VIGNAN'S
Foundation for Science, Technology & Research
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-Estd. u/s 3 of UGC Act 1956

Department of Computer Science and Engineering

Minutes of
Board of Studies Meetings

Department of Computer Science and engineering has conducted the Internal Board of Studies Meeting at 03:00 PM on 12.12.2020 in the Department Conference Hall, Vignan's Foundation for Science, Technology and Research, Vadlamudi.

Agenda of BoS Meeting:

1. Introduction of Python Programming Course as Core Course from the Department Elective Pool.
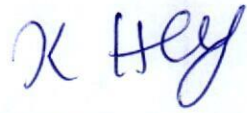
BoS Members Present :
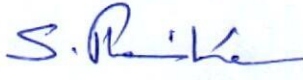
S.No.	Name	Designation	Details
1	Dr.VenkatesuluDondeti	Professor & Head, Department of CSE, VFSTR, Chairman.	BoS Chairman
2	Dr. K.Hemantha Kumar	Professor, Department of CSE, VFSTR, Member.	Member
3	Dr. M. Nirupama Bhat	Professor, Department of CSE, VFSTR, Member.	Member
4	Dr. M. Shanmugam	Associate Professor, Department of CSE, VFSTR, Member.	Member
5	Dr.S.V.Phani Kumar	Associate Professor, Department of CSE, VFSTR, Member.	Member& Coordinator
6	Mr. V. RamaKrishnaSajja	Assistant Professor, Department of CSE, VFSTR, Member.	Member
7	Mr. D. S. Bhupal Naik	Assistant Professor, Department of CSE, VFSTR, Member.	Member
8	Ms.B.Jyotsna Devi	Assistant Professor, Department of CSE, VFSTR, Member.	Member

Minutes of meeting:

As python creates job opportunities in the IT industries and it becomes the base language for Artificial Intelligence (AI) and Machine Learning (ML), based on the comments received from the various stack holders the following resolutions are incorporated.

1. Python Programming (19CS331) is made ascore and it is shifted from the Department Elective pool to the core courses of II Year II Semester.
2. To provide a strong foundation, the Python Programming course is introduced in II Year II Semester in place of the Operating System(19CS211) II Year II Semester.
3. The Operating System (19CS211) course is shifted from II Year II Semester to III Year I semester.

4. Compiler Design (19CS303) is moved from III Year I Semester to Department Elective pool, based on the technology development and demand the above changes were made and approved.

S.No.	Name&Designation	Signature
1	Dr.VenkatesuluDondeti, Professor & Head, Department of CSE, VFSTR, BoSChairman.	
2	Dr K.Hemantha Kumar, Professor, Department of CSE, VFSTR, Member.	
3	DrM. Nirupama Bhat, Professor, Department of CSE, VFSTR, Member.	
4	Dr M. Shanmugam, Associate Professor, Department of CSE, VFSTR, Member.	
5	DrS.V.Phani Kumar, Associate Professor, Department of CSE, VFSTR, Member.	
6	Mr V. RamaKrishnaSajja, Assistant Professor, Department of CSE, VFSTR, Member.	
7	Mr D. S. Bhupal Naik, Assistant Professor, Department of CSE, VFSTR, Member.	
8	MsB.Jyotsna Devi, Assistant Professor, Department of CSE, VFSTR, Member.	

The modification Proposed has been discussed with External BoS members over phone and they approved the Proposed changes.

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**Department of
Computer Science & Engineering**

10.06.2020

Minutes of Board of Studies Meeting

Department of Computer Science & Engineering has conducted the Board of Studies (BOS) Meeting for B.Tech CSE - Cyber Security on 10/06/2020 in online mode from 10.00 AM to 1.00 PM.

Agenda of the BOS Meeting:

1. Discussions and approval of B.Tech CSE - Cyber Security Program Structure.
2. Discussion on B.Tech. CSE - CS Course contents.
3. Any other point with the permission of Chair

Members attended the Meeting:

