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### **DEPARTMENT OF CSE (DATA SCIENCE)**

### PEC/CSE(DS)/2022-23

Date: 22-06-2022

#### CIRCULAR

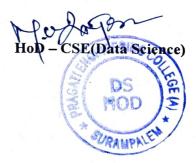
All the members of CSE (DS) Board of Studies meeting are hereby requested to attend the BoS meeting which will be held online on 26-06-2022 at 11:00 AM. The meeting will be conducted via Microsoft Teams, and the agenda will focus on ratification of III & IV Year course structure and syllabus.

#### Agenda:

- 1. Discussion on proposed B.Tech. III and IV Year course structure and syllabi, and ratification of the same.
- 2. Discussion on the ratification of Courses Objectives, Course Outcomes and CO-PO mapping.
- 3. Finalization of textbooks, reference books and web references.
- 4. Any other item.

Your participation and input are highly valued, and we look forward to your contributions to the discussions.

Copy to: The Principal All Individuals Dept. Office BoS File





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DEPARTMENT OF CSE - BOARD OF STUDIES B.TECH IN CSE (DATA SCIENCE) - R20 SYLLABUS OF III AND IV YEAR COURSES

## Minutes of the BoS Meeting For R20 Regulation of B.Tech CSE(AI&ML), CSE(AI), CSE(DS) on 26/6/2022 at 11.00 A.M.

## The following suggestions given by the members of BoS

- Discuss with Mechanical Engineering Board for possibility to change the Open Elective Course "Operations Research" to "Optimization Techniques".
- Include courses like Game Theory, Parametric Optimization course in the curriculum, as more number of Mathematics related courses are required for AI, AIML and DS.
- Include courses like Mining massive data science and Scalable Data Science courses can be included in DS
- Include minimum and maximum 2 text books under Text Books section
- For the course Snow Flake Cloud Analytics subject students need to study cloud computing as prerequisite so it is suggested to include first 2 units about Cloud Computing basics and remaining 3 units will be Snow Flake Cloud Analytics <sup>3</sup>
- No. of options under open electives and professional electives should be same i.e., 4
- Operating Systems & Complier Design Laboratory title to be modified as Operating Systems & Compiler Design Laboratory using C.
- Code Optimization + Code Generation one program is to be added to make 15 programs in OS&CD lab
- Professional electives can be 4, and they can be specific to the program (AIML, AI, DS)
- Machine Learning with Go For Go Prerequisite is not met
- Include the basic programs in Machine Learning for EEE Department and For ML Lab I and ML Lab II : Minimum 15 Programs must be there
- In ML Subject add the content from the TOM Michel Text book which is standard book for ML
- Algorithms for Efficient Coding using C T it is to be changed

Approved through	Approved through	Approved through	Approved through Email
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Dr. K Sahadevaiah,	Dr. D V L N Somayajulu,	Dr. M V Panduranga Rao,	
Professor in CSE, JNTUK	IIITDM, Kurnool	IIT Hyderabad	Dr. V S Naresh, Vasavi Engine
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Mr. Y Praveen Kumar,	0.000	Du VI D	
TCS, Hyderabad	HoD CSE,	Dr. Y Jaya Babu, Professor in CSE	Mr, M V Rajesh,
	CSE BoS Chairman, PEC	Controller of Examinations	HoD COD (D



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- Refer and add the content related of Sebesta textbook for Semantic Web subject.
- Speech processing consider 2 text books only and reduce the Syllabus from unit 5 and stick to any one text book for complete syllabus.
- In Artificial Intelligence course for IT dept consider the Standard text book Russell Stuart and do the changes accordingly.

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Professor in CSE, JNTUK	IIITDM, Kurnool	IIT Hyderabad	Vasavi Engineering College
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Mr. Y Praveen Kumar, TCS, Hyderabad	Dr. M Radhika Mani, HoD CSE, CSE BoS Chairman, PEC	Dr. Y Jaya Babu, Professor in CSE Controller of Examinations	Mr, M V Rajesh, HoD, CSE (Data Science) PEC

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(AUTONOMOUS) DEPARTMENT OF CSE - BOARD OF STUDIES B.TECH IN CSE (DATA SCIENCE) - R20 SYLLABUS OF III AND IV YEAR COURSES

	BoS Meeting for B.Tech-CSE(AI&ML), C R20-III&IV Year on 26.06.	22 af 11.00/A.WI.	
S.No.	Suggestions given	Implementation of Suggestions	
1	Discuss with Mechanical Engineering Board for possibility to change the Open Elective Course "Operations Research" to "Optimization Techniques".	Mechanical Engineering Board have changed the open elective offered from "Operations Research" to "Optimization Techniques". Suggestion Implemented.	
2	Inclusion of additional mathematics related courses like like Game Theory, Parametric Optimization for emerging branches i.e., AI & ML, AI and DS	as an elective subject for CSE (AI&ML), CSE(AI) and CSE (DS).	
3	For the course Snow Flake Cloud Analytics subject students need to study cloud computing as prerequisite so it is suggested to include first 2 units about Cloud Computing basics and remaining 3 units will be Snow Flake Cloud Analytics	Cloud Analytics' is modified to include first 2 units about Cloud Computing basics and remaining 3 units will be Snow Flake Cloud Analytics. Suggestion Implemented.	
4	Courses like Mining Massive datasets and Scalable Data Science courses can be included Data Science branch	The course "Mining Massive Datasets" has been included under Professional Elective-IV in IV-I Semester, by replacing the course "Cloud Computing".	
5	Include minimum and maximum 2 text books under Text Books section	Suggestion Implemented.	
6	No. of options under open electives and professional electives should be same i.e., 4	Suggestion Implemented.	
7	Operating Systems & Complier Design Laboratory title to be modified as Operating Systems & Compiler Design Laboratory using C and also include Code Optimization + Code Generation one program is to be added to make 15 programs in OS&CD lab	Suggestion Implemented.	

Approved through EmailApproved through EmailDr. K Sahadevaiah, Professor in CSE, JNTUKDr. D V L N Somayaju IIITDM, KurnoolMr. Y Praveen Kumar, TCS, HyderabadDr. M Radhika Mani, HoD CSE, CSE BoS Chairman, P	lu, Dr. M V Panduranga Rao, IIT Hyderabad Y V Salar Dr. Y Jaya Babu, Professor in CSE	Approved through Email Dr. V S Naresh, Vasavi Engineering College Mr, M V Rajesh, HoD, CSE (Data Science) PEC
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8	Speech processing consider 2 text books only and reduce the Syllabus from unit 5 and stick to any one text book for complete syllabus.	Suggestion Implemented
9	Professional Electives and Open Electives count to be restricted to 4 if possible	Suggestion Implemented
10	Suggested to modify the title of "Algorithms for Efficient Coding" as "Algorithms for Efficient Coding using C"	Suggestion Implemented
11	Include Course specific subjects for AI	Suggestion Implemented
12	Machine Learning with Go – For Go Prerequisite is not met	During the lab explanation of the GO will be given for first half of the lab and next half will be allowed to execute the programs.
13	Include the basic programs in Machine Learning for EEE Department For ML Lab – I : Minimum 15 Programs must be there For ML Lab – II : Minimum 15 programs must be there	Suggestion Implemented
14	In ML Subject add the content from the TOM Michel Text book which is standard book for ML	Suggestion Implemented
15	Refer and add the content related of Sebesta textbook for Semantic Web subject.	Suggestion Implemented

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