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

VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH
Department of Advanced Computer Science & Engineering

Date: 22.03.2024

Department of Advanced CSE is going to conduct Board of Studies (BoS) meeting for the B.Tech CSE– Cyber Security Programme on **03.04.2024** from 11:00 AM in blended mode. (Physical meeting: N603, Nagarjuna Block, VFSTR and virtual meeting link: https://us06web.zoom.us/j/89368456815?pwd=ZwD71TlHjc0jM9QajtWfoQ4YbiklQU.1)

All the members of B.Tech - CSE Cyber Security Board of Studies are requested to make it convenient to attend the meeting.

S.No	Name of the Member	Designation and Affiliation	Role
1	Dr. Venkatesulu Dondeti	Professor & Head, Department of ACSE, VFSTR Deemed to be University	Chair Person
2	Dr. D Radha Rani	Associate Professor, Department of ACSE, VFSTR Deemed to be University	Secretary (Ex-officio)
3	Dr. Venkatesan S	Associate Professor, Department of IT, IIIT Allahabad	External Member
4	Dr.B.Venkata Ramana	Associate Professor & HoD Department of CSE, IIT Tirupathi	External Member
5	Dr.B M Mehtre	Professor, Center for Cyber Security and Data Privacy, IDBRT, Hyderabad	Invited Member
6	Dr. Digambar Pawar	Associate Professor, University of Hyderabad, Hyderabad	Invited Member
7	Dr. Nirupama Bhat	Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member
8	Dr. Bala Krishna S	Assistant Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member
9	Mr. Amar Jukuntla	Assistant Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member (Nominee – School Dean)
10	Dr. B Jyostna Devi	Assistant Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member (Nominee – Dean R&D)

The primary agenda of this Board of Studies (BoS) meeting is to:

1. Analysis of the feedback collected from various stakeholders such as Alumni, Employers, Faculty, Parents and Students during the academic year 2022-23

2. Approval of R22 Revision-1, Review the proposed first-year course structure for the Revised R22 regulation

3. Finalize the course structure for the remaining courses.

4. Approval of NPTEL courses.

5. Approval of L-T-P structure change or any credit change courses, if any

6. Approval of Honor/minor/department elective/open elective courses, if any

7. Discussion of results-FA, SA, grades

8. Discussion of attainments process, rubrics, CO/PO/PSO and SO values.

(Chair Person)
Dr. Venkatesulu Dondeti

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VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH
Department of Advanced Computer Science & Engineering

Date: 04.04.2024

Minutes of Board of Studies Meeting

Board of Studies (BoS) meeting of B.Tech., CSE-CS programme was conducted on 03.04.2024 in blended mode from 11:00 AM to 12:00 PM. (Physical meeting: N603, Nagarjuna Block, VFSTR and virtual meeting link:

https://us06web.zoom.us/j/89368456815?pwd=ZwD71TlHjc0jM9QajtWfoQ4YbiklQU.1)

Agenda of the BoS Meeting:

1. Reviewing the course structure and content introduced in R22 regulation
2. Discussion on revision of Course contents.
3. Discussion on L-T- P-C structure of various courses.
4. Discussion on addition of the department electives, open electives and the fulfillment of pre-requisites for the department electives.
5. SWAYAM-NPTEL courses identification
6. Formative and summative assessment results
7. Discussion on CO-PO-PSO
8. Fixing the CO-PO-PSO-PEO target values
9. Any other points based on the requirements with the permission of Chair.

The following members were present either thorough offline or online:

S.No	Name and Designation of the Member	Role	Signature
1	Dr. Venkatesulu Dondeti Professor & Head, Department of ACSE, VFSTR Deemed to be University	Chair Person	for B.Jy
2	Dr. D Radha Rani Associate Professor, Department of ACSE, VFSTR Deemed to be University	Secretary (Ex-officio)	Radha Rani
3	Dr. Venkatesan S Associate Professor, Department of IT, IIIT Allahabad	External Member	—online—
4	Dr.B.Venkata Ramana Associate Professor & HoD Department of CSE, IIT Tirupathi	External Member	—online—
5	Dr.B M Mehtre Professor, Center for Cyber Security and Data Privacy, IDBRT, Hyderabad	Invited Member	—online—

