



S.A.ENGINEERING COLLEGE, CHENNAI-77.

(An Autonomous Institution, Affiliated to Anna University)

B.TECH - ARTIFICIAL INTELLIGENCE AND DATA SCIENCE
CURRICULUM & SYLLABI

Dr. R. GEETHA Teaching is presenting

ARTIFICIAL INTELLIGENCE & DATA SCIENCE CURRICULUM

BOS MEETING

People (15)

- Dr. VEENA S Teaching
- Dr. S. SIVAKUMAR Teaching
- HOD CS
- madhavan V
- MUTHUGURUNATHAN
- MUTHUKUMARASAMY
- PADMAVATHY T Teaching
- RAMYA DEVI K Teaching
- SUDHA L Teaching

Dr. R. GEETHA Teaching is presenting

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Dr. R. GEETHA Teaching is presenting

SEMESTER I

AVL/ACT CODE	COURSE TITLE	CREDITS	THEORY	LAB	TOTAL
THEORY					
MA1104	Mathematical Proofs	3	3	0	3
MA1105	Calculus and its applications	3	3	0	3
PH1101	Applied Physics	3	3	0	3
CS1101	Discrete Structures	3	3	0	3
CS1102	Python Scripting and Python Programming	3	3	0	3
CS1103	Equationing Compiler	3	3	0	3
PRACTICALS					
MA1106	Physics and Chemistry Laboratory	3	0	3	3
CS1104	Python Scripting and Python Programming Laboratory	3	0	3	3
MANDATORY COURSE					
CS1105	Indian Constitution	3	3	0	3
TOTAL			18	3	21

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- Umeshankar Nataraj...

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S.A.ENGINEERING COLLEGE, CHENNAI-600 077
(An Autonomous Institution Affiliated to Anna University)
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MINUTES OF BOARD OF STUDIES MEETING

DATE: 17.04.2021

S.A.Engineering College, Chennai conducted the meeting of Board of Studies for UG course “Artificial Intelligence and Data Science” under Department of Computer Science and Engineering as per the guidelines of UGC on 16.04.2021 at 2.15pm.

The Following Members were present at the Meeting:

S.NO	NAME & ADDRESS	DESIGNATION
1.	Dr.R.Geetha Professor/HoD S.A.Engineering College	Chairperson
2.	Dr.R.Anitha Professor/CSE Sri Venkateshwara College of Engineering (Affiliated to Anna University) Chennai	University Nominee
3.	Dr. Rajeswari Sridhar Associate Professor-HoD/CSE National Institute of Technology, Trichy	Subject Expert
4.	Dr.V.Masilamani Associate Professor /CSE IIITDM, Vandalur-Kelambakkam Road, Chennai -600127	Subject Expert
5.	Mr.Umashankar Nedunchezian CTO, ICloud Hub Chennai- 600015	Representative from Industry
6.	Mr.B.R.Sri Kiran Jyothi Senior Product Manager, PayPal India Pvt Ltd, Chennai	Alumnus
7.	Dr.S.Veena (Data Science)	Professor
8.	Dr. K. Dinakaran (Data Warehouse and Data Mining)	Professor
9.	Dr.G.Jayanthi (Computer Networks)	Professor
10.	Dr. M. Preetha (Cryptography & Network Security)	Associate Professor
11.	Dr.S.Siva Kumar (Theory of Computation)	Associate Professor
12.	Mr.C.Balakrishnan (Machine Learning)	Associate Professor
13.	Mr.A.Mani	Associate Professor

	(Internet Programming)	
14.	Mrs.N.S.Usha (OOAD)	Associate Professor
15.	Mr.M.Balasubramanian (Database management systems)	Associate Professor
16.	Mr.S.Muthukumarasamy (Mobile Computing)	Associate Professor
17.	Mrs.V. Saraswathi (SOA)	Assistant Professor
18.	Mr.S.Prabhu (Network Security)	Assistant Professor
19.	Ms.K.Ramyadevi (Computer Graphics)	Assistant Professor
20.	Mrs.V.Sathya (OOPS)	Assistant Professor
21.	Mrs.M.Renuka Devi (Python Programming)	Assistant Professor
22.	Mrs.L.Sudha (Data Structures)	Assistant Professor
23.	Mrs.K.Elavarasi (Artificial Intelligence)	Assistant Professor
24.	Mrs.J.Sangeetha (Computer Networks)	Assistant Professor
25.	Mrs.V.Sureka (Design and Analysis of Algorithms)	Assistant Professor
26.	Mrs.S.Jonisha (Software Engineering)	Assistant Professor
27.	Mrs. K.B.Aruna (Computer Architecture)	Assistant Professor
28.	Mrs.Jayanthi.K (Artificial Intelligence)	Assistant Professor
29.	Mrs.N.R.G.Sreevani (Advanced Datastructures)	Assistant Professor
30.	Mr.V.Kaliraj (Distributed Systems & Cloud Computing)	Assistant Professor
31.	Mrs.T.Thilagam (Compiler Design)	Assistant Professor
32.	Mr. G.Muthugurunathan (Programming in C)	Assistant Professor
33.	Mrs. S. N. Ananthi (Software Testing)	Assistant Professor
34.	Mrs. T. Padmavathy (Operating Systems)	Assistant Professor
35.	Mrs.B.Cynthia Sherin (BigData Analytics)	Assistant Professor
36.	Ms.A.K.Suntheya (Multicore Architecture & Programming)	Assistant Professor

