



Minutes of Meeting of Board of Studies (BOS)

Date: 30.03.2019

Board of Studies Meeting (BOS) of department of Information Technology of Vignan's Foundation for Science Technology and Research Deemed to be University is conducted on 30th March, 2019 at Vice-Chancellor's Conference Hall, A-Block, Vignan's Foundation for Science Technology and Research Deemed to be University, Vadlamudi.

Agenda of the BOS Meeting:

1. To finalize R19 B.Tech. Information Technology programme Curriculum.
2. Any point with the permission of Chair.

The following members attended the meeting.

S.No.	Name & Address of the Expert	Contact Details	Member
1	Dr. K.V.Krishna Kishore, HOD, Dean, Lib and IT Services, Department of Information Technology Vignan's University.	Mobile : 9490647678 Mail-id: kishorekvk_1@yahoo.com; hodit@vignanuniversity.org	BoS Chairman Internal Member
2	Dr.C.Raghavendra Rao, Professor, University of Hyderabad, Hyderabad	Mobile : 9247465125 Mail-id: cracs@uohyd.ernet.in	External Member
3	Dr. R.B.V. Subramaanyam Professor & HOD Department of CSE, NIT Warangal-506004, Telangana, India.	Mobile: +91 9491346969 Mail-id : rbvs66@gmail.com	External Member
4	Dr. Salman Abdul Moiz Professor Department Computer Science in the School of Computer and Information Sciences University of Hyderabad	Mobile:+91 9885049992 Mail- id:salman.adbul.moiz@gmail.com	External Member
5	Mr. Chilli Anil Kumar Scientist –E CAIR DRDO C V Raman Nagar Bengaluru	Mobile: 9043056079 Mail-id: anil@cair.drdo.in	External Member



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6	Dr. N.Veeranjanyulu Professor & Assistant Controller of Examinations Department of Information Technology VFSTR University	Mobile:9347162038 Mail-id : veeru2006n@gmail.com	Internal Member
7	Dr. B. Premamayudu Associate Professor Department of Information Technology, VFSTR University	Mobile:+91 9440006478 Mail-id : premamayudu@gmail.com	Internal Member
8	Dr. P. Surrabao Associate Professor Department of Information Technology, VFSTR University	Mobile:+91 9440006478 Mail-id : subbarao.peram@gmail.com	Internal Member
9	Dr. K. Sujatha Associate Professor Department of Information Technology, VFSTR University	Mobile:+91 9989728642 Mail-id : sujatha101012@gmail.com	Internal Member
10	Dr. B. Balaji Assistant Professor Department of Information Technology, VFSTR University	Mobile:+91 8971027077 Mail-id : balajiwgl@gmail.com	Internal Member

The following members have taken leave of absence to attend the meeting.

S.No.	Name & Address of the Expert	Contact Details	Member
1	Dr. Adi Maheswara Reddy Manger Software Engineering Parexel International Pvt. Ltd Raheja Mind Space Madhapur Hyderabad-500081	Phone:+91 9704679987 Mail- di:adimaheswara@yahoo.com	External Member



Following are the points discussed and resolutions made during this meeting.

1. Propose and approve course structure for all 4 years of B.Tech. Programme in Information Technology (Appendix I)
2. Choice based credit system is implemented in the Curriculum (Appendix IV) and 42% of syllabus revision was carried out.
3. All the Courses in the Curriculum are designed to fall under either of the domains of employability or entrepreneurship or skill development (Appendix II)
4. Feedback from wide array of stakeholders is carefully collected, analyzed and their suggestions are considered while designing the Curriculum
5. Propose and approve detailed syllabus for the 4 year of B.Tech. Programme in Information Technology with effect from the academic year 2019-20. The proposed structure and syllabus are applicable for 2019 admitted batch onwards.
6. It is better to complete Basics of Computers and Internet and Basics of Engineering Products in Induction Program itself. If possible, give the credits for Induction Program from 6 to 8 credits and do not include in CGPS calculation.
7. While calculating the CGPA of the degree, do not consider the credits of employability and sports courses.
8. If possible, it is better to decrease the credits from 170 to 160.
9. Include more elective courses that number must be at least 8 electives offered from 3rd year 1st semester to 4th year 1st Semester.
10. Specify the prerequisite for every course. In particular, for elective course, if the students did not complete (pass) all the prerequisites for elective course, do not allow such students to register for such elective course.



