



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date: 27.06.2022

Minutes of Board of Studies Meeting






Board of Studies (BoS) meeting of B.Tech.,CSE – Cyber Security programme was conducted on 27.06.2022 in blended mode from 12.00PM to 01.30PM. (Physical meeting : CSE Conference Hall, Third floor, JC Bose Block, VFSTR and virtual meeting link : <https://us02web.zoom.us/j/6400485257?pwd=jN9EMqLRUorw6gcZ3T5gmA-QP1BvNQ>)

Agenda of the BoS Meeting:

1. Discussions and approval of R22 B.Tech. CSE – Cyber Security Program Structure.
2. Discussion on revision of R22 B.Tech. CSE – Cyber Security course contents.
3. Any other point with the permission of Chair.

The following members were present either thorough offline or online.

S.No.	Name and designation of the Member	Position	Signature
1	Dr. Venkatesulu Dondeti Professor & Head, Department of CSE, VFSTR Deemed to be University	Chair Person	
2	Prof. R.V.B.Subramanyam Professor Department of CSE, NIT Warangal	External Member (Academic)	Attended Online
3	Prof. C.R.Rao Professor SCIS, University of Hyderabad	External Member (Academic)	Attended Online
4	Dr.B.Venkata Ramana Assoc. Professor & HoD Department of CSE, IIT Tirupathi	External Member (Academic)	Attended Online
5	Dr. Nagesh Bhattu Sristy Asst. Professor Department of CSE, NIT AP	External Member (Academic)	Attended Online
6	Dr. Nirupama Bhat Professor, Department of CSE, VFSTR Deemed to be University	Internal Member	
7	Dr. S V Phani Kumar Assoc. Professor, Department of CSE, VFSTR Deemed to be University	Internal Member	

8	Dr. Mainak Biswas Assoc. Professor, Department of CSE, VFSTR Deemed to be University	Internal Member	
9	Dr. U. Srilakshmi Asst. Professor, Department of CSE, VFSTR Deemed to be University	Internal Member	
10	Mrs. B. Jyostna Devi Asst. Professor, Department of CSE, VFSTR Deemed to be University	Internal Member	
11	Dr. D. Radha Rani Asst. Professor, Department of CSE, VFSTR Deemed to be University	Invited Member (Nominee – Dean R&D)	
12	Mr. V Ramakrishna Sajja Asst. Professor, Department of CSE, VFSTR Deemed to be University	Secretary (Ex-officio)	

The following members have taken leave of absence:

S.No.	Name and designation of the Member	Position
1	Dr.V. Radha Assoc. Professor IDRBT, Hyderabad	External Member (Academic)
2	Dr.M.Dinesh Research Scientist Philips, Bangalore	External Member (Industry)

Chairperson Dr. Venkatesulu Dondeti, Professor and Head, department of CSE, VFSTR opened the meeting by welcoming and introducing the external members, invitees to the internal members. Chairperson presented about the *NEP 2020 Compliant Regulation - R22* which emphasis oncreating *learning centric* (continuous learning andcontinuous assessment model),offering B.Tech., B.Tech. with Honours/ Research Honours/ Minor/ Add-on Diploma,*Dual degree* (B.Tech. + M.Tech./MBA, or M.Tech. + Ph.D.), providingmultiple entry and multiple exits.

The following points were discussed in the BoS meeting:

1. Regulation R22.
2. Curriculum structure with credits, credits distribution.
3. 2 Modules instead of 5 units.
4. Assessment methods (Formative & Summative).
5. Grading Schemes.
6. Electives and streams/pools.
7. Minor / Honor courses.

The following resolutions made after the discussion:

1. Dr.D.Radha Rani has initiated the presentation on R22 CSE –Cyber Security Curriculum. All the BoS members have approved the curriculum.
2. Prof. C. R. Rao has suggested to float the course related to how to secure the systems from intruders and how to encrypt the technical documents etc. Committee accepted the comment, and it has been considered.
3. Prof. R.V.Subramanyam has suggested to float the one core course related privacy and its issues. Committee accepted the comment, and it has been included in cryptography and network security.
4. BoS Members approved the revised regulations, curriculum structure, syllabus of B.Tech., CSE – Cyber Security programmes and it follows based on the NEP 2020. Curriculum structure is provided in Appendix-I.
5. Major restructuring has taken place in the curriculum 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 thorough 20 more credits with additional courses.
7. The curriculum is encompassing the courses that enable employability or entrepreneurship or skill development, provided in Appendix- II.
8. The significant changes are made in the content of all courses and hence the courses are considered as new courses provided in Appendix- III.
9. Total average percentage of syllabus revised was 42% compared to previous curriculum

