minor revision in the course structure of M Tech Artificial Intelligence for the students admitted in AY 2022-23 onwards (Encl. - Ig)
    - Renaming of course 'Financial Institution & Markets' to 'Financial Markets and Risk Analytics' in semester I
  - E. Minor revision in syllabus of course, 'An introduction to Artificial Intelligence and AI framework' of **Semester I, M Tech Artificial Intelligence**, for the students admitted in AY 2022-23 onwards (Encl. - VII)
  - F. Minor revision in the course structure of M Tech Artificial Intelligence for the students admitted in AY 2021-22 (Encl. - Ih)
  - G. Minor revision in Teaching and Examination Schemes of **Semester III, M Tech Artificial Intelligence**, for the students admitted in AY 2021-22 (Encl. - VIII)
    - Renaming the course, Advanced Marketing Analytics, Advanced Supply Chain Analytics, Advanced Finance Analytics as "Capstone Project". Change in 4 theory hours to 8 practical hours for semester III



Chairperson  
Dean, Board of Studies