- The Chairperson Dr.R.Geetha, Board of Studies in Department of Computer Science and Engineering welcomed the Members of Studies.
- The Meeting proceeded to the matters in Agenda:

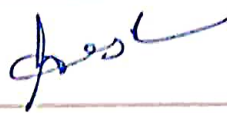



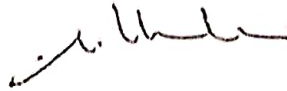

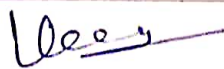

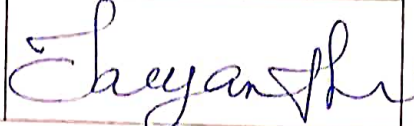
S.NO	POINTS DISCUSSED & DESCRIPTION
1.	<p>Semester I</p> <ul style="list-style-type: none"> • Theory with Credits - Technical English, Calculus and its application, Applied Physics, Engineering Chemistry, Engineering Graphics, Problem Solving and Python Programming • Lab with Credits - Physics and Chemistry Laboratory, Problem Solving and Python Programming Laboratory • Theory with no credits - Indian Constitution is kept as Mandatory Course • The same syllabus can be followed for the above subjects to Artificial Intelligence and Data Science (AIDS) as decided in CSE Board of Studies meeting held on 2.4.2020.
2.	<p>Semester II</p> <ul style="list-style-type: none"> • Theory with Credits – English for Communication, Material Science, Basic Electrical and Electronics Engineering, Programming in C • Lab with Credits - Engineering Practice Laboratory, Programming in C Laboratory • Theory with no credits- Environmental Science and Engineering is kept as Mandatory Course • The same syllabus is followed for 4 Theory and 2 Labs as decided in CSE BoS meeting held on 2.4.2020. <p>Modifications Suggested</p> <ul style="list-style-type: none"> • Digital Principles and System Design – This subject can be added instead of Fundamentals of Computing as per CSE Curriculum. DPSD subject is available in III semester of CSE curriculum and now it is moved to Second semester of AIDS with the same subject code. Members suggested to follow the same subject code if the same syllabus is followed, else to change it accordingly. • Discrete Mathematics– Since Complex Variables and Transforms subject is less related to the proposed course it can be removed and Discrete Mathematics can be included which acts as a prerequisite to Artificial Intelligence subject which is proposed in third semester of CSE Curriculum.
3.	<p>Semester III</p> <ul style="list-style-type: none"> • Theory – Object Oriented Programming, Data Structures, Database Management Systems and Computer Architecture • Lab - Object Oriented Programming Laboratory, Database Management Systems Laboratory and Data Structures Laboratory • The same syllabus is followed for 4 Theory and 3 Labs as decided in CSE BoS meeting held on 2.4.2021. • Introduction to Artificial Intelligence – Subject is included with 3 credits • Algebra and Number Theory – Can be replaced with Linear Algebra and Optimization Techniques





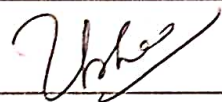



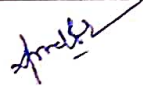
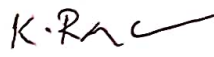
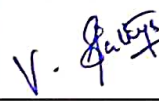






4.	<p>Semester IV</p> <ul style="list-style-type: none"> • Theory – Computer Networks, Design and Analysis of Algorithms, Software Engineering • Lab - Design and Analysis of Algorithms Laboratory, • The same syllabus is followed for 3 Theory and 1 Lab as decided in CSE BoS meeting held on 2.4.2021. • Data Warehousing and Data Mining with Data mining laboratory and Operating Systems - Subjects are included with 3 credits for Theory and 2 credit for Lab.
5.	<p>Semester V</p> <ul style="list-style-type: none"> • Cloud Computing Services, Machine Learning Techniques, Fundamentals of Data Science, Artificial Neural Networks with Professional Elective – I are included • Natural Language Processing – members suggested to include this subject in Semester V
6.	<p>Semester VI</p> <ul style="list-style-type: none"> • Internet Programming with Internet Programming Laboratory - The same syllabus can be followed for 1 Theory and 1 Lab as decided in CSE • Image Processing, Deep Learning, Internet of Things are included with Professional elective – II in this semester • IoT Lab are included in this semester
7.	<p>Semester VII</p> <ul style="list-style-type: none"> • Data Security, Soft Computing with Professional elective – III and IV are included in this semester • Computer Vision is included as a Core subject • Big Data Analytics and visualization are combined for Theory and lab • Mini project is included in this semester
8.	<p>Semester VIII</p> <ul style="list-style-type: none"> • Professional elective –V and VI are included in this semester • Project work is included in this semester
9.	<p>General</p> <ul style="list-style-type: none"> • The total credit of 185 for Artificial Intelligence and Data Science Course to be followed as per Anna University norms. • Members suggested to have atleast 3 Professional Elective should be Artificial Intelligence oriented subjects • Number of electives can be minimal for specialization courses • Subjects offered in other engineering branches(CSE/IT/ECE...) can be used in AIDS in different semesters with same subject code

CERTIFICATE

S.A.Engineering College, Chennai conducted the meeting of Board of Studies for UG course “**Artificial Intelligence and Data Science**” under Department of Computer Science and Engineering as per the guidelines of UGC on 16.04.2021 at 2.15pm.

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