VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956

DEPARTMENT OF ADVANCED COMPUTER SCIENCE & ENGINEERING

Date: 13.04.2024

Minutes of Board of Studies Meeting

Board of Studies (BoS) meeting of B.Tech., Computer Science and Business Systems programme was conducted on 13.04.2024 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/83812418806?pwd=0SfT3nJn9VURgrjrQPPzH1Mt0rNXoz.1).

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 addition of additional Department electives, open electives and the fulfillment of pre-requisites for department electives.
4. Analysis of the feedback collected from various stakeholders such as Alumni, Employers, Faculty, Parents and Students during the academic year 2022-23 AND/OR 2023-24.
5. Approval of R22 Revision-1
6. Approval of NPTEL courses
7. Approval of L-T-P structure change or any credit change courses, if any
8. Approval of Honor/minor/department elective/open elective courses, if any
9. Discussion of results-FA, SA, grades
10. Discussion of attainments – process, rubrics, CO/PO/PSO and SO values.
11. 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, AP	External Member	online
5	Dr. Chalam Professor (Rtd), Department of Management	Invited Member	Not attended

	Acharaya Nagarjuna University, AP		
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	Not attended

The following members have taken leave of absence:

SL.No.	Name and Designation of the member	Position	Signature
5	Dr. Chalam Professor (Rtd), Department of Management Acharaya Nagarjuna University, Andhra Pradesh	Invited Member	
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 ACSE, 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 revised curriculum of R22 B.Tech. Computer Science and Business Systems course contents.
3. Discussion on addition of additional Department electives, open electives and the fulfillment of pre-requisites for department electives
4. Approval of L-T-P structure change or any credit change courses, if any
5. Discussion on addition of additional department electives, open electives and the fulfillment of pre-requisites for department electives.
6. Approval of NPTEL courses
7. Approval of Honor/minor/department elective/open elective courses, if any
8. 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 Revision of 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 members proposed to offer Machine Learning course in VIIth semester, But, Board recommended to offer it in Vth or VIth semester. The suggestion was accepted by the internal BoS members and done modifications accordingly.
3. Board recommended to offer the "Optimization Techniques" course as a professional core course rather than as a Department Elective. The suggestion was accepted by the internal BoS members and done modifications accordingly.
4. BoS Members approved the revised regulations, curriculum structure, syllabus of B.Tech., CSE-CSBS programme and it follows based on the NEP 2020. Curriculum structure is provided in Appendix-I.
5. Major restructuring has taken place in the curriculum by increasing 5% of courses under Basic Sciences category which is oriented towards continuous learning and assessment based on Module structure.
6. Major reformation has taken place in the curriculum by offering Honours/Specialization degree or Minor degree through additional 20 more credits with additional courses.
7. 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.
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.
9. The Board members have proposed to organize a symposium/conference to brainstorm the sessions on various aspects of CSBS curriculum, its importance. Chairperson Dr. Venkatesulu Dondeti, Professor and Head, department of ACSE have invited the proposal and agreed to submit a proposal for approval from Honorable Vice-Chancellor.

Based on the feedback from various stakeholders and 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, ACSE
VFSTR
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APPENDIX I

Computer Science and Business Systems: Curriculum Structure

I Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1		Mathematics-I				4	Basic Sciences
2		Physics				4	Basic Sciences
3		Basics of Electrical and Electronics Engineering				3	Basic Engineering
4		Programming in C				4	Basic Engineering
5		IT Tools and Cyber Security				2	Basic Engineering
6		English Proficiency and Communication Skills(PET)				1	Humanities
7		Environmental Studies				3	Basic Sciences
8		Constitution of India				1	Audit Course
9		Orientation Session -1				1	Audit Course
10		Physical Fitness				1	Audit Course
		Total				**24**	
		Total				**24**	

L=Lecture; T= Tutorial; P= Practical; C=Credits

I Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1		Mathematics-II				4	Basic Sciences
2		Chemistry				4	Basic science
3		Engineering Graphics				3	Basic Engineering
4		Python Programming				3	Basic Engineering
5		Technical English Communication				3	Humanities
6		Management Science				3	Basic Sciences
7		Indian Knowledge Systems –Dept Specific				1	Audit Course
8		Orientation Session -2				1	Audit Course
		Universal Human Values				1	Audit Course
		Total				**23**	
		Total				**23**	

L=Lecture; T= Tutorial; P= Practical; C=Credits

II Year I Semester

Sl. No.	Course code	Course Title	L	T	P	C	Course Category
1	22MT104	Discrete Mathematics	2	2	0	3	Basic Sciences
2		Data Structures and Algorithms				4	Basic Engineering
3		Introductory Topics in Statistics, Probability and Calculus				4	Basic Sciences
4		Digital Logic and Computer Organization	2	2	0	3	Professional Core
5	22CB203	Formal Languages & Automata Theory	2	2	0	3	Professional Core
6	22CB202	Database Management Systems	2	2	2	4	Professional Core
7		Design Thinking & Engineering Orientation				1	
8		Life Skills					
		Total	**14**	**10**	**10**	**23**	-
		Total		**34**		**23**	-