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11. Every elective course must offer with lab component and simple projects.
12. Tutorial hours are required for most of the core courses, like Discrete mathematical structures, automata theory and formal languages, Data structures, operating systems, design and analysis of algorithms, Data base management systems etc.
13. Include fundamental analytics on data as one unit in big data analytics course.
14. Conduct at least 3 or 4 experiments on real time cloud environment like Amazon Web Servers (AWS), Microsoft Azure and etc.
15. Better to offer python language course from 2nd year and implement lab experiment of other courses in python language like computer networks, simulation of operating systems concepts and etc.
16. Include Block Chain Technologies or crypto currency, web technologies, data science, distributed systems, and advanced data base management systems, multimedia systems as an elective courses.
17. They suggested to revise the following courses:
 - a) Python programming – include important python libraries like numpy, scipy, pandas and matplotlib; introduce lab experiments accordingly
 - b) Programming for Problem Solving II – Last unit of this course better to move to Data structure course
 - c) Computer Organization – include Concepts of Assembly language Programming
 - d) Web Technologies – introduce LAMP/WAMP Stack
 - e) Internet of Things – include MCA protocol concepts and basic sensors
 - f) R programming – include few case studies for practicing in laboratory and visualization concepts.



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- g) Statistics using python – include working data sets form authentic consortium
- h) Block Chain Technologies – Include Bitcoin protocol
- i) Operating systems – include UNIX/LINUX utilities in OS laboratory
- j) Artificial Intelligence – introduce LISP, Prolog and Haskel
- k) Software Engineering – introduce software quality facts, software planning topics and unified modeling in laboratory experiments
- l) Big data analytics – introduce basic analytics and visualization
- m) Mobile Application Development – Introduce light weight databases and rename the course as mobile application development
- n) Embedded Systems – Introduce cross platforms

17. Inclusion of new courses in the curriculum is reviewed and is provided as Appendix III

S.No.	Name & Address of the Expert	Signature
1	Dr. K.V.Krishna Kishore, HOD, Dean, Lib and IT Services, Department of Information Technology Vignans University.	
2	Dr.C.Raghavendra Rao, Professor, University of Hyderabad, Hyderabad	
3	Dr. R.B.V. Subramaanyam Professor & HOD Department of CSE, NIT Warangal-506004, Telangana, India.	
4	Dr. Salman Abdul Moiz Professor Department Computer Science in the School of Computer and Information Sciences University of Hyderabad	



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5	Mr. Chilli Anil Kumar Scientist –E CAIR DRDO C V Raman Nagar Bengaluru	
6	Dr. N.Veeranjanyulu Professor & Assistant Controller of Examinations Department of Information Technology VFSTR University	
7	Dr. B. Premamayudu Associate Professor Department of Information Technology, VFSTR University	
8	Dr. P. Subbarao Associate Professor Department of Information Technology, VFSTR University	
9	Dr. K. Sujatha Associate Professor Department of Information Technology, VFSTR University	
10	Dr. B. Balaji Assistant Professor Department of Information Technology, VFSTR University	



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Appendix-I

B.Tech. Information Technology Programme Structure

I-I Semester

S.No.	Course Name	L	T	P	C
1	Engineering Mathematics I (C)	3	-	2	4
2	Engineering Physics (A)	3	-	2	4
3	Basics of Electrical & Electronics Engineering	3	-	2	4
4	Engineering Graphics and Design	1	-	2	2
5	Programming for Problem Solving-I	3	-	4	5
6	Basics of Computer & Internet	1	-	2	2
7	Physical Fitness, Sports & Games-I	-	-	3	1
Total		14	-	17	22

I-II Semester

S.No.	Course Name	L	T	P	C
1	Engineering Mathematics II (C)	3	-	2	4
2	Discrete Mathematical Structure	3	-	-	3
3	Engineering Chemistry (A)	2	-	-	2
4	Programming for Problem Solving-II	3	-	4	5
5	English Proficiency and Communication Skills	-	-	2	1
6	Constitution of India	1	-	-	1
7	Workshop	1	-	2	2
8	Technical English Communication	2	-	2	3
9	Physical Fitness, Sports & Games-II	-	-	3	1
Total		15	-	15	22

