



Minutes of Meeting of Board of Studies (BOS)

Date: 09.04.2016

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 09th April, 2016 at Registrar Office Conference Hall, Vignan's Foundation for Science Technology and Research Deemed to be University, Vadlamudi.

The following members attended the meeting

1. Dr. C. Raghavendra Rao, Professor, Central University, Hyderabad, Member
2. Dr. R.Nadarjan, Professor & Head, Department of Computer Science and Engineering, PSG College of Technology, Coimbatore
3. Mr.V.Venkata Swamy, Sr. Validation Architect, Sandisk India Device Design Centre, Bangalore
4. Dr. N. Veeranjanyulu, HOD, IT, VFSTR Deemed to be University, Bos Chairman
5. Mr.B.Premamayudu, Assoc. Prof. IT, University, Member
6. Dr.M.Nirupama Bhat, Asst. Prof, IT, University, Member
7. Mrs. K. Santhi Sri, Assoc. Prof. IT, VFSTR University, Member
8. Mr. P. Subbarao, Asst. Prof., IT, VFSTR University, Member
9. Mr. K. Praveen Kumar, Asst. Prof. IT, VFSTR University, Member

The following members expressed their inability to attend the meeting:

1. Dr. S. Nickolas, Professor, Department of Computer Applications, NIT, Tiruchurapalli
2. Mr. T. Bala Krishna, Director, Global Infrastructure Services, Computer Science Corporation, Hyderabad
3. Mrs. Ashika, Scientist 'D', Center for Artificial Intelligence and Robotics(CAIR), DRDO, CV Raman Nagar, Bangalore

Agenda of the BOS Meeting:

1. To finalize R16 B.Tech. Information Technology programme Curriculum.
2. Any point with the permission of Chair.

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. The Data Structure and Algorithms course is to be divided into two courses as data structures and advanced data structures



3. The syllabus of foundations of Information Technology lab must cover all the concepts so that completion of this lab students must be able to assemble the system environmental setup and protecting their documents or databases.
4. Propose and approve detailed syllabus for the 4 year of B.Tech. Programme in Information Technology with effect from the academic year 2016-17. The proposed structure and syllabus are applicable for 2016 admitted batch onwards.
5. Stakeholder's feedback is collected, analyzed and given utmost priority while designing the curriculum and their suggestions are implemented
6. The curriculum follows choice-based credit system (Appendix IV)
7. The curriculum is encompassing the courses that enable employability or entrepreneurship or skill development (Appendix II)
8. In the B.Tech. Information Technology revised regulation R16, the substantial changes are made in the content of all courses and hence the courses are considered as new courses (Appendix III) and 56% of syllabus revision was carried out.

Signature of the members present

BOS Members:

1. Dr.R.Nadarajan

3 .Mr.V. Venkata Swamy

5.Mr.B.Premamyudu

7. Dr.M.Nirupama Bhat

9.Mr.K.Praveen Kumar

2. Dr.C.RaghavendraRao

4. Dr.N.Veeranjaneyulu

6.Mrs.K.Santhi Sri

8. Mr.P.Subba Rao



Appendix I

B.Tech. Information Technology Programme Structure

I-I Semester

S.No.	Course Name	L	T	P	C
1	Engineering Mathematics I	3	1	2	5
2	Engineering Chemistry	3	-	-	3
3	Basic Engineering Products	3	-	2	4
4	Basics of Electrical and Electronics Engineering	3	-	2	4
5	English Proficiency and Communication Skills	-	-	2	1
6	Basics of Computers and Internet	3	-	2	4
7	Workshop Practice	-	-	3	2
8	Engineering Chemistry Laboratory	-	-	3	2
Total		15	1	16	25

I-II Semester

S.No.	Course Name	L	T	P	C
1	Engineering Mathematics-II	3	1	2	5
2	Engineering Physics	3	-	-	3
3	Computer Programming	3	1	2	5
4	Electronic Devices and Circuits	3	-	2	4
5	Environmental Science and Technology	2	-	-	2
6	Engineering Graphics	1	-	3	3
7	Technical English Communications	3	-	2	4
8	Engineering Physics Laboratory	-	-	3	2
Total		18	2	14	28

II-I Semester

S.No.	Course Name	L	T	P	C
1	Probability and Statistics	3	1	-	4
2	Management Science	3	-	-	3
3	Object Oriented Programming	3	-	2	4
4	Data Structures	3	-	2	4
5	Digital Logic Design	3	1	-	4
6	Web Technologies	3	1	2	5
7	Soft Skills Laboratory	-	-	2	1
8	Employability and Life Skills Elective	-	-	-	1-3
Total					26-28



