



VAAGDEVI COLLEGE OF ENGINEERING
(Autonomous)
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
(Data Science)

BOARD OF STUDIES MEETING

Minutes of meeting of Board of studies in Computer Science and Engineering (Data Science)
held on 29-Jan-2022 at 12:00 pm.

Members Present:

S. No	Name and Address	Designation	Signature
1	Dr. Ayesha Banu Assistant Professor & Head, CSE (Data Science), VCE.	Chairman	
2	Dr. A. Kavitha Associate Professor of CSE & Additional Controller of Examinations, JNTU Hyderabad.	Member (Univ. Nominee)	
3	Prof. R.B.V. Subramaanyam Professor, NITW.	Member (Subject Expert)	
4	Prof. V. Janaki Principal, Jayamukhi Institute of Technological Sciences.	Member (Subject Expert)	
5	Dr. E. Raju Assistant Professor, CSE (Data Science), VCE.	Member	
6	Mrs. Vandana Tamirisa Associate JP Morgan Services Pvt. Ltd	Member (Alumni Member)	
7	Mr. Sarath. J Director, Innominds India pvt. ltd.	Member (Industry Representative)	

The following decisions are taken:

1. Approved the course structure of B. Tech CSE (Data Science), (R20) Regulations for V, VI, VII and VIII Semesters.
2. Approved the syllabi of B. Tech CSE (Data Science), (R20) Regulations for V, VI, VII and VIII Semesters.
3. Approved the course structure & syllabi of Minor courses offered to other departments

CHAIRMAN
Board of studies
Dr. Ayesha Banu

Department of CSE (Data Science)

Chairman-Board of Studies
VAAGDEVI COLLEGE OF ENGINEERING
(Autonomous)
Bollikunta, Warangal (T.S)-506 005



**VAAGDEVICOLLEGE OF ENGINEERING
(AUTONOMOUS)**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

COURSE STRUCTURE

(R20 Regulations applicable for the batches admitted from Academic Year 2020- 2021)

V - SEMESTER

S.No	Course Code	Title of the Course	L	T	P	C
1.		Big Data Analytics	3	0	0	3
2.		Data Communications and Computer Networks	3	0	0	3
3.		Artificial Intelligence	3	0	0	3
4.		Professional Elective – I Software Engineering Information Retrieval Systems Advanced Databases	3	0	0	3
5.		Open Elective – I	3	0	0	3
6.		Big Data Analytics Lab	0	0	3	1.5
7.		Data Communications and Computer Networks Lab	0	0	3	1.5
8.		Artificial Intelligence Lab	0	0	3	1.5
9.		Indian Constitution	2	0	0	0
10.		Project Based Learning -3	0	0	2	1
Total Credits			17		11	20.5

Dr. Ayesha Banu

Dr. A. Kavitha

Prof. R.B.V. Subramaanyam

Prof. V. Janaki

Dr. E. Raju

Mrs. Vandana Tamirisa

T. Sasi Vandana

Mr. Sarath. J

Department of CSE (Data Science)



**VAAGDEVICOLLEGE OF ENGINEERING
(AUTONOMOUS)**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

COURSE STRUCTURE

(R20 Regulations applicable for the batches admitted from Academic Year 2020- 2021)

VI – SEMESTER

S.No	Course Code	Title of the Course	L	T	P	C
1.		Cloud Computing	3	0	0	3
2.		Machine Learning	3	0	0	3
3.		Data Visualization Techniques	3	0	0	3
4.		Professional Elective – II Software Project Management Theory of Computation Natural Language Processing	3	0	0	3
5.		Open Elective – II	3	0	0	3
6.		Cloud Computing Lab	0	0	3	1.5
7.		Machine Learning Lab	0	0	3	1.5
8.		Data Visualization Techniques Lab	0	0	3	1.5
9.		Logical Reasoning and Quantitative Aptitude	2	0	0	0
10.		Project Based Learning -4	0	0	2	1
Total Credits			17	0	11	20.5

Dr. Ayesha Banu

Dr. A. Kavitha

Prof. R.B.V. Subramaanyam

Prof. V. Janaki

Dr. E. Raju

Mrs. Vandana Tamirisa

T. Sasi Vandana

Mr. Sarath. J

Department of CSE (Data Science)



**VAAGDEVICOLLEGE OF ENGINEERING
(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)
COURSE STRUCTURE**

(R20 Regulations applicable for the batches admitted from Academic Year 2020- 2021)

VII - SEMESTER

S.No	Course Code	Title of the Course	L	T	P	C
1.		Internet of Things	3	0	0	3
2.		Network Security and Cryptography	3	0	0	3
3.		Professional Elective – III Semantic Web Technology Deep Learning Exploratory Data Analysis	3	0	0	3
4.		Professional Elective – IV Software Testing Time Series Data Analytics Web Services	3	0	0	3
5.		Open Elective – III	3	0	0	3
6.		Mini project & Internship	0	0	0	2
7.		Internet of Things Lab	0	0	3	1.5
8.		Major Project Phase – 1	0	0	8	4
9.		Human Values & Professional Ethics	2	0	0	0
Total Credits			17	0	11	22.5

Dr. Ayesha Banu

Dr. A. Kavitha

Prof. R.B.V. Subramaanyam

Prof. V. Janaki

Dr. E. Raju

Mrs. Vandana Tamirisa

Mr. Sarath.

