

**VIGNAN'S**

Foundation for Science, Technology & Research

(Deemed to be University)

-Ftd u/s 3 of UGC Act 1956

DEPARTMENT OF ADVANCED COMPUTER SCIENCE & ENGINEERING**CIRCULAR**

Date: 11.12.2023

Department of ACSE is going to conduct Board of Studies (BoS) meeting for the B.Tech Computer Science and Business Systems programme on **19.12.2023** from 10.00AM in blended mode. (Physical meeting : Room No:602, sixth floor, Nagarjuna Block, VFSTR and virtual meeting [link](https://us06web.zoom.us/j/4576585062?pwd=Sct6dTc5ckRSVld2ZHRsa2JFZStWQT09&omn=89901768226) :

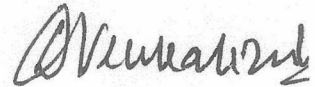
<https://us06web.zoom.us/j/4576585062?pwd=Sct6dTc5ckRSVld2ZHRsa2JFZStWQT09&omn=89901768226>). All the members are requested to make it convenient to attend the meeting.

1	Dr. Venkatesulu Dondeti	Professor & Head, Department of ACSE, VFSTR Deemed to be University Contact : 91 98408 50744	Chair Person
2	Mr. DS Bhupal Naik	Asst. Professor, Department of ACSE, VFSTR Deemed to be University Contact : 91 9550367172	Secretary (Ex-officio)
3	Mr. Magesh	Regional head, TCS Contact : 91 9008182063	External Member
4	Dr. MM Naidu	Professor (Rtd) and former Principal, SVU college of Engineering, Tirupati, Andhra Pradesh Contact : 91 9848348473	External Member
5	Dr. Chalam	Professor (Rtd), Department of Management Acharaya nagarjuna University, Andhra Pradesh	Invited Member
6	Dr MVP Chandra Sekhara Rao	Professor & Head, Department of CSBS & DS RVR & JC college of Engineering, AP Contact : 91 9849403801	Invited Member
7	Dr. Nirupama Bhat M	Professor, Department of ACSE, VFSTR Deemed to be University Contact : 91 99088 23834	Internal Member
8	Dr. B. Jyostna Devi	Asst. Professor, Department of ACSE, VFSTR Deemed to be University Contact : 91 73582 09553	Internal Member (Nominee – Dean R&D)
9	Mrs. S Radha Rani	Asst. Professor, Department of ACSE, VFSTR Deemed to be University Contact: 91 9493670612	Internal Member (Nominee – School Dean)

10	Dr Arnab De	Asst. Professor, Department of ACSE, VFSTR Deemed to be University. Contact: 91 9614547390	Internal Member
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Agenda of the BoS Meeting:

1. Discussions and approval of R22 B.Tech. Computer Science and Business Systems Program Structure.
2. Discussion on revision of R22 B.Tech. Computer Science and Business Systems course contents.
3. Discussion on L-T-P-C structure of various courses.
4. Discussion on addition of additional department electives, open electives and the fulfillment of pre-requisites for department electives.
5. SWAYAM-NPTEL courses identification.
6. Any other point with the permission of Chair.



Chairperson

HoD
Dept. of Advanced Computer Science & Engineering
VIGNAN'S FOUNDATION
FOR SCIENCE, TECHNOLOGY AND RESEARCH
Deemed to be University
(Estd u/s. 3 of UGC Act - 1956)
VADLAMUDI - 522 211
Gunur Dist., A.P., India

**DEPARTMENT OF ADVANCED COMPUTER SCIENCE & ENGINEERING**

Date: 19.12.2023

Minutes of Board of Studies Meeting

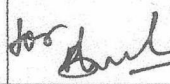
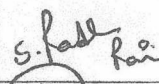

Board of Studies (BoS) meeting of B.Tech., Computer Science and Business Systems programme was conducted on 19.12.2023 in blended mode from 10.00AM onwards. (Physical meeting : Room No:602, sixth floor, Nagarjuna Block, VFSTR and virtual meeting link : <https://us06web.zoom.us/j/4576585062?pwd=SCT6dTc5ckRSVld2ZHRsa2JFZStWOT09&omn=89901768226>).

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3. Discussion on L-T-P-C structure of various courses.
4. Discussion on addition of additional department electives, open electives and the fulfillment of pre-requisites for department electives.
5. SWAYAM-NPTEL courses identification.
6. Any other point with the permission of Chair.

The following members were present either thorough offline or online.