B.Tech. Information Technology Programme Structure

II-II Semester

S.No.	Course Name	L	T	P	C
1	Computer Organization and Architecture	3	1	-	4
2	Advanced data structures	3	-	2	4
3	Database Management Systems	3	1	2	5
4	Discrete Mathematical Structures	-	-	2	1
5	Professional Communications Laboratory	-	-	2	1
6	Department Elective	-	-	-	3-4
7	Department / Open Elective	-	-	-	3-4
8	Employability and Life Skills Elective	-	-	-	1-3
Total		12	2	6	24-28

III-I Semester

S.No.	Course Name	L	T	P	C
1	Software Engineering	3	-	2	4
2	Design and Analysis of Algorithms	3	-	2	4
3	Formal Languages and Automata Theory	3	1	-	4
4	Operating Systems	3	-	2	4
5	Department Elective	-	-	-	3-4
6	Department/Open Elective	-	-	-	3-4
7	Employability and Life Skills Elective	-	-	-	1-3
Total		12	1	6	23-27

III-II Semester

S.No.	Course Name	L	T	P	C
1	Professional Ethics	2	-	-	4
2	Data Mining Techniques	3	-	2	4
3	Computer Networks	3	-	2	4
4	Human Computer Interaction	3	-	-	3
5	Compiler Design	3	-	-	3
6	Department Elective	-	-	-	3-4
7	Department/ Open Elective	-	-	-	3-4
8	Employability and Life Skills Elective*	-	-	-	1-3
Total		14	-	4	23-27



B.Tech. Information Technology Programme Structure

IV-I Semester

S.No.	Course Name	L	T	P	C
1	Cloud Computing	3	-	2	4
2	Information Security	3	-	2	4
3	Bigdata Analytics	3	-	2	4
4	Mobile Application Development	3	-	2	4
5	Department Elective	-	-	-	3-4
6	Department/ Open Elective	-	-	-	3-4
7	Employability and Life Skills Elective*	-	-	-	1-3
Total		12	-	6	23-27

* Includes courses and programmes like Foreign Languages, Summer Internship, NCC, NSS, Yoga, Music, Dance and Value-Added Courses

IV-II Semester

S.No.	Course Name	L	T	P	C
1	Project Work/Internship	-	-	-	15
Total		-	-	-	15

L: Lecture Hours/week; T: Tutorial Hours/week; P: Practical Hours/week;

C: Credits of the Course;


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Department Elective Streams and Courses

STREAM-I: WED SYSTEMS AND TECHNOLOGIES

S.No.	Course Name	L	T	P	C
1	Scripting Languages	3	-	2	4
2	Open Systems for Web Technologies	3	-	2	4
3	Middleware Technologies	3	-	2	4
4	Enterprise Computing	3	-	2	4

STREAM-II: EMBEDDED SYSTEMS

S.No.	Course Name	L	T	P	C
1	Micro Processors and Interfacing	3	-	2	4
2	Embedded Systems	3	-	2	4
3	Wireless Sensor Networks	3	-	2	4
4	Internet of Things	3	-	2	4

STREAM-III: MACHINE LEARNING

S.No.	Course Name	L	T	P	C
1	Artificial Intelligence	3	-	2	4
2	Optimization Techniques	3	-	2	4
3	Soft Computing	3	-	2	4
4	Agent Technologies	3	-	2	4

STREAM-IV: COMPUTER VISION

S.No.	Course Name	L	T	P	C
1	Computer Graphics	3	-	2	4
2	Fundamentals of Image Processing	3	-	2	4
3	Pattern Recognition	3	-	2	4
4	Virtual Reality Systems	3	-	2	4

Open Electives Streams

Stream	Mobile Application Development			
Course Name	L	T	P	C
Unix/Linux and Shell Programming	3	1	-	4
Java Programming	3	1	-	4
Mobile Application Development Using Android	3	1	-	4
Advanced Mobile Application Development Using Android	3	1	-	4

Stream	Data Science			
Course Name	L	T	P	C
Unix/Linux and Shell Programming	3	1	-	4
Python Programming	3	1	-	4
Statistics Using Python	3	1	-	4
Data Science Using Python	3	1	-	4

