



# **SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE**

(An Autonomous Institution)

(Approved by AICTE, New Delhi and Affiliated to Pondicherry University)  
(Accredited by NAAC with 'A' Grade and Accredited by NBA-AICTE, New Delhi)  
Madagadipet, Puducherry



*Third Meeting of the Board of Studies*

*Department of Computational Studies*

for the Programme

## **Bachelor of Data Science And Analytics**

*Venue*

First Floor, SAS Block

Sri Manakula Vinayagar Engineering College

Madagadipet, Puducherry – 605 107

*Date & Time*

*29-11-2023 & 02.30 pm to 4.00 pm*



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## School of Arts and Science Department of Computational Studies Board of Studies Meeting for B.Sc. Data Science and Analytics

The Third meeting of Board of Studies for the course B.Sc. Data Science and Analytics was held through online on 29.11.2023 at 02:30 pm in the Department of Computational Studies, School of Arts and Science, Sri Manakula Vinayagar Engineering College with the Head of the Department in the Chair.

The following members were present for the Third Meeting of Board of Studies.

S. No.	Name of the Member with Designation and official Address	Responsibility in the BoS
1	<b>Dr. N. MOGANARANGAN, M.E., Ph.D.</b> Professor & Head, Department of Computational Studies, School of Arts & Science, Sri Manakula Vinayagar Engineering College (Autonomous) Madagadipet, Puducherry 605 107 <b>E-mail: moganarangan.cse@smvec.ac.in</b> <b>Mobile: 98945 33661</b>	Chairman
2	<b>Dr. PUNAM BEDI M.Sc., M.Tech., Ph.D.</b> Professor, Department of Computer Science, University of Delhi, Delhi – 110 007. <b>Email: punambedi@gmail.com , Mobile:9899125785</b>	Pondicherry University Nominee
3	<b>Dr. R. AROKIA PAUL RAJAN MCA, PGDBA, MA, Ph.D.,</b> Associate Professor, Computer Science, School of Sciences, Bangalore Central Campus, Christ University, Bangalore, Karnataka. <b>Mail id: paulraajan@gmail.com</b> <b>Ph: 9443459242</b>	Subject Expert (Academic Council Nominee)
4	<b>Dr. M. DURAISAMY, MCA., M.Phil., Ph.D., TNSET.</b> Associate Professor and Head, Department of Computer Applications, Government Arts and Science College, Kariyampatti, Tirupattur, Tamilnadu - 635 901. <b>E-mail: duraimca78@gmail.com</b> <b>Mobile: 98431 55358.</b>	Subject Expert (Academic Council Nominee)
5	<b>Mr.E.IYYAPPAN,</b> Senior Application Developer, IQVIA, Bangalore. <b>E-mail: eiyyappan.mca@gmail.com</b> <b>Mobile:9790700670</b>	Member (Industry Representative)

<b>Co-opted Expert Members</b>		
6	<b>Dr. J. MADHUSUDANAN, ME., Ph.D.,</b> Professor and Head, Department of Artificial Intelligence and Data Science, Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry. 605 107. <b>E-mail: madhu@smvec.ac.in</b> <b>Mobile: 9003739274</b>	Co-opted Expert Member
7	<b>Mr. M. SHANMUGAM, M.Sc., M.Phil., M.E., SET, (Ph.D).,</b> Associate Professor, Department of Computer Science Engineering, Sri Manakula Vinayagar Engineering College  <b>E-mail: shanmugam.mm@smvec.ac.in</b> <b>Mobile: 9444370963</b>	Co-opted Expert Member
<b>Internal Members</b>		
8	<b>Mrs. A. SHAMSATH BEGAM, M.C.A.,</b> Assistant Professor, Department of Computational Studies, School of Arts and Science, Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry. 605 107. <b>E-mail: shamsathbegum.sas@smvec.ac.in, Mobile: 9500399774</b>	Internal Member
9	<b>Mr. K. SANTHOSHKUMAR, M.C.A. M.Phil. B.Ed.,</b> Assistant Professor Department of Computational Studies School of Arts and Science Sri Manakula Vinayagar Engineering College <b>Mail id: santhoshkumark.sas@smvec.ac.in</b> <b>Phone: 8508068040.</b>	Internal Member
10	<b>Dr. M.A. ISHRATH JAHAN M.A., M.Phil., Ph.D.,</b> Associate Professor & Head, Department of English, School of Arts and Science, Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry. 605 107. <b>E-mail: ishrath@smvec.ac.in</b> <b>Mobile: 9443075126.</b>	Internal Member
11	<b>Mr. P.KRISHNAMOORTHY M.Sc., M.Phil.,</b> Assistant Professor and Head, Department of mathematics, School of Arts and Science, Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry. 605 107. <b>E-mail: krishnamoorthymaths@smvec.ac.in</b> <b>Mobile: 9750028056.</b>	Internal Member