II-I Semester

S.No.	Course Name	L	T	P	C
1	Probability and Statistics	3	1	-	4
2	Data Structures	3	-	2	4
3	Digital Logic Design	3	-	-	3
4	Database Management Systems	3	-	2	4
5	OOPs through JAVA	3	-	4	5
6	Environmental Studies	1	-	-	1
7	Life Skills-I	-	-	2	-
8	Technical Seminar – I	-	-	2	1
9	Intra-Disciplinary Projects-I	-	-	2	1
10	Physical Fitness, Sports & Games-III	-	-	2	1
Total		16	1	16	24



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B.Tech. Information Technology Programme Structure

II-II Semester

S.No.	Course Name	L	T	P	C
1	Formal Languages & Automata Theory and Compiler Design	3	1	-	4
2	Computer Organization & Architecture	3	-	-	3
3	Operating Systems	3	-	2	4
4	Python Programming	2	-	4	4
5	Web Technologies	3	-	2	4
6	Principles of Management & Organizational Behaviour	3	-	-	3
7	Life Skills – II	-	-	2	1
8	Technical Seminar – II	-	-	2	1
9	Intra-Disciplinary Projects-II	-	-	2	1
Total		17	0	14	24

III-I Semester

S.No.	Course Name	L	T	P	C
1	Data Communications and Networking	3	-	-	3
2	Software Engineering	3	-	2	4
3	Design and Analysis of Algorithms	2	-	4	4
4	Department Elective – I	3	-	2	4
5	Open Elective-I	3	-	-	3
6	Soft Skills Lab	1	-	-	1
7	Employability Skills – I	-	-	2	-
8	Inter-Departmental Projects – I	-	-	4	2
9	Modular Course	-	-	-	1
Total		15	0	14	22

III-II Semester

S.No.	Course Name	L	T	P	C
1	Data Mining Techniques	3	-	2	4
2	Internet of Things	3	-	2	4
3	Competitive Coding	-	-	2	1
4	Departmental Elective-II	3	-	2	4
5	Open Elective-II	3	-	-	3
6	Professional Communication Lab	-	-	2	1
7	Human Values, Professional Ethics & Gender Equity	2	-	-	2
8	Employability Skills – II	-	-	2	1
9	Inter-Departmental Projects-II	-	-	4	2
Total		14	0	16	22



B.Tech. Information Technology Programme Structure

IV-I Semester

S.No.	Course Name	L	T	P	C
1	Cryptography & Network Security	3	-	2	4
2	Bigdata Analytics	3	-	2	4
3	Departmental Elective- III	3	-	2	4
4	Departmental Elective- IV	3	-	2	4
5	Open Elective – IV	3	-	0	3
6	Social Centric and Industry Related Projects	-	-	6	3
Total		15	-	14	22

IV-II Semester

S.No.	Course Name	L	T	P	C
1	Project Work/Internship	-	-	24	12
Total		-	-	24	12

L: Lecture Hours/week; T: Tutorial Hours/week; P: Practical Hours/week;
C: Credits of the Course;

Department Electives Courses

S.No.	Course Title
1	R Programming
2	Mobile Application Development
3	Artificial Intelligence
4	Cloud Computing
5	Embedded Systems
6	Network Programming
7	Fundamentals of Image Processing
8	Advanced Data Mining
9	Multimedia Computing
10	Open Source Web Technologies
11	Machine Learning
12	Block Chain Technologies

Open Elective Courses

S.No.	Course Title
1	OOPs through JAVA
2	Data Science using Python


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Appendix II

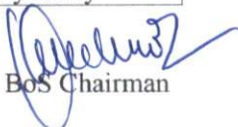
List of courses that enable employability or entrepreneurship or skill development in the R-19 B.Tech. - Information Technology