N. Murugesu



Appendix II

List of courses that enable employability or entrepreneurship or skill development in the R-16 B.Tech. – Information Technology

S.No.	Year	Course Name	Course Nature
1	I	Engineering Mathematics I	Skill Development
2	I	Engineering Chemistry	Skill Development
3	I	Basic Engineering Products	Skill Development
4	I	Basics of Electrical and Electronics Engineering	Skill Development
5	I	English Proficiency and Communication Skills	Skill Development
6	I	Basics of Computers and Internet	Skill Development
7	I	Workshop Practice	Skill Development
8	I	Engineering Chemistry Laboratory	Skill Development
9	I	Engineering Mathematics-II	Skill Development
10	I	Engineering Physics	Skill Development
11	I	Computer Programming	Skill Development
12	I	Electronic Devices and Circuits	Skill Development
13	I	Environmental Science and Technology	Skill Development
14	I	Engineering Graphics	Skill Development
15	I	Technical English Communications	Skill Development
16	I	Engineering Physics Laboratory	Skill Development
17	II	Probability and Statistics	Skill Development
18	II	Management Science	Skill Development
19	II	Object Oriented Programming	Employability
20	II	Data Structures	Skill Development
21	II	Digital Logic Design	Skill Development
22	II	Web Technologies	Employability
23	II	Soft Skills Laboratory	Skill Development
24	II	Employability and Life Skills Elective	Employability
25	II	Computer Organization and Architecture	Skill Development
26	II	Advanced data structures	Skill Development
27	II	Database Management Systems	Employability
28	II	Discrete Mathematical Structures	Skill Development
29	II	Professional Communications Laboratory	Skill Development
30	II	Employability and Life Skills Elective	Employability
31	III	Software Engineering	Skill Development
32	III	Design and Analysis of Algorithms	Skill Development
33	III	Formal Languages and Automata Theory	Skill Development
34	III	Operating Systems	Skill Development
35	III	Employability and Life Skills Elective	Employability
36	III	Professional Ethics	Skill Development
37	III	Data Mining Techniques	Employability
38	III	Computer Networks	Skill Development
39	III	Human Computer Interaction	Skill Development



40	III	Compiler Design	Skill Development
41	III	Employability and Life Skills Elective	Employability
42	IV	Cloud Computing	Employability
43	IV	Information Security	Employability
44	IV	Bigdata Analytics	Employability
45	IV	Mobile Application Development	Employability
46	IV	Employability and Life Skills Elective	Employability
47	IV	Project Work/Internship	Employability
48	Department Elective	Scripting Languages	Employability
49	Department Elective	Open Systems for Web Technologies	Employability
50	Department Elective	Middleware Technologies	Employability
51	Department Elective	Enterprise Computing	Employability
52	Department Elective	Micro Processors and Interfacing	Employability
53	Department Elective	Embedded Systems	Employability
54	Department Elective	Wireless Sensor Networks	Employability
55	Department Elective	Internet of Things	Employability
56	Department Elective	Artificial Intelligence	Employability
57	Department Elective	Optimization Techniques	Skill Development
58	Department Elective	Soft Computing	Employability
59	Department Elective	Agent Technologies	Employability
60	Department Elective	Computer Graphics	Employability
61	Department Elective	Fundamentals of Image Processing	Employability
62	Department Elective	Pattern Recognition	Employability
63	Department Elective	Virtual Reality Systems	Employability
64	Open Elective	Unix/Linux and Shell Programming	Employability
65	Open Elective	Java Programming	Employability
66	Open Elective	Mobile Application Development Using Android	Employability
67	Open	Advanced Mobile Application	Employability



VIGNAN'S
Foundation for Science, Technology & Research
UNIVERSITY
(Established by UGC Act of 1956)

Vadlamudi – 522 213, Guntur Dt. AP, India

Department of Information Technology

	Elective	Development Using Android	
68	Open Elective	Unix/Linux and Shell Programming	Employability
69	Open Elective	Python Programming	Employability
70	Open Elective	Statistics Using Python	Employability
71	Open Elective	Data Science Using Python	Employability

