

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 625 015
(A Govt Aided Autonomous Institution Affiliated to Anna University)

Minutes of Five Years Integrated M.Sc., (Data Science) Degree Programme

Board of Studies (BOS) Meeting

The Draft Copy of Regulations, Curriculum and Syllabus for *Five Years Integrated M.Sc., (Data Science) Degree Programme [2019-2020] Onwards* were scrutinized by the BOS members. The suggestions provided by the members have been incorporated and the final version has been approved by the members, which is attached herewith.

Date: 21/12/2018 (Friday) @ 02.30 pm

External Expert Members:

Dr. B. Ravindran
Professor
Department of Computer Science and Engineering
Indian Institute of Technology (IIT) Madras

B. Ravindran

Dr. Venkatesh Raman
Professor
The Institute of Mathematical Sciences
Chennai

R. Venkatesh

Internal Faculty Members:

Dr.S.Parthasarathy Associate Professor & Head/ MCA, TCE	<u>parthasarathy</u>	Dr.V.Mohan Professor of Mathematics & Registrar, TCE	<u>Mohan</u>
Dr. S.Mercy Shalinie Professor & Head / CSE, TCE	<u>SM Shalinie</u>	Dr.A.Johnsanjeevkumar Assistant Professor / MCA, TCE	<u>John</u>
Dr.C.Deisy Professor & Head / IT, TCE	<u>Deisy</u>	Dr.D.Anitha Assistant Professor / MCA, TCE	<u>Anitha D</u>

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Dr.S.Parthasarathy
Coordinator – MSc (Data Science)

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 625 015
DEPARTMENT OF COMPUTER APPLICATIONS

SUMMARY OF SUGGESTIONS / COMMENTS from BOS Members

Name of the meeting : Board of Studies

Agenda : Regulations, Curriculum and Syllabus for M.Sc. (Data Science) Degree [2019-2020]
Onwards

Date & Time : 21.12.2018, 2:30 pm

Sl. No	List of Suggestions/Comments
1	<ul style="list-style-type: none">➤ To move 19DS610 Parallel and Distributed Computing to Elective.➤ To introduce a core subject "Deep Learning" – Theory as well as a Lab Course.➤ To shift Natural Language Processing (NLP) course from Elective to Core.➤ To introduce a NLP Lab in the place of Reinforcement Learning Lab.➤ To shift Network Science from Core to Elective.➤ To shift Information Retrieval course from Core to Elective.➤ To remove courses on Data Compression, Multimedia analytics, Pervasive computing from Elective list.➤ To introduce courses on High Performance Computing, Embedded system, Graphical models under Electives.➤ Renaming elective courses on "MIS" as "EIS", "Applied Graph Algorithms" as "Graph Algorithms".
Other Suggestions:	
2	<ul style="list-style-type: none">➤ Clustering of Electives shall be explored.➤ Mini Projects with a focus on Innovation shall be encouraged for MSc (DS) students.

Anitha D

Dr. D. Anitha, APCA
TLP Coordinator

parthasarathy

Approved by Dr. S. Parthasarathy
Coordinator – MSc (Data Science)

Following the discussion and comments from the Board of Studies members, the curriculum and the detailed syllabus for the following courses are passed in the Board of Studies Meeting for M.Sc. Data Science Degree programme along with Regulations for M.Sc. Data Science [2019-2020 onwards].

SEMESTER I

S.No	Course Code	Course Name
1	19DS110	CALCULUS
2	19DS120	APPLIED PHYSICS
3	19DS130	DIGITAL ELECTRONICS
4	19DS140	PROBLEM SOLVING USING C PROGRAMMING
5	19DS150	DISCRETE STRUCTURES
6	19DS170	C PROGRAMMING LAB
7	19DS180	PROFESSIONAL COMMUNICATION

SEMESTER II

S.No	Course Code	Course Name
1	19DS210	THEORY OF PROBABILITY
2	19DS220	TRANSFORMS AND THEIR APPLICATIONS
3	19DS230	DATA STRUCTURES
4	19DS240	OBJECT ORIENTED PROGRAMMING
5	19DS250	GRAPH THEORY
6	19DS270	OBJECT ORIENTED PROGRAMMING LAB
7	19DS280	DATA STRUCTURES LAB