S.No.	Year	Course Name	Course Nature
1	I	Engineering Mathematics I (C)	Skill Development
2	I	Engineering Physics (A)	Skill Development
3	I	Basics of Electrical & Electronics Engineering	Skill Development
4	I	Engineering Graphics and Design	Skill Development
5	I	Programming for Problem Solving-I	Skill Development
6	I	Basics of Computer & Internet	Skill Development
7	I	Physical Fitness, Sports & Games-I	Skill Development
8	I	Engineering Mathematics II (C)	Skill Development
9	I	Discrete Mathematical Structure	Skill Development
10	I	Engineering Chemistry (A)	Skill Development
11	I	Programming for Problem Solving-II	Skill Development
12	I	English Proficiency and Communication Skills	Skill Development
13	I	Constitution of India	Skill Development
14	I	Workshop	Skill Development
15	I	Technical English Communication	Skill Development
16	I	Physical Fitness, Sports & Games-II	Skill Development
17	II	Probability and Statistics	Skill Development
18	II	Data Structures	Skill Development
19	II	Digital Logic Design	Skill Development
20	II	Database Management Systems	Employability
21	II	OOPs through JAVA	Employability
22	II	Environmental Studies	Skill Development
23	II	Life Skills-I	Skill Development
24	II	Technical Seminar - I	Employability
25	II	Intra-Disciplinary Projects-I	Employability
26	II	Physical Fitness, Sports & Games-III	Skill Development
27	II	Formal Languages & Automata Theory and Compiler Design	Skill Development
28	II	Computer Organization & Architecture	Skill Development
29	II	Operating Systems	Employability
30	II	Python Programming	Employability
31	II	Web Technologies	Employability
32	II	Principles of Management & Organizational Behaviour	Skill Development
33	II	Life Skills - II	Skill Development
34	II	Technical Seminar - II	Employability
35	II	Intra-Disciplinary Projects-II	Employability
36	III	Data Communications and Networking	Skill Development
37	III	Software Engineering	Skill Development



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38	III	Design and Analysis of Algorithms	Skill Development
39	III	Soft Skills Lab	Skill Development
40	III	Employability Skills – I	Employability
41	III	Inter-Departmental Projects – I	Employability
42	III	Modular Course	Employability
43	III	Data Mining Techniques	Employability
44	III	Internet of Things	Employability
45	III	Competitive Coding	Employability
46	III	Professional Communication Lab	Skill Development
47	III	Human Values, Professional Ethics & Gender Equity	Skill Development
48	III	Employability Skills – II	Employability
49	III	Inter-Departmental Projects-II	Employability
50	IV	Cryptography & Network Security	Skill Development
51	IV	Bigdata Analytics	Employability
52	IV	Social Centric and Industry Related Projects	Employability
53	IV	Project Work/Internship	Employability
54	Department Elective	R Programming	Employability
55	Department Elective	Mobile Application Development	Employability
56	Department Elective	Artificial Intelligence	Employability
57	Department Elective	Cloud Computing	Employability
58	Department Elective	Embedded Systems	Employability
59	Department Elective	Network Programming	Employability
60	Department Elective	Fundamentals of Image Processing	Employability
61	Department Elective	Advanced Data Mining	Employability
62	Department Elective	Multimedia Computing	Employability
63	Department Elective	Open Source Web Technologies	Employability
64	Department Elective	Machine Learning	Employability
65	Department Elective	Block Chain Technologies	Employability
66	Open Elective	Data Science using Python	Employability


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Appendix III

List of new courses in the R-19

B.Tech. – Information Technology Curriculum

S.No.	Semester (Year)	Course Name
1	Semester I (First Year)	Engineering Mathematics I (C)
2	Semester I (First Year)	Engineering Physics (A)
3	Semester I (First Year)	Basics of Electrical & Electronics Engineering
4	Semester I (First Year)	Engineering Graphics and Design
5	Semester I (First Year)	Programming for Problem Solving-I
6	Semester I (First Year)	Basics of Computer & Internet
7	Semester I (First Year)	Physical Fitness, Sports & Games-I
8	Semester II (First Year)	Engineering Mathematics II (C)
9	Semester II (First Year)	Discrete Mathematical Structure
10	Semester II (First Year)	Engineering Chemistry (A)
11	Semester II (First Year)	Programming for Problem Solving-II
12	Semester II (First Year)	English Proficiency and Communication Skills
13	Semester II (First Year)	Constitution of India
14	Semester II (First Year)	Workshop
15	Semester II (First Year)	Technical English Communication
16	Semester II (First Year)	Physical Fitness, Sports & Games-II
17	Semester I (Second Year)	Probability and Statistics
18	Semester I (Second Year)	Data Structures
19	Semester I (Second Year)	Digital Logic Design
20	Semester I (Second Year)	Database Management Systems
21	Semester I (Second Year)	OOPs through JAVA
22	Semester I (Second Year)	Environmental Studies
23	Semester I (Second Year)	Life Skills-I
24	Semester I (Second Year)	Technical Seminar – I
25	Semester I (Second Year)	Intra-Disciplinary Projects-I
26	Semester I (Second Year)	Physical Fitness, Sports & Games-III
27	Semester II (Second Year)	Formal Languages & Automata Theory and Compiler Design
28	Semester II (Second Year)	Computer Organization & Architecture
29	Semester II (Second Year)	Operating Systems
30	Semester II (Second Year)	Python Programming
31	Semester II (Second Year)	Web Technologies
32	Semester II (Second Year)	Principles of Management & Organizational Behaviour
33	Semester II (Second Year)	Life Skills – II
34	Semester II (Second Year)	Technical Seminar – II
35	Semester II (Second Year)	Intra-Disciplinary Projects-II
36	Semester I (Third Year)	Data Communications and Networking
37	Semester I (Third Year)	Software Engineering