S.No.	Name	Designation & Affiliation	Details
1	Dr. Venkatesulu Dondeti	Professor & Head, Department of CSE, VFSTR Deemed to be University	BoS Chairman
2	Prof. Dr. G Vara Prasad	Professor, Dept of CSE, BMS College of Engineering, Bangalore (Research)	External Member
3	Dr. C D Jaidhar,	Associate Professor, Dept of IT, NIT Surathkal, Karnataka (Research)	External Member
4	Dr. Venkata Ramana B	Associate Professor & HOD, CSE, IIT, Tirupati (Academia)	External Member
5	Dr. Ramesh Babu B	Assistant Professor, MNIT, Jaipur, Rajasthan (Academia)	External Member
6	Dr C. Jagadish	Technical architect, Cisco systems, Bangalore (Industry)	External Member
7	Sri. Ravichandran M	Director, Terafast Networks Pvt Ltd, Chennai (Industry)	External Member
8	Mrs. Amrutha Valli	CEO, Apple purple info systems. New Delhi	External Member
9	Dr. Nirupama Bhat M	Professor, Department of CSE, VFSTR Deemed to be University	Internal Member & Coordinator
10	Dr U Sri Lakshmi	Asst. Professor, Department of CSE, VFSTR Deemed to be University	Internal Member
11	Mr. D S BhupalNaik	Asst. Professor, Department of CSE, VFSTR Deemed to be University	Internal Member
12	Mrs D Radha Rani	Asst. Professor, Department of CSE, VFSTR Deemed to be University	Internal Member
14	Dr. K Hemantha Kumar	Professor, Department of CSE, VFSTR Deemed to be University	Special Invitee
15	Dr. S V Phani Kumar	Assoc. Professor, Department of CSE, VFSTR Deemed to be University	Special Invitee
16	Mrs. B Jyostna Devi	Asst. Professor, Department of CSE, VFSTR Deemed to be University	Special Invitee

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Department of
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Following points were discussed in the meeting:

1. Dr. D Venkatesulu, HoD, CSE has invited all the external and internal members and introduced the initiation of B.Tech-CSE Cyber Security Programme that have to be commenced from the academic year 2020-21. He notified the members that Choice-Based Credit System is followed for this programme.
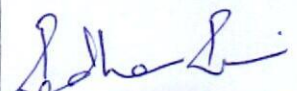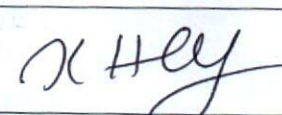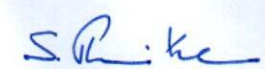
   Thereafter, he shared the minutes of Curriculum Design and Monitoring Committee meeting with External members. He also mentioned that the Curriculum is encompassing the courses that enable employability or entrepreneurship or skill development. List is included as Annexure II.

2. Prof M Nirupama Bhat has initiated the presentation on the Curriculum of the B.Tech CSE-Cyber Security Programme. Firstly, she explained the credit distribution of the courses in the curriculum. The Programme Outcomes, Programme Specific Outcomes and Programme Educational objectives were thoroughly discussed and approved.

3. There was a discussion among the BoS members about the importance of CS course, and the level of its need to the industries and organizations, the orientation that must be given towards B.Tech, Cyber Security programme.
   Dr VenkataRamana has explained the inclusion of MLC (Mandatory Learning Course) course in the curriculum. Dr Jaidhar suggested to build very strong foundation and good orientation on cyber security courses. He also suggested to identify the top 10 companies which are offering placement on cyber security with good package and provide that data to the students to increase the interest among the students in taking the admissions into this course.

4. The course structure and course contents of the B.Tech CSE Cyber Security programme were discussed. In the first year, along with the courses in B.Tech CSE programme, Introduction to Security, Mathematical Foundations for Cyber Security and Probability and Statistics are included. Engineering Chemistry, Discrete Mathematical Structures and Engineering Mathematics were replaced with the above mentioned courses. Mathematical Foundation for Cyber Security is kept in I-II under Basic Sciences. Introduction to Security is offered in I-II under Basic Engineering.

5. Dr Ramesh suggested to include the standards and frameworks of cyber security and to include some more courses like privacy and security in online social media, social engineering, Opensource frameworks, Reverse engineering etc as elective courses pool.

6. Dr. Jagadish C suggested to include security aspects of Internet of things with basic introduction, vulnerabilities and how to overcome them followed by security in Industrial IOT. It is suggested to change the title of the course "Wireless Computer

Networks" as "Wireless Networks". Further, discussion went on about removal of redundancy between the syllabus in the theory course and the theory course integrated with lab.

7. Sri RaviChandran suggested to offer diverse level in emerging cyber security courses as programme specific electives. It is also suggested to provide specific orientation to the students during the selection of electives.

8. After thorough discussion, Nine programme specific courses and Nine programme specific electives were finalized. Introduction to Cryptography course was included in Year-II, Semester I. It is followed by Network Security and Cyber security and Cyber laws and Wireless Computer Networks were included in Year – III Semester I and Digital forensics, Internet of things were put in Semester-II. Block chain Technology was introduced in Year-IV I.