SL.No.	Name and Designation of the member	Position	Signature
1	Dr. Venkatesulu Dondeti Professor & Head, Department of ACSE, VFSTR Deemed to be University	Chair Person	
2	Mr. DS Bhupal Naik Asst. Professor, Department of ACSE, VFSTR Deemed to be University	Secretary (Ex-officio)	
3	Mr. Magesh Regional head, TCS	External Member	online
4	Dr. MM Naidu Professor (Rtd) and former Principal, SVU college of Engineering, Tirupati, Andhra Pradesh	External Member	
5	Dr. Chalam Professor (Rtd), Department of Management Acharaya Nagarjuna University, Andhra Pradesh	Invited Member	Not Joined
6	Dr MVP Chandra Sekhara Rao Professor & Head, Department of CSBS & DS RVR & JC college of Engineering, AP	Invited Member	online
7	Dr. Nirupama Bhat M Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member	

8	Dr. B. Jyostna Devi Asst. Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member (Nominee – Dean R&D)	
9	Mrs. S Radha Rani Asst. Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member (Nominee – School Dean)	
10	Dr Arnab De Asst. Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member	

Chairperson Dr. Venkatesulu Dondeti, Professor and Head, department of CSE, VFSTR opened the meeting by welcoming the external members, invitees to the internal members. Secretary, Mr. DS Bhupal Naik, Assistant Professor. Department of ACSE, VFSTR presented the B.Tech. Computer Science and Business Systems Program sponsored by TCS program curriculum along with the contents to the board members.

The following points were discussed in the BoS meeting:

1. Discussions and approval of R22 B.Tech. Computer Science and Business Systems Program Structure.
2. Discussion on revision of R22 B.Tech. Computer Science and Business Systems course contents.
3. Discussion on L-T-P-C structure of various courses.
4. Discussion on addition of additional department electives, open electives and the fulfillment of pre-requisites for department electives.
5. SWAYAM-NPTEL courses identification.
6. Any other point with the permission of Chair.

The following resolutions made after the discussion:

1. Secretary, Mr. DS Bhupal Naik has initiated the presentation on R22 B.Tech CSE- CSBS Curriculum. The External Board members expressed their opinion that the overall course structure of the program and the content of the courses are well-designed and are sufficient for the program at under graduate level. They provided a few suggestions to further improve the quality of the existing curriculum.
2. Internal BoS member suggested to split the 'Fundamentals of Computer Science' course based on the feedback given by the students and faculty, External BoS members have advised to split the course across two semesters of Ist year. The suggestion was accepted by the internal BoS members and done modifications accordingly. This change is going to be effective from A.Y. 2023-24.
3. Internal BoS member proposed to offer 'Data Structures and Algorithms' course in IInd year I semester as Fundamentals of Computer Science course will be completed by the end of Ist year. Mr. Magesh, Regional Head, TCS and Prof. MM Naidu and Dr. MVP Chandra Sekhara Rao have accepted to move 'Data Structures and Algorithms' course to IInd year I semester and internal BoS members accepted the recommendations.

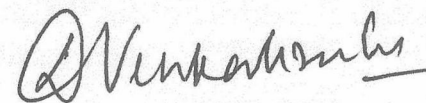
'Data Structures and Algorithms' course is too early to offer in Ist year and advised to retain the title as 'Data Structures' instead of 'Data Structures and Algorithms' and suggested to remove the contents of algorithms as they are going to study algorithms in detail in a separate course of 'Design and Analysis of Algorithms' course offered in IInd year II Semester. The modifications done accordingly. This change is going to be effective from A.Y. 2023-24.

4. Internal BoS members proposed to introduce 'Python programming' course in the curriculum. Prof. MM Naidu and Dr. MVP Chandra Sekhara Rao have accepted to start 'Python programming' in Ist year II Semester instead of 'Scripting Languages' which is offered in IInd year I semester as this course contents overlaps with 'Modern Web Applications' course. Board accepted the suggestions and done modifications accordingly. This change is going to be effective from A.Y. 2023-24.
5. Mr. Magesh, Regional head, TCS have advised that, the sequence of courses can be interchanged across the semesters without violation of pre-requisites. However, the courses specified in the program structure proposed by TCS need to be intact.
6. The TCS proposed curriculum for the CSBS program at the beginning was 170 credits. VFSTR have introduced a *NEP 2020 Compliant Regulation - R22* which emphasis on creating *learning centric* (continuous learning and continuous assessment model with 161 credits. All the courses proposed by TCS was encompassed in R22 regulations. However, the L-T-P-C structure of courses was changed and few courses were made as binary graded. Few board members suggested to change the LTPC structure of 'Computational Statistics' course (22ST205) from (3-0-2-4) to (2-0-2-3) and the LTPC structure of 'Operating Systems' course (22CB208) from (3-0-2-4) to (2-0-2-3). BoS accepted the suggestions and done modifications accordingly. This change is going to be effective from A.Y. 2024-25.
7. External BoS member suggested to include 'Java Programming' course as department elective course because students have studied OOPS concepts through C++ course but the core java and advanced java concepts were not studied. Board accepted the suggestions and done modifications accordingly. This change is going to be effective from A.Y. 2024-25.
8. The board members suggested few SWAYAM-NPTEL courses to be included in the curriculum, recognizing their relevance and potential to enhance the students' knowledge and skills in the field of data analytics and decision making. After thorough discussion following courses are recommended: Data analytics, Business Intelligence, Power BI, Customer Relation Management, AI for Investments, E-Business. Board accepted the comments, and it has been considered.