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



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

APPENDIX I

B.Tech CSE – Cyber Security Programme : Curriculum Structure

I Year I Semester

Sl. No.	Course Title	L	T	P	C	Course Category
1	Linear Algebra and Ordinary Differential Equations	3	2	0	4	Basic Sciences
2	Semiconductor Physics and Electromagnetics	2	0	2	3	Basic Sciences
3	Basics of Electrical and Electronics Engineering	2	0	2	3	Basic Engineering
4	IT Workshop and Tools	0	2	4	3	Basic Engineering
5	Programming in C	2	0	4	4	Basic Engineering
6	English Proficiency and Communication Skills	0	0	2	1	Humanities
7	Physical Fitness, Sports and Games – I	0	0	3	1	Binary grade
8	Constitution of India	0	2	0	1	Binary grade
	Total	9	6	17	20	
	Total		32		20	

I Year II Semester

Sl. No.	Course Title	L	T	P	C	Course Category
1	Algebra	3	2	0	4	Basic Sciences
2	Mathematical Foundation for Cyber Security	2	2	0	3	Basic sciences
3	Engineering Graphics	2	0	2	3	Basic Engineering
4	Basic Coding Competency	0	1	3	2	Basic Engineering
5	Technical English Communication	2	0	2	3	Humanities
6	Python Programming	2	0	2	3	Professional core
7	Physical Fitness, Sports and Games – II	0	0	3	1	Binary grade
8	Orientation Session	0	0	6	3	Binary grade
	Total	11	5	18	22	
	Total		34		22	

II Year I Semester

Sl. No.	Course Title	L	T	P	C	Course Category
1	Probability and Statistics	3	0	2	4	Basic Sciences
2	Data Structures	2	2	2	4	Basic Engineering
3	Management Science	2	2	0	3	Humanities
4	Database Management Systems	2	2	2	4	Professional core
5	Object-Oriented Programming through JAVA	2	0	4	4	Professional core
6	Digital Logic and Computer Organization	2	2	0	3	Professional core
7	Environmental Studies	1	1	0	1	Basic Sciences
8	Life Skills – I	0	0	2	1	Binary grade
9	NCC/ NSS/ SAC/ E-cell/ Student Mentoring/ Social activities/ Publication	0	0	0	1	Binary grade
	Total	14	9	12	25	
	Total		35		25	

II Year II Semester

Sl. No.	Course Title	L	T	P	C	Course Category
1	Advanced Coding Competency	0	0	2	1	Basic Engineering
2	Professional Communication	0	0	2	1	Humanities
3	Computer Networks	3	0	2	4	Professional core
4	Design and Analysis of Algorithms	2	2	2	4	Professional core
5	Operating Systems	2	0	2	3	Professional core
6	Cyber Security and Cyber Laws	2	2	0	3	Professional core
7	Life Skills – II	0	0	2	1	Binary grade
8	Open Elective – 1	3	0	0	3	Open Elective
	Total	12	4	12	20	
9	Minor / Honors – 1	3	0	2	4	
	Total		33		24	

III Year I Semester

Sl. No.	Course Title	L	T	P	C	Course Category
1	Soft Skills Laboratory	0	0	2	1	Humanities
2	Formal Languages and Automata Theory	2	2	0	3	Professional core
3	Web Technologies	2	0	4	4	Professional core
4	Cryptography and Network Security	3	0	2	4	Professional core
5	Inter-Disciplinary Project – Phase I	0	0	2	0	Project
6	Industry Interface Course	1	0	0	1	Binary Grades
7	Department Elective – 1	3	0	2	4	Department Elective
8	Open Elective – 2	3	0	0	3	Open Elective
9	NCC/ NSS/ SAC/ E-cell/ Student Mentoring/ Social activities/ Publication	0	0	0	1	Binary grade
	Total	14	2	12	21	
10	Minor / Honors – 2	3	0	2	4	
	Total	17	2	14	25	
	Total		33		25	

