Vivekanand Education Society's College of Arts, Science & Commerce (Autonomous)

Department of Data Science & Data Analytics
Minutes of the 2nd BOS Meeting

The second meeting of BOS of the Data Science & Data Analytics Department was held on 25th February 2023 between 1:30 pm to 2.30 pm. The following members were present for the meeting -

1. Chairperson (HOD / Coordinator): Mr. Kamlakar Bhopatkar

2. Other University Level Representative:

   Dr. Manoj Devare, School of Information Technology, Amity University, Mumbai

3. Subject Expert (R&D/ Industry):

   Dr Subodh Deolekar, Specialist Data Sciences at L&T Infotech, India.

4. PG Alumnus:

   Mr. Smitraj Raut, Senior Manager-Data Science, EXL Services

5. The entire faculty of each specialization:

         i. Mr. Gokul Choudhary

         ii. Dr. Madhavi Vaidya

         iv. Ms. Laxmi Tiwari

The meeting was planned with the following agenda -

1. To discuss and sanction the syllabi for the academic year 2023-24
2. Implementation of NEP for 2023-24
3. AOB with permission of the chair

The proceedings of the meeting along with the resolutions adopted are as follows -

Mr. Sameer Kanse, Ms. Sridevi Vadapalli, Ms. Rajashree Date, Mr. Sujit Chavan couldn't attend the meeting due to their prior commitments.

Agenda 1 - To discuss and sanction the syllabi for the academic year 2023-24

(i) Welcome Address -

Mr. Kamlakar Bhopatkar welcomed and gave a brief introduction of all the members.Dr.Subodh Deolekar has been added as subject expert (R&D/ Industry) in the existing BOS.

He also mentioned that Mr. Gokul Choudhary will be playing an active role in arranging the meetings in near future.

(ii) To discuss and approve the Syllabus -

Sem 3	Sem 4
Algorithms and Data Structures - Explained by Mr. Kamlakar	Object Oriented Programming using Java - Explain by Ms. Laxmi
Introduction to Data Science - Explained by Mr. Kamlakar	AI & Machine Learning - Explained by Mr. Kamlakar
Data Warehousing and Data Mining -Explained by Dr. Madhavi	Software Engineering - Explained by Mr. Gokul
IoT - Explained by Mr. Gokul	Cloud Computing - Explain by Ms. Laxmi
Elective subjects Section	
Financial Literacy and Investment Analysis - Explained by Mr. Gokul	Universal Human Values - Explained by Mr. Gokul
Strategic Management and Entrepreneurship Development - Explained by Mr. Gokul	Green Technologies - Explained by Mr. Gokul
Internship	Capstone Project

Gokul Sir thanked the teachers of our college who helped in designing the syllabus of elective subjects.

Following major suggestions were given by the external members of BOS -

Dr. Manoj Devare, School of Information Technology, Amity University, Mumbai
- ✓ Software engineering subject syllabus is exhaustive as it includes everything like software engineering concepts, testing concepts and UML modeling also.
- ✓ For the multidisciplinary subjects lectures can be combined with commerce and management classes.
- ✓ Separate expert faculty should be assigned for IoT subject preferably from electronic background as well as proper kits of IOTs need to be set up
- ✓ Some suggestion given regarding the machine learning subjects in supervise and unsupervised learning
- ✓ Basic installation of Hadoop on windows may be added as hands on Practicals.

✓ Spark practical's can be added using python.

✓ Some topics can be added in IoT like – BACnet and Scada.

✓ Depth of a topic of neural network can be defined properly

Dr Subodh Deolekar, Specialist Data Sciences at L&T Infotech, India.

✓ Some suggestions given regarding the machine learning techniques about classification of various techniques in specific categories like K-NN.

✓ Some time data science and machine learning concepts are common so need to check and make sure that there will be no repetition of similar topics

✓ AI Syllabus can include technique like Gradient Descent

✓ Only one technology can be followed either R or Python

✓ Software engineering may include Poker method concepts.

Some of these points would be incorporated in the syllabus whereas decisions with respect to some points would be finalized after the meetings with the Academic Council/Examination Committee.

(iii) To discuss and approve suggested techniques for Continuous Internal Evaluation.