Based on the suggestions given by the members, the Chairperson of BoS told that, those fruitful suggestions would be incorporated appropriately in the curriculum and syllabi of the regulation R22 and this will be recommended to the Academic Council of VFSTR for the approval.

There being no further points for discussion, the Chairperson thanks all the external, internal, invited members and announced that the meeting was adjourned.

Member Secretary



Chairperson
HoD

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DEPARTMENT OF ADVANCED COMPUTER SCIENCE AND ENGINEERING

APPENDIX I

Computer Science and Business Systems: Curriculum Structure

I Year I Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
1	22MT104	Discrete Mathematics	2	2	0	3	CSE	Professional core
2	22ST101	Introductory Topics in Statistics, Probability and Calculus	2	0	2	3	Mathematics	Basic Sciences
3	22PY103	Fundamentals of Physics	3	0	2	4	Physics	Basic Sciences
4	22CS102	Fundamentals of Computer Science - I	2	0	2	3	CSE	Basic Engineering
5	22EE104	Principles of Electrical Engineering	3	0	2	4	EEE	Basic Engineering
6	22SA101	Physical Fitness, Sports & Games – I	0	0	3	1	Binary grade	Binary grade
7	22TP102	Constitution of India	0	2	0	0	Binary grade	Binary grade
8	22CT102	Environmental Science	2	0	0	0	Basic Science	Basic Sciences
9	22EN101	Business Communication & Value Science – I	0	0	2	1	English	Basic Sciences
Total			14	4	13	19	-	
			31		19	-		

I Year II Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
1	22MT108	Linear Algebra	2	2	0	3	Mathematics	Basic Sciences
2	22ST102	Statistical Methods	3	0	2	4	Statistics	Basic Sciences
3	22EC103	Principles of Electronics Engineering	2	0	2	3	ECE	Basic Engineering
4		Fundamentals of Computer Science -II	2	0	2	3	CSE	Basic Engineering
5	22MS101	Fundamentals of Economics	3	0	0	3	Management Studies	Management
6		Python programming	2	0	2	3	CSE	Professional core
7	22SA103	Physical Fitness, Sports & Games – II	0	0	3	1	Binary grade	Binary grade
8	22SA102	Orientation Session	0	0	6	3	Binary grade	Binary grade
9	22EN103	Business Communication & Value Science –II	0	0	2	1	English	Basic Sciences
Total			14	2	19	24	-	
Total			35		24	-		

II Year I Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
1	22ST205	Computational Statistics	2	0	2	3	Statistics	Basic Sciences
2	22CS101	Data Structures	2	2	2	4	CSE	Professional core
3	22CB201	Computer Organization and Architecture	2	2	0	3	CSE	Professional core
4	22CB204	Object Oriented Programming	2	2	2	4	CSE	Professional core
5	22CB203	Formal Languages & Automata Theory	2	2	0	3	CSE	Professional core
6	22CB202	Database Management Systems	2	2	2	4	CSE	Professional core
7	22MS202	Ethics and Human Values	2	0	0	0	English	Humanities
8	22SA201	Life Skills	0	0	2	1	Binary grade	Binary grade
9		NCC/ NSS/ SAC/ E-cell/ Student Mentoring/ Social activities/ Publication with good impact factor (Only 2 students can claim 1 paper/patent). These credits may be earned on or before the end of IV semester	0	0	0	1	Floating credits Binary grade	Binary grade
Total			14	10	10	23	-	
Total			34			23	-	

II Year II Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
1	22MT201	Operations Research	2	2	0	3	Mathematics	Basic Sciences
2	22CB206	Design and Analysis of Algorithms	3	0	2	4	CSE	Professional core
3	22CB208	Operating Systems	2	0	2	3	CSE	Professional core
4	22CB209	Software Engineering	2	2	0	3	CSE	Professional core
5	22MS204	Design Thinking	1	2	0	2	Mech	Basic Engineering
6	22SA202	Life Skills	0	0	2	1	Binary grade	Binary grade
7	22EN201	Business Communication & Value Science - III	0	0	2	1	English	Basic Sciences
8		Open Elective -1	2	2	0	3		Open Elective
Total			12	8	8	20	-	
9		Minor / Honors – 1	3	0	2	4	-	
Total			33			24	-	