III Year II Semester

Sl. No.	Course Title	L	T	P	C	Course Category
1	Quantitative Aptitude and Logical Reasoning	1	2	0	2	Humanities
2	Blockchain Technology	2	0	2	3	Professional core
3	Digital Forensics	2	0	2	3	Professional core
4	Compiler Design	3	2	0	4	Professional core
5	Inter-Disciplinary Project – Phase II	0	0	2	2	Project
6	Department Elective – 2	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	

IV Year I Semester

Sl. No.	Course Title	L	T	P	C	Course Category
1	Internet of Things	3	0	2	4	Professional core
2	Web and Database Security	3	0	2	4	Professional core
3	Cloud Computing	3	0	2	4	Professional core
4	Department Elective – 3	3	0	2	4	Department Elective
5	Department Elective – 4	3	0	2	4	Department Elective
	Total	15	0	10	20	
6	Minor / Honors – 4	3	0	2	4	
	Total	18	0	12	24	
	Total	30			24	

IV Year II Semester

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

Department Electives

Sl. No.	Course Title	L	T	P	C
1	Big Data Analytics	3	0	2	4
2	Intrusion Detection and Prevention System	3	0	2	4
3	Secure Coding and Software Security	3	0	2	4
4	Tools and Techniques for Ethical Hacking	3	0	2	4
5	Wireless Networks	3	0	2	4
6	Machine Learning	3	0	2	4
7	Mobile Application Development	2	0	4	4
8	Introduction to Software Engineering	3	0	2	4

Minors

Cyber Security Stream

Sl.No	Course Title	L	T	P	C
1	Introduction to Block chain Technology	2	0	4	4
2	Introduction to Digital Forensics	2	0	4	4
3	Fundamentals of Security	3	2	0	4
4	Fundamentals of Cryptography	3	0	2	4
5	Tools and Techniques for Ethical Hacking	3	0	2	4
6	Network Security	3	0	2	4
7	Capstone Project	0	2	6	4

Honours

Sl. No.	Course Title	L	T	P	C
1	Mobile and Wireless Security	3	0	2	4
2	Advanced Cryptography	3	0	2	4
3	Malware Analysis	3	0	2	4
4	Security Audit and Risk Assessment	3	0	2	4
5	Biometrics	3	0	2	4
6	Capstone Project	0	2	6	4


Chairperson



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

APPENDIX II

List of Courses that Enables Employability or Entrepreneurship or Skill Development

S. No.	Year and Semester	Course Title	Employability / Entrepreneurship / Skill development
1.	I Year I Semester	Linear Algebra & Ordinary Differential Equations	Skill development
2.	I Year I Semester	Semiconductor Physics & Electromagnetics	Skill development
3.	I Year I Semester	Basic of Electrical & Electronics Engineering	Skill development
4.	I Year I Semester	IT Workshop & Tools	Employability
5.	I Year I Semester	Programming in C	Employability
6.	I Year I Semester	English Proficiency and Communication Skills	Skill development
7.	I Year I Semester	Physical Fitness, Sports & Games – I	Skill development
8.	I Year I Semester	Constitution of India	Skill development
9.	I Year II Semester	Algebra	Skill development
10.	I Year II Semester	Mathematical Foundation for Cyber Security	Skill development
11.	I Year II Semester	Engineering Graphics	Skill development
12.	I Year II Semester	Basic Coding Competency	Skill development
13.	I Year II Semester	Technical English Communication	Entrepreneurship
14.	I Year II Semester	Python Programming	Employability
15.	I Year II Semester	Physical Fitness, Sports & Games – II	Skill development
16.	I Year II Semester	Orientation Session	Skill development
17.	II Year I Semester	Probability and Statistics	Skill development
18.	II Year I Semester	Data Structures	Skill development
19.	II Year I Semester	Management Science	Skill development
20.	II Year I Semester	Object-Oriented Programming through JAVA	Entrepreneurship
21.	II Year I Semester	Database Management Systems	Skill development
22.	II Year I Semester	Digital Logic and Computer Organization	Skill development

