



AQAR 2021-22

- 1.1 Curriculum Design and Development
- 1.1.2 Data Science – Board of Studies



DEPARTMENT OF DATA SCIENCE St. JOSEPH'S COLLEGE (Autonomous)

Special Heritage Status awarded by UGC, College with Potential for Excellence by UGC
Accredited at 'A++' Grade (4th Cycle) by NAAC, DBT-STAR & DST - FIST Sponsored College

TIRUCHIRAPPALLI - 620 002, S.INDIA

Tel : 0431-2700320 (Coll) / 2701501 (Fax) 0431-4226501 (Dept) / 4226492 (Lab)

E-mail: hodds@mail.sjctni.edu Website: www.sjctni.edu



Minutes of the Board of Studies Meeting


The Board of Studies meeting of the Department of Data Science was held on **18-5-2021 (Tuesday)** at **2:00 p.m.** in the Google classroom to pass and ratify the University recommended 2020 M.Sc., (Data Science) syllabus which had been fit into the PG course pattern of St. Joseph's College (Autonomous), Trichy; to pass the 2021 LOCF based M.Sc., (Data Science) syllabus; to get the approval for the question paper pattern based on 2021 LOCF based M.Sc., (Data Science) syllabus as well as for the eligibility requirements for MSc (Data Science)

The following experts were present

- **Dr. H. Karamath Ali**, Associate Professor, (University Nominee)
Department of Computer Science,
Periyar E.V.R. College (Autonomous),
Tiruchirappalli-620 023
E-mail: hkaramath@yahoo.com
Mobile: +919443628962
- **Dr. S. Dominic**, Associate Professor, (Subject Expert)
Dept. of Computer Applications
National Institute of Technology,
Tiruchirappalli – 620 015.
E-mail: dominic@nitt.edu
Mobile: 9994904763
- **Dr. P. Anandkumar**, (Industry Expert)
Director & Corporate Trainer,
ROOT-IT Learning Centre II Floor,
BKG Building, No.86, Madurai Road,
Tiruchirappalli – 620 008.
E-mail: root.anand@gmail.com
Mobile: 9790636324


Dr. Y. DOMINIC

Dean-School of Computing Sciences
St. Joseph's College (Autonomous)
Tiruchirappalli-620 002.


HOD
Department of Data Science
St. Joseph's College (Autonomous)
Trichy - 620 002.

The following faculty members were present

- | | |
|-----------------------------|--------------------------------|
| 1. Dr. L. Arockiam | Associate Professor & Head i/c |
| 2. Dr. V. Arul Kumar | Assistant Professor |
| 3. Dr. I. Priya Stella Mary | Assistant Professor |
| 4. Dr. M. Kirushanth | Assistant Professor |

The meeting started with a silent prayer. The external experts and the department faculty members were welcomed by Dr. L. Arockiam for the Board of Studies Meeting. He also explained that the M.Sc (Data Science) syllabus was framed to meet the equivalence eligibility, to focus on placements; to fit into the PG course structure and to provide room for accommodating any developments in the form of value added courses.

2020 M.Sc., (Data Science) Syllabus

The University recommended 2020 M.Sc., (Data Science) syllabus for various courses was presented for ratification. The external experts explored and approved the 2020 M.Sc., (Data Science) syllabus.

2021 LOCF based M.Sc., (Data Science) Syllabus

The 2021 LOCF based M.Sc., (Data Science) syllabus for various courses was presented. The external experts gave the following suggestions

- **Dr. S. Dominic** suggested to remove the **Data Mining** course [Course code: 21PDS1AE01] due to the repetition of data mining concepts in the **Machine Learning** course [Course Code :21PDS2ES2A]; emphasized the inclusion of **Operating System** course; suggested the inclusion of "*Basic Linear Algebra Concepts*"
- He also recommended to eliminate the repetition of topic "*Sampling Theory Concepts*" in **Statistical Computing** [Course Code: 21PDS1CC01] and **Time Series and Sampling Theory** [Course Code: 21PDS3CC06] courses.
- **Dr. P. Anandkumar** stressed the importance of offering **Object Oriented System Development** course [Course Code: 21PDS1ES1B]; suggested to have **Python Programming** in semester I.



HOD
Department of Data Science
St. Joseph's College (Autonomous)
Trichy - 620 002.

- Finally, he recommended to include the **Artificial Intelligence** course in semester I.
- **Dr. H. Karamath Ali** also emphasized the inclusion of **Operating System** course.

Actions Taken

In M.Sc Data Science, inclusions /amendments /eliminations were done in the following courses as per the suggestions/recommendations received from the external experts:

1. The **Data Mining** course [Course Code: 21PDS1AE01] is replaced with the new course namely **Artificial Intelligence** [Course Code: 21PDS1AE01] and "*Linear Algebra*" is included as a unit in it.
2. The **Operating System Concepts and Unix** and **Basic Python Programming** are included as the value added courses in Semester I.
3. It is decided to offer the **Object Oriented System Development** course [Course Code: 21PDS1ES1B] as the second elective, If the staff workload could be managed.
4. In the **Statistical Computing** course [Course Code: 21PDS1CC01], The "*Sampling Theory*" topic is replaced with the new topic "*Data Measurement, Collection and Classification; Skewness, Kurtosis and Moments*".


HOD
 Department of Data Science
 St. Joseph's College (Autonomous)
 Trichy - 620 002.