III Year I Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
1		Soft Skills Laboratory	0	0	2	1	Humanities	Basic Sciences
2		Fundamentals of Management	2	2	0	3	Management Studies	Management
3		Data Mining and Analytics	3	0	2	4	Management Studies	Management
4		Mobile Application Development	2	0	2	3	CSE	Professional core
5		Industry interface course (Modular course)	1	0	0	1	Binary Grade	
6		Inter-Departmental Project / Course	0	0	2	1	Project	
7		Department Elective-1	3	0	2	4	CSE	Department Elective
8		Open Elective -2	2	2	0	3		Open Elective
9		NCC/ NSS/ SAC/ E-cell/ Student Mentoring/ Social activities/ Publication with good impact factor (Only 2 students can claim 1 paper/patent). These credits maybe earned on or before the end of VI semester	0	0	0	1	Floating credits Binary grade	
		Total	13	4	10	21		
10		Minor / Honors – 2	3	0	2	4		
		Total	16	4	12	25		
		Total		32		25		

III Year II Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
1		Quantitative aptitude & Logical reasoning	1	2	0	2	Humanities	Basic Sciences
2		Financial and Cost Accounting	2	2	0	3	Management studies	Management
3		Compiler Design	2	2	0	3	CSE	Professional core
4		Computer Networks	3	0	2	4	CSE	Professional core
5		Department Elective-2	3	0	2	4	CSE	Department Elective
		Open Elective -3	2	2	0	3		Open Elective
6		Business Communication & Value Science - IV	0	0	2	1	English	Basic Sciences
7		Inter-Departmental Project/Course	0	0	2	1	Project	
		Total	13	8	8	21		
8		Minor / Honors – 3	3	0	2	4		
		Total	16	8	10	25		
		Total		34		25		

IV Year I Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
		Services Science and Service Operational Management	2	0	2	3	Management studies	Management
		Artificial Intelligence	3	0	2	4	CSE	Professional core
		Information Security	2	2	0	3	CSE	Professional core
		IT Project Management	2	0	2	3	CSE	Professional core
		Department Elective-3	3	0	2	4	CSE	Department Elective
		Department Elective-4	3	0	2	4	CSE	Department Elective
		Total	15	2	10	21		
		Minor / Honors – 4	3	0	2	4		
		Total	18	2	12	25		
		Total		32		25		

IV Year II Semester

Sl. No.	Course code	Course Title	L	T	P	C	Offering Department	Remarks
1		Internship / Project Work	0	2	22	12	Project	
		Total	0	2	22	12		
2		Minor / Honors – 5 (for project)	0	2	6	4	Theory course may be also offered	
		Total	0	4	28	16		
				32		16		

List of Department Electives

Sl. No.	Course Title	L	T	P	C	Pre-requisite Knowledge
1	Machine Learning	3	0	2	4	
2	Image Processing and pattern Recognition	3	0	2	4	
3	Introduction to IOT	3	0	2	4	
4	Deep Learning	3	0	2	4	
5	Advanced Social Text and Media Analytics	3	0	2	4	
6	Block Chain Technology	3	0	2	4	
7	Mobile Computing	3	0	2	4	
8	Cryptology	3	2	0	4	
9	Enterprise systems	3	2	0	4	
10	Modern Web Applications	3	0	2	4	
11	Big Data Analytics	3	0	2	4	
12	Usability design of software applications	3	0	2	4	
13	Optimization Techniques	3	2	0	4	
14	Simulation and Modelling	3	2	0	4	
15	Java Programming	3	0	2	4	

List of Open Elective Courses

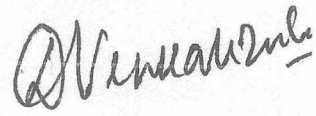
SL.No	Course code	Course Title	L	T	P	C
1		Introduction to Innovation, IP Management and Entrepreneurship	2	2	0	3
2		Business Strategy	2	2	0	3
3		Augmented Reality and virtual Reality	2	2	0	3
4		Human Resource management	2	2	0	3
5		Financial Management	2	2	0	3
6		Marketing Research and Marketing Management	2	2	0	3
7		Behavioural Economics	2	2	0	3
8		Advance Finance	2	2	0	3

List of Honour/Specialization Courses:

Sl.No	Course Title	L	T	P	C
1	Student can opt any four courses from department electives which he/she did not pursue under department elective courses.	3	-	2	4
2		3	-	2	4
3		3	-	2	4
4		3	-	2	4
5	Capstone Project / Any other Course	-	2	6	4

List of Minor Courses:

No minor courses are offered specific to the programme and are offered at department level



Chairperson

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