SEMESTER III

S.No	Course Code	Course Name
1	19DS310	APPLIED STATISTICS
2	19DS320	LINEAR ALGEBRA
3	19DS330	ORGANIZATIONAL THEORY AND BEHAVIOUR
4	19DS340	ADVANCED DATA STRUCTURES
5	19DS350	COMPUTER ORGANIZATION
6	19DS370	APPLIED STATISTICS AND PYTHON PROGRAMMING LAB
7	19DS380	ADVANCED DATA STRUCTURES LAB

SEMESTER IV

S.No	Course Code	Course Name
1	19DS410	ABSTRACT ALGEBRA
2	19DS420	DATABASE MANAGEMENT
3	19DS430	DESIGN AND ANALYSIS OF ALGORITHMS
4	19DS440	OPERATING SYSTEMS
5	19DS450	PREDICTIVE ANALYTICS
6	19DS470	RELATIONAL DATABASE LAB
7	19DS480	DESIGN AND ANALYSIS OF ALGORITHMS LAB

SEMESTER V

S.No	Course Code	Course Name
1	19DS510	NUMERICAL METHODS
2	19DS520	WEB TECHNOLOGY
3	19DS530	COMPUTER NETWORKS
4	19DS540	MACHINE LEARNING
5	19DS550	PREDICTIVE ANALYTICS
6	19DS570	JAVA PROGRAMMING LAB
7	19DS580	WEB TECHNOLOGY LAB

SEMESTER VI

S.No	Course Code	Course Name
1	19DS610	DEEP LEARNING
2	19DS620	DATA MINING
3	19DS630	BIG DATA SYSTEMS
4	19DS640	OPTIMIZATION TECHNIQUES
5	19DS670	BIG DATABASE SYSTEMS LAB
6	19DS680	DEEP LEARNING LAB

SEMESTER VII

S.No	Course Code	Course Name
1	19DSP10	Project Work - I

SEMESTER VIII

S.No	Course Code	Course Name
1	19DS810	REINFORCEMENT LEARNING
2	19DS820	INFORMATION SECURITY
3	19DS830	BUSINESS ANALYTICS
4	19DS870	MATHEMATICAL COMPUTING LAB
5	19DS880	INFORMATION SECURITY LAB

ELECTIVE & INDUSTRY SUPPORTED COURSES

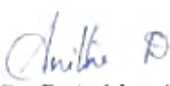
S.No	Course Code	Course Name
1	19DSPA0	High Performance Computing
2	19DSPB0	Mobile Application Development
3	19DSPC0	Parallel And Distributed Computing
4	19DSPD0	Embedded System
5	19DSPE0	Marketing Analytics
6	19DSPE0	Graphical Models
7	19DSPG0	Soft Computing
8	19DSPH0	Mathematical Modeling
9	19DSPJ0	Software Engineering
10	19DSPK0	Graph Algorithms
11	19DSPL0	Artificial Intelligence
12	19DSPM0	Game Theory
13	19DSPN0	Social Media Analytics
14	19DSPP0	Cloud Computing
15	19DSPQ0	Data Visualization
16	19DSPR0	Computational Finance
17	19DSPS0	Enterprise Information System
18	19DSPT0	Randomized Algorithms
19	19DSPU0	Principles Of Management
20	19DSPV0	Accounting and Financial Management
21	19DSPW0	Wireless Networks
22	19DSPX0	Network Science
23	19DSPY0	Information Retrieval

SEMESTER IX


S.No	Course Code	Course Name
1	19DS910	Web Analytics
2	19DS920	Natural Language Processing
3	19DS930	Computer Vision
4	19DS970	Natural Language Processing Lab
5	19DS980	Web Analytics Lab

SEMESTER X

S.No	Course Code	Course Name
1	19DSP20	Project Work - II


Dr. D. Anitha, APCA

TLP Coordinator


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Coordinator - M.Sc. Data Science