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II Year II Semester

Sl. No.	Course code	Course Title	L	T	P	C	Course Category
1	22ST205	Computational Statistics	3	0	2	4	Basic Sciences
2		Field Projects / IDP	0	0	2	1	Project
3	22CB204	Object Oriented Programming	2	2	2	4	Professional Core
4	22CB208	Operating Systems	2	2	2	4	Professional Core
5	22CB209	Software Engineering	2	2	2	4	Professional Core
6		Open Elective – 1 (NPTEL)	3	0	0	3	Open Elective
		Total				20	
7		Minor / Honors – 1	**3**	**0**	2	**4**	
		Total	**15**	**6**	**12**	**24**	-
		Total		**33**		**24**	-

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III Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1		BEC Certification	0	0	2	1	Humanities
2		Modern Web Applications	2	0	4	4	Professional Core
3		Data Mining and Analytics	3	0	2	4	Professional Core
4		Soft Skills Laboratory	0	0	2	1	Professional core
6		Industry Interface Course (Modular Course)	1	0	0	1	Binary Grades
7		Department Elective – 1	3	0	2	4	Department Elective
7		Department Elective – 2	2	0	2	3	Department Elective
8		Open Elective – 2	3	0	0	3	Open Elective
		Total	**14**	**0**	**14**	**21**	
10		Minor / Honors – 2	**3**	**0**	**2**	**4**	
		Total	**17**	**0**	**16**	**25**	
		Total	**33**			**25**	

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III Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1		Quantitative Aptitude & Logical Reasoning	0	2	0	2	Humanities
2		Artificial Intelligence	3	0	2	4	Professional core
3		Computer Networks	2	2	2	4	Professional core
4		Business Strategy	3	0	0	3	Professional core
5		Field Project / Inter-Disciplinary Project	0	0	2	1	Project
6		Department Elective – 3	3	0	2	4	Department Elective
7		Open Elective – 3	3	0	0	3	Open Elective
		Total	**14**	**4**	**8**	**21**	
8		Minor / Honors – 3	**3**	**0**	**2**	**4**	
		Total	**17**	**4**	**10**	**25**	
		Total	**31**			**25**	

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IV Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
		Professional Ethics	2	0	0	2	Humanities
1		Information Security	3	0	2	4	Professional core
2		Services Sciences and Service Operational Management	2	2	0	3	Professional core
3		Department Elective – 4	3	0	2	4	Department Elective
4		Department Elective – 5	3	0	2	4	Department Elective
5		Department Elective – 6	3	0	2	4	Department Elective
		Total	**16**	**2**	**8**	**21**	
6		Minor / Honors – 4	**3**	**0**	**2**	**4**	
		Total	**19**	**2**	**10**	**25**	
		Total	**31**			**25**	

L=Lecture; T= Tutorial; P= Practical; C=Credits

IV Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1		Project Work	0	2	22	12	Project
		Total	**0**	**2**	**22**	**12**	
2		Minor / Honors – 5	**0**	**2**	**6**	**4**	
		Total	**0**	**4**	**28**	**16**	
		Total	**32**			**16**	

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List of Department Electives

Sl. No.	Course Title	L	T	P	C	Pre-requisite Knowledge
1	Financial Management	2	2	0	3	
2	Human Resource management	2	2	0	3	
3	Machine Learning	3	0	2	4	
4	Usability design of software applications	3	0	2	4	
5	Introduction to IOT	3	0	2	4	
6	Big Data Analytics	3	0	2	4	
7	Data Science using Python	2	2	2	4	
8	Enterprise systems	3	2	0	4	

9	Marketing Research and Marketing Management	2	2	0	3	
10	Introduction to Innovation, IP Management and Entrepreneurship	2	2	0	3	
11	Augmented Reality and virtual Reality	2	2	0	3	
12	Mobile Computing	3	0	2	4	
13	Cryptology	3	2	0	4	
14	Image Processing and pattern Recognition	3	0	2	4	
15	Simulation and Modelling	3	2	0	4	
16	Java Programming	3	0	2	4	
17	Behavioural Economics	2	2	0	3	
18	Advance Finance	2	2	0	3	

List of Honors Courses

Sl. No.	Course Code	Course Title	L	T	P	C
1		Optimization Techniques	3	2	0	4
2		Image Processing and pattern Recognition	3	0	2	4
3		Deep Learning	3	0	2	4
4		Block Chain Technology	3	0	2	4
5		Capstone Project	0	2	6	4

LIST OF NPTEL Courses:

- Business analytics and data mining Modeling using R
- Data Analytics with Python,
- Data analytics,
- Business Intelligence
- Power BI
- Customer Relation Management
- AI for Investments
- E-Business.

List of Minor Courses:

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

Chairperson

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