9. Dr. Venkatesulu HoD, CSE concluded and thanked all the Internal and External members and meeting is adjourned. The approved Course Structure and Course contents were attached as Annexure I.

Signatures:

16. B. Jy

Copy to

    1. Dean, Academics.
    2. All BOS Members.
    3. File.

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Department of Computer Science and Engineering   Annexure I

R19 B.Tech CSE – Cyber Security

PROGRAMME STRUCTURE

I Year I Semester

Course Title	L	T	P	C
Engineering Mathematics I(C)	3	1	-	4
Basics of Electrical and Electronics Engineering	3	-	2	4
Engineering Physics (A)	3	-	2	4
Workshop	1	-	2	2
Programming for Problem Solving –I	3	-	4	5
Basics of Computer & Internet	1	-	2	2
Physical fitness, Sports & Games-I	-	-	3	1
Constitution of India	1	-	-	1
Total	15	1	15	23

I Year II Semester

Course Title	L	T	P	C
Probability and Statistics	4	-	-	4
Mathematical Foundation for Cyber Security	3	-	-	3
Programming for Problem Solving-II	3	-	4	5
English Proficiency and Communication Skills	-	-	2	1
Introduction to Security	3	-	-	3
Engineering Graphics and Design	1	-	2	2
Technical English Communication	2	-	2	3
Physical Fitness, Sports & Games-II	-	-	3	1
Total	16	-	13	22

II Year I Semester

Course Title	L	T	P	C
Digital Logic and Computer Organization	3	-	-	3
Introduction to Cryptography	2	-	2	3
OOPs through JAVA	2	-	4	4
Data Structures	3	-	2	4
Database Management Systems	3	-	2	4
Environmental Studies	1	-	-	1
Life Skills – I	-	-	2	-
Technical Seminar-I	-	-	2	1
Intra-disciplinary Projects-I	-	-	2	1
Physical Fitness, Sports & Games-III	-	-	2	1
Total	14	-	18	22

II Year II Semester

Course Title	L	T	P	C
Design & Analysis of Algorithms	3	-	2	4
Python Programming	2	-	2	3
Computer Networks	3	-	2	4
Operating Systems	3	-	2	4
Web Technologies	2	-	2	3
Principles of Management & Organizational Behaviour	3	-	-	3
Life Skills – II	-	-	2	1
Technical Seminar-II	-	-	2	1
Intra-disciplinary Projects-II	-	-	2	1
Total	16	-	16	24

III Year I Semester

Course Title	L	T	P	C
Software Engineering	3	-	2	4
Network Security	3	-	2	4
Cyber security and Cyber laws	3	-	-	3
Wireless Networks	3	-	2	4
Soft-skills Laboratory	1	-	-	1
Department Elective-I	3	-	2	4
Open Elective-I	3	-	-	3
Employability skills-I	-	-	2	-
Inter-departmental Projects-I	-	-	4	2
Modular Course	-	-	-	1
Total	19	-	14	26

III Year II Semester

Course Title	L	T	P	C
Internet of Things	2	-	2	3
Digital forensics	3	-	2	4
Machine learning	3	-	2	4
Competitive Coding	-	-	2	1
Professional Communication Laboratory	-	-	2	1
Human Values, Professional Ethics & Gender Equity	2	-	-	2
Department Elective-II	3	-	-	3
Open Elective-II	3	-	-	3
Employability skills-II	-	-	2	1
Inter-departmental Projects-II	-	-	4	2
Total	16	-	16	24

IV Year I Semester

Course Title	L	T	P	C
Block-chain Technology	3	-	2	4
Department Elective III	3	-	-	3
Department Elective IV	3	-	2	4
Open Elective III	3	-	-	3
Societal-Centric and Industry Related Projects	-	-	6	3
Total	12	-	10	17
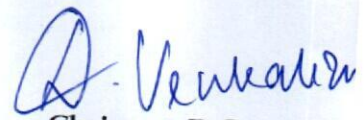
IV Year II Semester