## ANNEXURE – II

### AGENDA OF THE MEETING

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.1***

Welcome Address, Introduction about the Institution, Department, and BoS Members.

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.2***

To review and confirm the minutes of the Second meeting of the Board of Studies held on June 30, 2023.

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.3***

To discuss the curriculum and syllabi of (IV Semester) for revision and modifications if any. (R- 2020).

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.4***

To discuss and approve the curriculum (I-IV semester) and syllabi (II semester) for B.Sc Data Science and analytics programme under Regulations R-2023.

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.5***

To discuss and approve the Academic calendar for the even semester ( semester II, IV) of Academic year 2023-24.

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.6***

To Debate Admission eligibility criteria / norms to enroll as student in the specific programme as prescribed by UGC

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.7***

To Conduct of Internal assessment test, model practical exams, award of internal assessment /Re Earn / Improvement / Evaluation Procedures.

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.8***

To appraise and approve the Discipline Specific Elective (DSE) and Skill Enhancement course (SEC) offered to the fourth semester (R - 2020) and Second Semester (R – 2023)

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.9***

To propound the Department Research activities and to inform about the remarkable achievement of the Staff and Students.

***Item No.: BoS/2023/SAS/UG/ B.Sc. Data Science and Analytics/3.10***

Any other item with the permission of the Chair



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## **SCHOOL OF ARTS AND SCIENCE**

### **Department of Computational Studies**

#### **B.Sc. Data Science and Analytics**

#### **Minutes of 3<sup>rd</sup> meeting of Board of Studies**

### **ANNEXURE – I**

#### **ACADEMIC REGULATIONS 2020**

**(R 2020)**

#### **COLLEGE VISION AND MISSION**

## **Vision**

To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society.

## **Mission**

### **M1: Quality Education:**

To provide comprehensive academic system that amalgamates the cutting edge technologies with best practices.

### **M2: Research and Innovation:**

To foster value based research and innovation in collaboration with industries and institutions globally for creating intellectuals with new avenues.

### **M3: Employability and Entrepreneurship:**

To inculcate the employability and entrepreneurial skills through value and skill based training.

### **M4: Ethical Values:**

To instill deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.

## **DEPARTMENT OF COMPUTATIONAL STUDIES**

### **VISION AND MISSION**

#### **Vision:**

To come up with successfully as a high-quality human capital in Computer Science and related areas for the sustainable growth of the IT industry needs of the country.

#### **Mission:**

##### **M1: Innovative Skills:**

Ensuring deeper understanding of fundamentals and acquiring innovative skills within core areas of Computer Science.

##### **M2: Motivated Graduates:**

Producing highly skilled and motivated graduates with the ability of problem solving individually and in teams.

##### **M3: Ethical Responsibilities:**

Providing a deep awareness of our ethical responsibilities to our profession and to the society.