23.	II Year I Semester	Environmental Studies	Skill development
24.	II Year I Semester	Life Skills – I	Skill development
25.	II Year II Semester	Advanced CodingCompetency	Skill development
26.	II Year II Semester	Professional Communication	Skill development
27.	II Year II Semester	Computer Networks	Skill development
28.	II Year II Semester	Operating Systems	Skill development
29.	II Year II Semester	Cyber Security and Cyber Laws	Employability
30.	II Year II Semester	Design and Analysis of Algorithms	Employability
31.	II Year II Semester	Life Skills-II	Skill development
32.	III Year I Semester	Soft Skills Laboratory	Skill development
33.	III Year I Semester	Cryptography and Network Security	Employability
34.	III Year I Semester	Formal Languages and Automata Theory	Employability
35.	III Year I Semester	Web Technologies	Employability
36.	III Year I Semester	Industry interface course (Modular course)	Employability
37.	III Year I Semester	Inter-disciplinary Project – Phase I	Skill development
38.	III Year II Semester	Quantitative Aptitude & Logical Reasoning	Skill development
39.	III Year II Semester	Digital Forensics	Employability
40.	III Year II Semester	Blockchain Technology	Employability
41.	III Year II Semester	Compiler Design	Employability
42.	III Year II Semester	Inter-disciplinary Project – Phase II	Employability
43.	IV Year I Semester	Internet of Things	Employability
44.	IV Year I Semester	Cloud Computing	Employability
45.	IV Year I Semester	Web and Database Security	Employability
46.	IV Year II Semester	Internship / Project Work	Employability
47.	Dept.Elective	Wireless Networks	Employability
48.	Dept.Elective	Introduction to Software Engineering	Employability
49.	Dept.Elective	Machine Learning	Employability
50.	Dept.Elective	Secure Coding and Software Security	Employability

51.	Dept.Elective	Big Data Analytics	Employability
52.	Dept.Elective	Mobile Application Development	Employability
53.	Dept.Elective	Tools and Techniques for Ethical Hacking	Employability
54.	Dept.Elective	Intrusion Detection and Prevention System	Employability
55.	Honors	Mobile and Wireless Security	Employability
56.	Honors	Advanced Cryptography	Employability
57.	Honors	Malware Analysis	Employability
58.	Honors	Security Audit and Risk Assessment	Employability
59.	Honors	Biometrics	Employability


Chairperson



VIGNAN'S
Foundation for Science, Technology & Research
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WINDS OF KNOWLEDGE BLOWING

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

APPENDIX III

List of New Courses in the R22 Curriculum

S. No.	Year and Semester	Course Title
1.	I Year I Semester	IT Workshop & Tools
2.	I Year I Semester	Programming in C
3.	I Year II Semester	Mathematical Foundation for Cyber Security
4.	I Year II Semester	Python Programming
5.	II Year I Semester	Data Structures
6.	II Year I Semester	Management Science
7.	II Year I Semester	Object-Oriented Programming through JAVA
8.	II Year I Semester	Database Management Systems
9.	II Year I Semester	Digital Logic and Computer Organization
10.	II Year II Semester	Computer Networks
11.	II Year II Semester	Operating Systems
12.	II Year II Semester	Cyber Security and Cyber Laws
13.	II Year II Semester	Design and Analysis of Algorithms
14.	III Year I Semester	Cryptography and Network Security
15.	III Year I Semester	Formal Languages and Automata Theory
16.	III Year I Semester	Web Technologies
17.	III Year II Semester	Digital Forensics
18.	III Year II Semester	Blockchain Technology

19.	III Year II Semester	Compiler Design
20.	IV Year I Semester	Internet of Things
21.	IV Year I Semester	Cloud Computing
22.	IV Year I Semester	Web and Database Security
23.	Dept.Elective	Wireless Networks
24.	Dept.Elective	Introduction to Software Engineering
25.	Dept.Elective	Machine Learning
26.	Dept.Elective	Secure Coding and Software Security
27.	Dept.Elective	Big Data Analytics
28.	Dept.Elective	Mobile Application Development
29.	Dept.Elective	Tools and Techniques for Ethical Hacking
30.	Dept.Elective	Intrusion Detection and Prevention System
31.	Honors	Mobile and Wireless Security
32.	Honors	Advanced Cryptography
33.	Honors	Malware Analysis
34.	Honors	Security Audit and Risk Assessment
35.	Honors	Biometrics


Chairperson

General instructions

- ❖ If the percentage of change in the total course content is more than 20%, the course can be considered as NEW COURSE
- ❖ Core courses offered by other departments (ie., S&H, computer courses) should also be included here if they satisfy the above criteria