6	Dr. Digambar Pawar Associate Professor, University of Hyderabad, Hyderabad	Invited Member	— online —
7	Dr. Nirupama Bhat Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member	
8	Dr. Bala Krishna S Assistant Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member	
9	Mr. Amar Jukuntla Assistant Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member (Nominee – School Dean)	
10	Dr. B Jyostna Devi Assistant Professor, Department of ACSE, VFSTR Deemed to be University	Internal Member (Nominee – Dean R&D)	

Chairperson Dr. Venkatesulu Dondeti, Professor and Head, Department of ACSE, VFSTR initiated the meeting by welcoming and introducing the external members, invitees to the internal members. Secretary Dr. Deevi Radha Rani, Associate Professor, Department of ACSE, VFSTR presented program curriculum along with course content to the board.

The following points were discussed in the BoS meeting:
1. Reviewed Revised R22 CSE-CS program curriculum
2. Discussed on L-T- P-C structure of various courses.
3. SWAYAM-NPTEL courses identification for department, open electives and honors
4. Presented Formative and summative assessment results
5. Discussed on CO-PO-PSO
6. CO-PO-PSO-PEO target values finalization

The following resolutions are incorporated after the discussion:

1. Chairperson Dr. Venkatesulu Dondeti, Professor and Head, Department of ACSE has initiated the presentation on new features of revised R22 and changes in Credits Distribution for Various categories of courses.

2. Secretary, Dr. D. Radha Rani has presented the proposed draft version of revised R22 B. Tech CSE – Cyber Security 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.

3. Internal BoS members proposed to offer 2 separate courses, "Fundamentals of Security and Cryptography" and "Network Security" instead of "Cryptography and Network Security". External board members accepted for the change.

4. Dr.B.Venkata Ramana and Dr. Digambar Pawar suggested to include Object Oriented Programming course in II B.Tech II Semester and Operating Systems in II B.Tech I. Semester. Internal BoS members accepted their suggestions and done modifications accordingly.

5. Dr. B M Mehtre asked for the clarification for the change in Credits Distribution. Internal BoS members clarified him.

6. Dr. S Venkatesan and Dr. B M Mehtre suggested to include "Advanced Cryptography" and "Security Audit and Risk Assessment" as department elective instead of Honour course. Also suggested to include "Penetration Testing and Vulnerability Assessment" course as honour course. Internal BoS members accepted their suggestions and done modifications accordingly.

7. Dr. Digambar Pawar suggested to include topics of Cloud Security issues and Cloud Forensics in "Cloud Computing" course to customize the courses towards Programme specific. Internal BoS members accepted their suggestions and modified "Cloud Computing" course title as "Cloud Security".

8. Dr.B.Venkata Ramana and Dr. S Venkatesan suggested to move "Machine Learning" and "Wireless Networks" as core course instead of elective. Internal BoS members accepted their suggestions and done modifications accordingly.

9. After thorough discussions, the board suggested to consider the several SWAYAM-NPTEL courses, Value added courses and honours courses details of which are provided in the following sections.

10. At the end there was a discussion on Course Outcomes (CO), Program Outcomes (PO), Program Specific Outcomes (PSO), Formative Assessment results, Summative Assessment results, and the target values for CO-PO-PSO-PEO were decided.

Based on the suggestions given by the members, the Chairperson of BoS told that, these fruitful suggestions would be considered in the curriculum and syllabi of the revised R22 regulation.