Question Paper Pattern

The following Question Paper pattern based on 2021 LOCF based M.Sc., (Data Science) syllabus was presented and approved by the external experts

Table 1: A New Model for MID/END Test

FOR MID/END TEST			
DURATION: 2:00 Hours		Max Mark : 60	
SECTIONS	K- LEVELS	TYPE	MARKS
SECTION -A	K1	No choice	6 x 1 = 6
SECTION-B	K2	No choice	2 x 2 = 4
SECTION-C	K3, K4	Either /Or	4 x 5 = 20
SECTION-D	K5 ,K6	3 Out of 4	3 x 10 = 30
Total			60

Table 2: A New Model for Semester Examination

FOR SEMESTER EXAMINATION			
DURATION: 3:00 Hours		Max Mark : 100	
SECTIONS	K- LEVELS	TYPE	MARKS
SECTION -A	K1	No choice	10 x 1 = 10
SECTION-B	K2	No choice	10 x 2 = 20
SECTION-C	K3, K4	Either /Or	5 x 4 = 20
SECTION-D	K5 ,K6	5 Out of 6	5 x 10 = 50
Total			100

Table 3: Assessment Pattern for Courses in Part - IV of

LOCF Syllabus (2021-22)

S. No.	Course Title	CIA (Department)	Semester	Total Marks
1	Self-Paced Learning	25 + 25 = 50	50 Marks MCQ (COE)	100
2	Comprehensive Examinations	25 +25 = 50	50 Marks (MCQ) (COE)	100
3	SEC: SOFT SKILL(For UG and PG)	100	(Fully Internal)	100
4	Internship (Three Weeks during summer vacation)	100	(Fully Internal)	100
5	Project	100	100	200
6	Ability Enhancement Course for PG (Refer Table 4 & 5 for Evaluation Pattern)	50	50	100



HOD
Department of Data Science
St. Joseph's College (Autonomous)
Trichy - 620 002.

Table 4: A New Model for AEC Internal Test

FOR AEC INTERNAL TEST			
Type	K Levels	TYPE	Marks
Two Components (2x10)	K1-K6	Assignment/Seminar	20
Written Test *			30
Total			50
DETAILS FOR THE AEC WRITTEN TEST *			
DURATION: 2:00 Hours			Max Mark : 50
SECTIONS	K- LEVELS	TYPE	MARKS
SECTION -A	K1	No choice	2 x 1 = 2
SECTION-B	K2	No choice	2 x 2 = 4
SECTION-C	K3, K4	Either /Or	2 x 4 = 8
SECTION-D	K5 ,K6	2 Out of 3	2 x 8 =16
Total			30


Table 5: A New Model for AEC Semester Examination

FOR SEMESTER EXAMINATION			
DURATION: 3:00 Hours			Max Mark : 50
SECTIONS	K- LEVELS	TYPE	MARKS
SECTION -A	K1	No choice	5 x 1 = 5
SECTION-B	K2	No choice	5 x 2 = 10
SECTION-C	K3, K4	Either /Or	5 x 4 = 20
SECTION-D	K5 ,K6	2 Out of 3	2 x 7.5 = 15
Total			50

Eligibility Requirements for MSc (Data Science)

The following eligibility requirements for the admission into M.Sc., (Data Science) Course were discussed and approved by the board members

- B.Sc. (CS), B.Sc. (IT), BCA, B.Voc. (Software Development).
- B.E. / B.Tech. Degree in Computer Science, Information Technology.
- Any B.Sc. Degree with Mathematics / Statistics as allied subject.



HOD
 Department of Data Science
 St. Joseph's College (Autonomous)
 Trichy - 620 002.

The meeting ended with a vote of thanks proposed by Dr. M. Kriushanth

1. Dr. H. Karamath Ali Associate Professor
2. Dr. S. Domnic Associate Professor
3. Dr. P. Anandkumar, Director & Corporate Trainer
4. Dr.L.Arockiam Associate Professor & Head I/C
5. Dr.V.Arul Kumar Assistant Professor
6. Dr.I.Priya Stella Mary Assistant Professor
7. Dr.Kirushanth Assistant Professor



Screenshots



HOD
Department of Data Science
St. Joseph's College (Autonomous)
Trichy - 620 002.

Dr. V. Arul Kumar is presenting

Course Pattern - 2020

Sem	Code	Course	Th	Cr
I	20PDS1101	Data Science and Big Data Analytics	5	4
	20PDS1102	Statistical Computing	5	4
	20PDS1103	Advanced Database Management Systems	4	4
	20PDS1104	Data Mining	4	4
	20PDS1105	Software Lab-I (R Programming)	4	2
	20PDS1106	Software Lab-II (Databases)	4	2
	20PDS1201A	Core Elective I: Design and Analysis of Algorithms (OR)	4	4
	20PDS1201B	Core Elective I: Applied Statistics	4	4
	20PDS1401	Extra Credit Course-I: MOOC	-	(2)
		Total for Semester I	30	24 + (2)
20PDS2107	Exploratory and Descriptive Data Analytics	5	4	
20PDS2108	Cloud Computing	5	4	

Participants: Dominic Sandanam, Dr. V. Arul Kumar, Dr. Arockiam L., Dr. Anandkumar Prakasam, Karamath Ali Hameed.

Dr. V. Arul Kumar is presenting

3:22 PM

Participants: Dr. Arockiam L., Dr. Anandkumar Prakasam, Karamath Ali Hameed, Dominic Sandanam, Dr. V. Arul Kumar, Dr. I Priya Stella Mary, Dr. M. Kriushanth.

Dr. V. Arul Kumar is presenting

HOD
Department of Data Science
St. Joseph's College (Autonomous)
Trichy - 620 002.