Department of CSE (Data Science)



VAAGDEVICOLLEGE OF ENGINEERING
(AUTONOMOUS)
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

COURSE STRUCTURE
(R20 Regulations applicable for the batches admitted from Academic Year 2020- 2021)

VIII - SEMESTER

S.No	Course Code	Course Title	L	T	P	C
1		Professional Elective – V Cyber Security and Ethical Hacking Mining Massive Datasets Social Network Analysis	3	0	0	3
2		Professional Elective – VI Block Chain Technologies Web and Graph Mining Data Privacy and Security	3	0	0	3
3	B18CS48	Technical Seminar	0	0	2	1
4	B18CS49	Major Project Phase –II	0	0	16	8
Total Credits			6	0	18	15

Dr. Ayesha Banu

Dr. A. Kavitha

19/2/2022

Prof. R.B.V. Subramaanyam

Prof. V. Janaki

Dr. E. Raju

Mrs. Vandana Tamirisa

T. Sasi vandana

Mr. Sarath. J



VAAGDEVI COLLEGE OF ENGINEERING
Autonomous
Bollikunta, Khila Warangal (Mandal), Warangal Urban-506 005 (T.S), www.vaagdevi.edu.in

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

Open Electives offered by Computer Science and Engineering (DS) to the other Departments for the Academic year 2021-22

S.No.	Course Code	Title of the Course	L	T	P	Credits
1		Introduction to Data science	3	0	0	3
2		Data Handling and Visualization	3	0	0	3
3		Big Data Analytics	3	0	0	3
4		Introduction to Computer Forensics	3	0	0	3

Dr. Ayesha Banu

Dr. A. Kavitha

Prof. R.B.V. Subramaanyam

Prof. V. Janaki

Dr. E. Raju

Mrs. Vandana Tamirisa T. Sasi Vandana

Mr. Sarath. J

Department of CSE (DATA SCIENCE)



VAAGDEVI COLLEGE OF ENGINEERING

Autonomous

Bollikunta, Khila Warangal (Mandal), Warangal Urban-506 005 (T.S), www.vaagdevi.edu.in

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Data Science)

B. Tech Minors in Computer Science and Engineering (Data Science) for the Academic year 2021-22

S.No.	Semester	Title of the Course	L	T	P	Credits
1	V	Introduction to Data Science	3	0	0	3
2	VI	Data Science Applications	3	0	0	4
3	VI	R Programming Laboratory	0	0	3	1.5
4	VII	Data Wrangling and Visualization OR Big Data Analytics	3	0	0	3
5	VII	Data Wrangling and Visualization Lab OR Big Data Analytics Lab	0	0	3	1.5
6	VIII	Any one of the following subjects: (which is not studied in regular B. Tech. course) 1.Mining Massive Databases 2.Web & Social Media Analytics 3.Social Network Analysis	3	0	0	3
7	VIII	Mini Project	0	0	0	2
Total Credits			12	0	6	18

Dr. Ayesha Banu

Dr. A. Kavitha

Prof. R.B.V. Subramaanyam

Prof. V. Janaki

Dr. E. Raju

Mrs. Vandana Tamirisa

T. Sasi Vandana

Mr. Sarath. J

Department of CSE(Data Science)



VAAGDEVI COLLEGE OF ENGINEERING

Autonomous

Bollikunta, Khila Warangal (Mandal), Warangal Urban-506 005 (T.S), www.vaagdevi.edu.in

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Data Science)

Open Source Software required for the R20 Regulation Laboratories

S.No	Semester	Name of the Lab	Open Source Software
1	I	Programming for Problem Solving Lab	Linux, GCC, GEDIT
2	II	Python Programming Lab	Linux, GCC, GEDIT , Python 3
3	II	Data Structures and Algorithms Lab	Linux, GCC, GEDIT
4	III	Operating Systems & DPA Lab	Linux, GCC, GEDIT, Python 3
5	III	Database Management Systems Lab	Linux, MYSQL
6	IV	Design and Analysis of Algorithms Lab	Linux, GCC, GEDIT ,Python 3
7	IV	Java Programming Lab	Linux, MySQL,Eclipse,JDK,J2SE, Tomcat server
8	IV	Data Mining Lab	Linux, Weka
9	V	Artificial Intelligence Lab	Linux, Prolog, Python 3
10	V	Big Data Analytics Lab	Linux, Hadoop
11	V	Data Communications and Computer Networks Lab	Linux, Cisco Packet Tracer, PUTTY,GCC,GEDIT
11	VI	Machine Learning Lab	Linux, GEDIT , Python 3 , Anaconda
12	VI	Cloud Computing Lab	Linux, Oracle VM VirtualBox
13	VI	Data Visualization Techniques Lab	Linux, GEDIT , Python 3
14	VII	Internet of Things Lab	Linux, GCC, GEDIT ,Python 3


Dr. A. Kavitha

Associate Professor of CSE &
Additional Controller of Examinations,
JNTU Hyderabad.


Dr. Ayesha Banu
CHAIRMAN
Board of studies