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38	Semester I (Third Year)	Design and Analysis of Algorithms
39	Semester I (Third Year)	Soft Skills Lab
40	Semester I (Third Year)	Employability Skills – I
41	Semester I (Third Year)	Inter-Departmental Projects – I
42	Semester I (Third Year)	Modular Course
43	Semester II (Third Year)	Data Mining Techniques
44	Semester II (Third Year)	Internet of Things
45	Semester II (Third Year)	Competitive Coding
46	Semester II (Third Year)	Professional Communication Lab
47	Semester II (Third Year)	Human Values, Professional Ethics & Gender Equity
48	Semester II (Third Year)	Employability Skills – II
49	Semester II (Third Year)	Inter-Departmental Projects-II
50	Semester I (Fourth Year)	Cryptography & Network Security
51	Semester I (Fourth Year)	Bigdata Analytics
52	Semester I (Fourth Year)	Social Centric and Industry Related Projects
53	Semester II (Fourth Year)	Project Work/Internship
54	Department Elective	R Programming
55	Department Elective	Mobile Application Development
56	Department Elective	Artificial Intelligence
57	Department Elective	Cloud Computing
58	Department Elective	Embedded Systems
59	Department Elective	Network Programming
60	Department Elective	Fundamentals of Image Processing
61	Department Elective	Advanced Data Mining
62	Department Elective	Multimedia Computing
63	Department Elective	Open Source Web Technologies
64	Department Elective	Machine Learning
65	Department Elective	Block Chain Technologies
66	Open Elective	Data Science using Python


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**Appendix IV
CBCS (Choice Based Credit System)**

S.No.	Semester (Year)	Course Name	Credits
1	Semester I (First Year)	Physical Fitness, Sports & Games-I	1
2	Semester II (First Year)	Physical Fitness, Sports & Games-II	1
3	Semester I (Second Year)	Life Skills – I	0.5
4	Semester I (Second Year)	Technical Seminar – I	1
5	Semester I (Second Year)	Intra-Disciplinary Projects-I	1
6	Semester I (Second Year)	Physical Fitness, Sports & Games-III	1
7	Semester II (Second Year)	Life Skills – II	0.5
8	Semester II (Second Year)	Technical Seminar – II	1
9	Semester II (Second Year)	Intra-Disciplinary Projects-II	1
10	Semester I (Third Year)	Employability Skills – I	0.5
11	Semester I (Third Year)	Inter-Departmental Projects – I	2
12	Semester I (Third Year)	Modular Course	1
13	Semester II (Third Year)	Employability Skills – II	0.5
14	Semester II (Third Year)	Inter-Departmental Projects-II	2
15	Semester I (Fourth Year)	Social Centric and Industry Related Projects	3
16	Semester II (Fourth Year)	Project Work/Internship	12
17	Semester I (Third Year)	Department Elective-I	4
18	Semester II (Third Year)	Department Elective-II	4
19	Semester I (Fourth Year)	Department Elective-III	4
20	Semester I (Fourth Year)	Department Elective-IV	4
21	Semester I (Third Year)	Open Elective-I	3
22	Semester II (Third Year)	Open Elective-II	3
23	Semester I (Fourth Year)	Open Elective-III	3
Total			54


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