SEMESTER - IV										
S. No	Course Code	Course Title	Category	Periods			Credits	Max. Marks		
				L	T	P		CAM	ESM	Total
Theory										
1	A20DAT407	NoSQL Databases	DSC	4	0	0	4	25	75	100
2	A20DAT408	Introduction of Artificial Intelligence	DSC	4	0	0	4	25	75	100
3	A20DAE4XX	Discipline Specific Elective–II	DSE	3	0	0	3	25	75	100
4	A20DAD404	Health Analytics	IDC	3	0	0	4	25	75	100
5	A20XXO4XX	Open Elective–II	OE	2	0	0	2	25	75	100
Practical										
6	A20DAL407	NoSQL Databases - Lab	DSC	0	0	4	2	50	50	100
7	A20DAL408	Artificial Intelligence (PROLOG) Lab	DSC	0	0	4	2	50	50	100
Skill Enhancement Course										
8	A20DAS404	AWS Web Services	SEC	0	0	4	2	100	0	100
Employment Enhancement Course										
9	A20DAC404	Blockchain	EEC	0	0	4	0	100	0	100
							23	425	475	900

DISCIPLINE SPECIFIC ELECTIVES										
Sl. No	Course Code	Course Title	Category	Periods			Credits	Max. Marks		
				L	T	P		CAM	ESM	Total
Discipline Specific Elective (DSE - I) – offered in Third Semester										
1	A20DAE301	Operating System	DSE	3	-	-	3	25	75	100
2	A20DAE302	Information Security	DSE	3	-	-	3	25	75	100
3	A20DAE303	Computer Networks	DSE	3	-	-	3	25	75	100
Discipline Specific Elective (DSE - II) – offered in Fourth Semester										
1	A20DAE404	Infrastructure Management	DSE	3	-	-	3	25	75	100
2	A20DAE405	Client Server Technology	DSE	3	-	-	3	25	75	100
3	A20DAE406	Image Processing	DSE	3	-	-	3	25	75	100
Discipline Specific Elective (DSE - III) – offered in Fifth Semester										
1	A20DAE507	Wireless Sensor Network	DSE	3	-	-	3	25	75	100
2	A20DAE508	Data Science using R	DSE	3	-	-	3	25	75	100
3	A20DAE509	Virtualization using Cloud	DSE	3	-	-	3	25	75	100
Discipline Specific Elective (DSE - IV) – offered in Sixth Semester										
1	A20DAE610	Process Management	DSE	3	-	-	3	25	75	100
2	A20DAE611	Software Engineering	DSE	3	-	-	3	25	75	100
3	A20DAE612	Introduction to Digital Marketing	DSE	3	-	-	3	25	75	100

## OPEN ELECTIVE COURSES



**COMPLETE LIST OF OPEN ELECTIVES OFFERED BY ALL THE DEPARTMENTS**

Sl. No.	Course Code	Course Title	Offering Department
1	A20BTO401	Herbal Technology	Bioscience
2	A20BTO402	Vermiculture	Bioscience
3	A20BTO403	Biotechnology for Society	Bioscience
4	A20CHO404	C++ Programming and its Application to Chemistry	Chemistry
5	A20CHO405	Computational Chemistry Practical	Chemistry
6	A20CHO406	Instrumental Methods of Analysis	Chemistry
7	A20CMO407	Essential Legal Awareness	Commerce and Management
8	A20CMO408	Essentials of Insurance	Commerce and Management
9	A20CMO409	Practical Banking	Commerce and Management
10	A20CPO410	Database Management Systems	Computational Studies
11	A20CPO411	Introduction to Data Science using Python	Computational Studies
12	A20CPO412	Web Development	Computational Studies
13	A20ENO413	Functional English	English
14	A20ENO414	English Next-India	English
15	A20ENO415	English for Competitive Exam	English
16	A20MAO416	Discrete mathematics	Mathematics
17	A20MAO417	Operations Research	Mathematics
18	A20MAO418	Quantitative Aptitude - II	Mathematics
19	A20VCO419	Basics of News Reporting	Media Studies
20	A20VCO420	Scripting for media	Media Studies
21	A20VCO421	Video Editing	Media Studies
22	A20NDO422	Food Labelling	Food Science
23	A20NDO423	Hygiene and Sanitation	Food Science
24	A20NDO424	Nutrition for Adolescent	Food Science
25	A20PHO425	Digital Electronics	Physics
26	A20PHO426	Geo-Physics	Physics
27	A20PHO427	Space Science	Physics
28	A20TMO428	தமிழ் மொழி	Tamil
29	A20TMO429	தமிழ் மொழி இலக்கணம்	Tamil
30	A20TMO430	தமிழ் மொழி வரலாறு	Tamil

5/5

R.D. McManis