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Appendix III

**List of new courses in the R-16
B.Tech. – Information Technology Curriculum**

S.No.	Semester (Year)	Course Name
1	Semester I (First Year)	Engineering Mathematics I
2	Semester I (First Year)	Engineering Chemistry
3	Semester I (First Year)	Basic Engineering Products
4	Semester I (First Year)	Basics of Electrical and Electronics Engineering
5	Semester I (First Year)	English Proficiency and Communication Skills
6	Semester I (First Year)	Basics of Computers and Internet
7	Semester I (First Year)	Workshop Practice
8	Semester I (First Year)	Engineering Chemistry Laboratory
9	Semester II (First Year)	Engineering Mathematics-II
10	Semester II (First Year)	Engineering Physics
11	Semester II (First Year)	Computer Programming
12	Semester II (First Year)	Electronic Devices and Circuits
13	Semester II (First Year)	Environmental Science and Technology
14	Semester II (First Year)	Engineering Graphics
15	Semester II (First Year)	Technical English Communications
16	Semester II (First Year)	Engineering Physics Laboratory
17	Semester I (Second Year)	Probability and Statistics
18	Semester I (Second Year)	Management Science
19	Semester I (Second Year)	Object Oriented Programming
20	Semester I (Second Year)	Data Structures
21	Semester I (Second Year)	Digital Logic Design
22	Semester I (Second Year)	Web Technologies
23	Semester I (Second Year)	Soft Skills Laboratory
24	Semester I (Second Year)	Employability and Life Skills Elective
25	Semester II (Second Year)	Computer Organization and Architecture
26	Semester II (Second Year)	Advanced data structures
27	Semester II (Second Year)	Database Management Systems
28	Semester II (Second Year)	Discrete Mathematical Laboratory
29	Semester II (Second Year)	Professional Communications Laboratory
30	Semester II (Second Year)	Employability and Life Skills Elective
31	Semester I (Third Year)	Software Engineering
32	Semester I (Third Year)	Design and Analysis of Algorithms
33	Semester I (Third Year)	Formal Languages and Automata Theory
34	Semester I (Third Year)	Operating Systems
35	Semester I (Third Year)	Employability and Life Skills Elective
36	Semester II (Third Year)	Professional Ethics
37	Semester II (Third Year)	Data Mining Techniques
38	Semester II (Third Year)	Computer Networks
39	Semester II (Third Year)	Human Computer Interaction
40	Semester II (Third Year)	Compiler Design



41	Semester II (Third Year)	Employability and Life Skills Elective
42	Semester I (Fourth Year)	Cloud Computing
43	Semester I (Fourth Year)	Information Security
44	Semester I (Fourth Year)	Bigdata Analytics
45	Semester I (Fourth Year)	Mobile Application Development
46	Semester I (Fourth Year)	Employability and Life Skills Elective
47	Semester II (Fourth Year)	Project Work/Internship
48	Department Elective	Scripting Languages
49	Department Elective	Open Systems for Web Technologies
50	Department Elective	Middleware Technologies
51	Department Elective	Enterprise Computing
52	Department Elective	Micro Processors and Interfacing
53	Department Elective	Embedded Systems
54	Department Elective	Wireless Sensor Networks
55	Department Elective	Internet of Things
56	Department Elective	Artificial Intelligence
57	Department Elective	Optimization Techniques
58	Department Elective	Soft Computing
59	Department Elective	Agent Technologies
60	Department Elective	Computer Graphics
61	Department Elective	Fundamentals of Image Processing
62	Department Elective	Pattern Recognition
63	Department Elective	Virtual Reality Systems
64	Open Elective	Unix/Linux and Shell Programming
65	Open Elective	Java Programming
66	Open Elective	Mobile Application Development Using Android
67	Open Elective	Advanced Mobile Application Development Using Android
68	Open Elective	Unix/Linux and Shell Programming
69	Open Elective	Python Programming
70	Open Elective	Statistics Using Python
71	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 (Second Year)	Employability and Life Skills Elective	5
2	Semester II (Second Year)	Employability and Life Skills Elective	
3	Semester I (Third Year)	Employability and Life Skills Elective	
4	Semester II (Third Year)	Employability and Life Skills Elective	
5	Semester II (Second Year)	Department Elective -I	4
6	Semester I (Third Year)	Department Elective -II	4
7	Semester II (Third Year)	Department Elective -III	4
8	Semester I (Fourth Year)	Department Elective -IV	4
9	Semester II (Second Year)	Open Elective -I	4
10	Semester I (Third Year)	Open Elective -II	4
11	Semester II (Third Year)	Open Elective -III	4
12	Semester I (Fourth Year)	Open Elective -IV	4
13	Semester II (Fourth Year)	Internship / Project Work	15
14	Modular Course		1
Total			53

N. Veerayya
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