Course Title	L	T	P	C
Internship / Project work	-	-	24	12
Total	-	-	24	12

DEPARTMENT ELECTIVE COURSES

Course Title	L	T	P	C	
Tools and Techniques for ethical hacking	3	-	2	4	
Mobile and Wireless security	3	-	2	4	
Advanced Cryptography	3	-	-	4	
Secure Coding and Software Security	3	-	2	4	
Web and Database Security	3	-	2	4	
Cloud computing	3	-	2	4	
Cryptanalysis and Cyber Defense	3	1	-	4	
Security Audit and Risk assessment	3	1	-	4	
Biometrics	3	1	-	4	
Intrusion Detection and Prevention system	3	1	-	3	
Social Networks	3	-	-	3	
Secure Computation-I	3	-	-	3	} NPTEL Courses
Secure Computation-II	3	-	-	3	
Secure Systems Engineering	3	-	-	3	

Chairman, BoS

CSE

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Department of Computer Science and Engineering
R19 B.Tech CSE – Cyber Security
List of New Courses

- Mathematical Foundation for Cyber Security
- Introduction to Security
- Introduction to Cryptography
- Network Security
- Cyber security and Cyber laws
- Wireless Networks
- Internet of Things
- Digital forensics
- Block-chain Technology
- Tools and Techniques for ethical hacking
- Mobile and Wireless security
- Advanced Cryptography
- Secure Coding and Software Security
- Web and Database Security
- Cloud computing
- Cryptanalysis and Cyber Defense
- Security Audit and Risk assessment
- Biometrics
- Intrusion Detection and Prevention system
- Social Networks
- Secure Computation-I
- Secure Computation-II
- Secure Systems Engineering

Chairman, BoS

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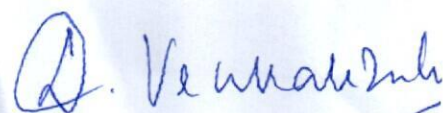Foundation for Science, Technology & Research
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Department of Computer Science and Engineering
R19 B.Tech CSE – Cyber Security
Course Categorization

Course Title	Course Category
Engineering Mathematics I(C)	Skill Development
Basics of Electrical and Electronics Engineering	Skill Development
Engineering Physics (A)	Skill Development
Workshop	Skill Development
Programming for Problem Solving –I	Employability
Basics of Computer & Internet	Skill Development
Physical fitness, Sports & Games-I	Skill Development
Constitution of India	Skill Development
Probability and Statistics	Skill Development
Mathematical Foundation for Cyber Security	Skill Development
Programming for Problem Solving-II	Employability
English Proficiency and Communication Skills	Skill Development
Introduction to Security	Skill Development
Engineering Graphics and Design	Skill Development
Technical English Communication	Skill Development
Physical Fitness, Sports & Games-II	Skill Development
Digital Logic and Computer Organization	Skill Development
Introduction to Cryptography	Skill Development
OOPs through JAVA	Employability
Data Structures	Skill Development
Database Management Systems	Skill Development
Environmental Studies	Skill Development

Course	Category
Life Skills – I	Skill Development
Technical Seminar-I	Skill Development
Intra-disciplinary Projects-I	Skill Development
Physical Fitness, Sports & Games-III	Skill Development
Design & Analysis of Algorithms	Employability
Python Programming	Employability
Computer Networks	Skill Development
Operating Systems	Skill Development
Web Technologies	Employability
Principles of Management & Organizational Behaviour	Entrepreneurship
Life Skills – II	Skill Development
Technical Seminar-II	Skill Development
Intra-disciplinary Projects-II	Skill Development
Software Engineering	Skill Development
Network Security	Employability
Cyber security and Cyber laws	Employability
Wireless Networks	Skill Development
Soft-skills Laboratory	Skill Development
Employability skills-I	Skill Development
Inter-departmental Projects-I	Skill Development
Modular Course	Employability
Internet of Things	Employability
Digital forensics	Employability
Machine learning	Employability
Competitive Coding	Skill Development
Professional Communication Laboratory	Entrepreneurship
Human Values, Professional Ethics & Gender Equity	Skill Development
Employability skills-II	Employability

Inter-departmental Projects-II	Employability
Block-chain Technology	Skill Development
Societal-Centric and Industry Related Projects	Skill Development
Internship / Project work	Employability
Tools and Techniques for ethical hacking	Employability
Mobile and Wireless security	Employability
Advanced Cryptography	Employability
Secure Coding and Software Security	Employability
Web and Database Security	Employability
Cloud computing	Employability
Cryptanalysis and Cyber Defense	Employability
Security Audit and Risk assessment	Employability
Biometrics	Employability
Intrusion Detection and Prevention system	Employability
Social Networks	Skill Development
Secure Computation-I	Skill Development
Secure Computation-II	Skill Development
Secure Systems Engineering	Skill Development

Chairman, BoS

CSE