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

VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH

Program: CSE – Cyber Security (CS)　　　　　　　　**Regulation:** R22

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 Science				3	Basic Engineering
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	Professional core
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**	

II Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1	22CYxxx	Fundamentals of Security and Cryptography	3	0	2	4	Basic Sciences
2		Data Structures and Algorithms	3	0	2	4	Basic Engineering
3	22MT109	Mathematical Foundation for Cyber Security	2	2	0	3	Basic Sciences
4	22CY206	Operating Systems	3	0	2	4	Professional core
5	22xxxxx	Digital Logic and Computer Organization	3	0	2	4	Professional core
6	22xxxxx	Database Management Systems	2	2	2	4	Professional core
7		Design Thinking & Engineering Orientation	0	2	0	1	Basic Engineering
8		Life Skills /UHV	0	0	2	1	Audit Course
		Total	16	6	12	25	
		Total		34		25	

II Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1	22ST202	Probability and Statistics	3	0	2	4	Basic Sciences
2		Field Projects / IDP	0	0	2	1	Project
3	22xxxxx	Algorithm Design and Analysis	2	2	2	4	Professional core
4	22CY204	Computer Networks	3	0	2	4	Professional core
5	22AM205	Object Oriented Programming	2	0	4	4	Professional core
6		Open Elective – 1 (NPTEL)	3	0	0	3	Open Elective
		Total	13	2	12	20	
7		Minor / Honors – 1	3	0	2	4	
		Total	16	2	14	24	
		Total		32		24	

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

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	22CYxxx	Network Security	3	0	2	4	Professional core
3	22xxxxx	Web Technologies	2	0	4	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**	

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	22CY304	Digital Forensics	3	0	2	4	Professional core
3	22CY805	Wireless Networks	3	0	2	4	Professional core
4	22CY303	Blockchain Technology	2	0	2	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**	**2**	**10**	**21**	
8		Minor / Honors – 3	**3**	**2**	**2**	**4**	
		Total	**17**	**4**	**12**	**25**	
		Total		**33**		**25**	

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

IV Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1	22CY401	Internet of Things	3	0	2	4	Professional core
2	22CYxxx	Machine Learning	2	0	2	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
6		Professional ethics				2	
		Total	14	0	10	21	
7		Minor / Honors – 4	3	0	2	4	
		Total	17	0	12	25	
		Total		29		25	

IV Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C	Course Category
1	22CY403	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 Code	Course Title	L	T	P	C
1	22CY952	Advanced Cryptography	3	0	2	4
2	22AM802	Compiler Design	3	2	0	4
3	22xxxxx	Formal Languages and Automata Theory	2	2	0	3
4	22CY203	Cyber Crimes and Cyber Laws	2	0	2	3
5	22CY804	Ethical Hacking	3	0	2	4
6	22CYxxx	Cloud Security	3	0	2	4
7	22CY402	Web and Database Security	3	0	2	4
8	22CY803	Secure Coding and Software Security	3	2	0	4
9	22xxxxx	Introduction to Software Engineering	2	0	2	3
10	22CY954	Security Audit and Risk Assessment	3	0	2	4
11	22CY802	Intrusion Detection and Prevention System	3	0	2	4
12	22xxxxx	Mobile Application Development	2	0	4	4

Honors Courses

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CY955	Biometrics	3	0	2	4
2	22CY951	Mobile and Wireless Security	3	0	2	4
3	22CY953	Malware Analysis	3	0	2	4
4	22CYxxx	Penetration Testing and Vulnerability Assessment	3	0	2	4
5	22CY956	Capstone Project	0	2	6	4

List of Minor Courses

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CY903	Fundamentals of Security	3	0	2	4
2	22CY904	Fundamentals of Cryptography	3	0	2	4
3	22CY905	Ethical Hacking	3	0	2	4
4	22CY906	Network Security	3	0	2	4
5	22CY907	Introduction to Digital Forensics	3	0	2	4
6	22CY908	Capstone Project	0	2	6	4

List of NPTEL (Dept Elective/Honor) Courses

- Cyber Security and Privacy
- Privacy and Security in Online Social Media
- Advanced Computer Networks
- Foundations of Cyber Physical Systems
- Systems and Usable Security
- Social Network Analysis
- Secure Computation
- Information Security - 5 - Secure Systems Engineering
- Cloud Computing and Distributed Systems

List of NPTEL (Open Elective) Courses

- Principles of Management
- Leadership and Team Effectiveness
- Artificial Intelligence for Investments
- E-Business

Chairperson

HoD
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