Internal Evaluation for Theory Courses – 25 Marks

a. Mid-Term Class Test– 15 Marks

● It should be conducted using any learning management system such as Moodle (Modular object-oriented dynamic learning environment)

● The test should have 15 MCQ's which should be solved in a time duration of 30 minutes.

b. Assignment / Presentations – 10 Marks (Minimum 5 hours of work)

● Assignment - Any subject-related work in soft copy format comprising of case study, solutions to multiple challenging problems beyond journal, study and review of published research paper from a reputed journal

● Presentation - Any subject-related work (can be done in a group) comprising of mini-project, explaining topics beyond syllabus, presenting any subject-related topic into innovative way (like skit or video)

● Proof of the assignment/presentation should be maintained.

c. To discuss and approve Question Paper Pattern (For Theory & Practical)

External Examination for Theory Courses – 75 Marks

Duration: 2.5 Hours

Theory question paper pattern:

All questions shall be compulsory with internal choice within the questions. Each Question may be subdivided into sub-questions as a, b, c, d, e etc. & the allocation of Marks depends on the weightage of the topic.

All questions are compulsory.			
Question	Based on	Options	Marks
Q.1	Unit I	Any 3 out of 5	15
Q.2	Unit II	Any 3 out of 5	15
Q.3	Unit III	Any 3 out of 5	15
Q.4	Unit IV	Any 3 out of 5	15
Q.5	Unit V	Any 3 out of 5	15

III. Practical Examination – 50 Marks

Each core subject carries 50 Marks

40 marks + 05 marks (journal) + 05 marks (viva)

Duration: 2 Hours for each practical course.

- Minimum 80% practical from each core subject is required to be completed.
- Certified Journal is compulsory for appearing at the time of Practical Exam
- The final submission and evaluation of journals in electronic form using a Learning Management System / Platform can be promoted by college.
- For TYBSc Examinations, one external from nearby college should be present

Agenda 2 Implementation of NEP for the academic year 2023-24

For the next academic year i.e 2023-2024 department proposed following course curriculum as per the NEP curriculum framework –

<div align="center">FYDSDA SEM-I</div>

Type	SUBJECTS	Theory	Practs	Tut(1)	Total lectures	Total Credits
Major	Operating System	3	1		5	4
	Programming with Python	3	1		5	4
Minor	Statistics Using R	2	1		4	3
Multi	Open Source Softwares	1	1		3	2
Ability	Soft Skills	2			2	2

Type		Theory	Practs(2)	Tut(1)	Total lectures	Total Credits
Skill	Web Technology	2	1		4	3
Value added	Green Technologies & E-waste management	3		1	4	4
	Total	**16**	**5**	**1**	**27**	**22**

FYDSDA SEM-II

Type	Sem 2	Theory	Practs(2)	Tut(1)	Total lectures	Total Credits
Major	DBMS	3	1		5	4
	Application Design using Python	3	1		5	4
Minor	Statistical Techniques	3	1		4	4
Multi	Financial Literacy	3			3	3
Ability	Business Communication	2	1		4	3
Skill	Advance web Technologies		1		2	1
Value added	Indian Constitution & Universal Human values	3			3	3
	Total	17	5		26	22

SYDSDA SEM-III

Type	SUBJECTS	Theory	Practs	Tut(1)	Total lectures	Total Credits
Major	MJ301 Algorithms and Data Structures	3	1		5	4
	MJ302 Introduction to Data Science	3	1		5	4
Minor	MN301 Data Warehousing and Data Mining	3	1		5	4
Multi	MULT301 IoT	3	1		5	4
Ability	AEC 301 Strategic Management and Entrepreneurship Development	3			3	3
Skill	SS 301 / Ruby on Rails / Data Visualization	1	1		3	2
	Internship		1			1
	TOTAL	16	6		**26**	22

SYDSDA SEM-IV

Type	Sem 4	Theory	Practs(2)	Tut(1)	Total lectures	Total Credits
Major	MJ401 Object Oriented Programming using Java	3	1		5	4
	MJ402 Data Science Techniques	3	1		5	4
	MJ403 Software Engineering	3	1		5	4
Minor	MN401 Cloud Computing	3	1		5	4
	AI & Machine Learning	3			3	3
	MN402 Capstone Project		1		2	1

Ability	AEC 401- Android Programming	1	1		3	2
		16	6		28	22

Agenda 8 - Any other matter with the permission of the chair.

None

The meeting ended with a vote of thanks by the chairman.