

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)
SREE SAINATH NAGAR, TIRUPATI-517 102

Department of Information Technology

Agenda for 13th Meeting of Board of Studies for B. Tech. (Information Technology) on 10-07-2021 at 02:15 PM

- Action taken report on minutes/resolutions of 11th & 12th BOS meeting.
- Report on implementation of Autonomy with respect to syllabi & academic regulations for II-B.Tech (under SVEC-19) and I B.Tech (under SVEC-20 regulations).
- Course Structure, Syllabl with Course Objectives, Course Outcomes, for the Courses of III & IV B.Tech including Minor & Honors Degrees (Under SVEC-19).
- Course Structure, Syllabi with Course Objectives, Course Outcomes, for the Courses of II, III & IV B.Tech (Under SVEC-20) and Course structures of Minor & Honors Degrees (Under SVEC-20).
- Regulation-wise, list of courses in which the content of the syllabus is changed more than 20%.
- 6. List of new courses introduced in SVEC-19 and SVEC-20.
- 7. Panel of Examiners for Question paper setting.
- 8. Substitute Courses.
- 9. Appraisal on research, teaching, extension and other academic activities, achievements of the Department.
- 10. Any other item.

Dr. K. Ramani Chairperson, BoS-IT

Sub: 13th BoS meeting in IT on 10.07.2021 @2.15PM (Saturday) in virtual conference mode through the Zoom platform

Topic: Ramani K's Zoom Meeting Time: Jul 10, 2021 02:15 PM India

Join Zoom Meeting

https://zoom.us/j/3548323572?pwd=ZjhZSnlNcy8rcWI4Z2cwcjNiWmhkZz09

Meeting ID: 354 832 3572

Passcode: 917903



SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)
SREE SAINATH NAGAR, TIRUPATI-517 102

Department of Information Technology

13 th Meeting of Board of Studies In Information Technology B. Tech(IT)

10th July , 2021

Members Present:

S. No.	Name	Affliation
1.	Mr. Srinivasa Kongara	Associate Manager
	(External member)	
2.	Dr. G. Zayaraz	Accenture Pvt. Ltd, Hyderabad-500003
	(External member)	Professor
	(member)	Dept. of CSE,Pondicherry Engineering College,
3.	Mr. B. Jayachandra	Puducherry-605001
	Reddy	Software Engineer
	(External member)	Wipro Pvt. Ltd. Electonic City, Bangalore-561229
4.	Dr. K. Ramani	Duefers H. J. D. G. Gl. i
	(Internal Member)	Professor, Head and BoS Chairperson-IT
	(Internal Hember)	Dept. of Information Tehnology
5.	Mr. P. Srinivasa Reddi	Sree Vidyanikethan Engineering College, A.Rangampet
J.	(Internal Member)	Associate Professor, Dept. of Information Tehnology
6.	Dr. K. K. Baseer	Sree Vidyanikethan Engineering College, A.Rangampet
0.		Associate Professor, Dept. of Information Tehnology
	(Internal Member)	Sree Vidyanikethan Engineering College, A.Rangampet
7.	Dr. Lokanadham Naidu	Associate Professor, Dept. of Information Tehnology
	(Internal Member)	Sree Vidyanikethan Engineering College
8.	Dr. V. Jyothsna	Associate Professor, Dept. of Information Tehnology
	(Internal Member)	Sree Vidyanikethan Engineering College, A.Rangampet
9.	Mr. P. Bhasha"	Assistant Professor, Dept. of Information Tehnology
	(Internal Member)	Sree Vidyanikethan Engineering College, A Rangampet
10.	Ms. E. Sandhya	Assistant Professor, Dept. of Information Tehnology
	(Internal Member)	Sree Vidyanikethan Engineering College A Pangamant
11.	Mr. G. M. Chanakya	ASSISTANT Professor, Dept. of Information Tehnology
	(Internal Member)	Sree Vidyanikethan Engineering College A Panasasas
12.	Mr. Ch. Sreenu Babu	ASSISTANT PROTESSOF, Dept. of Information Tabanta
	(Internal Member)	Sree vigyanikethan Engineering College A Dansel
13.	Ms. C. Silpa	ASSISTABLE FLORESSOL DEDT OF Information Taken
	(Internal Member)	Sree Vidyanikethan Engineering College, A.Rangampet
14.	Ms. Ch. Prathima	Assistant Professor, Dept. of Information Tehnology
	(Internal Member)	Sree Vidyanikethan Engineering College, A.Rangampet

SREE VIDYANIKETHAN Engineering College

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

Department of Information Technology

Minutes of 13th meeting of B.O.S (I.T) conducted on 10-07-2021 at 2.15 PM.

- Members of B.O.S were apprised of the Action Taken Report on minutes of 11th and 12th B.O.S meetings held on 13.07.2020 and 09.01.2021 respectively.
- Report on implementation of Autonomy with respect to syllabi & academic regulations for II-B.Tech (under SVEC-19) and I B.Tech (under SVEC-20 regulations) was presented to the BoS members.
- Course Structure, Syllabi with Course Objectives, Course Outcomes, for the Courses of III & IV B.Tech including Minor & Honors Degrees (Under SVEC-19) were presented to the members.
- 4. In SVEC-19 Professional elective course GPU computing is replaced with Full Stack Development with members' approval.

The members gave the following suggestions on syllabi:

- a. The external member Mr. Srinivasa Kongara suggested the following in .NET Technologies Course: Include ORM entity framework and replace AutoLotDAL, CarLotMVC and CarLotWebAPI as DAL, MVC and WebAPI (instead of examples replace with generic names).
- b. Mr. Srinivasa Kongara suggested the following in Cloud Computing course: Remove the "Defining the Windows Azure Platform" topic and Replaced Windows Azure with Microsoft Azure.
- c. Mr. Jaya Chandra Reddy suggested to add Prisma Cloud experiments in Cloud Application Development Lab.
- d. Mr. B. Jaya Chandra Reddy suggested that Mobile applications and Web applications security should be assessed using Burp Suite and OWASP ZAP (Zed Attack Proxy).

They gave following suggestions on Minor Degree:

 Members asked to check the possibility of implementing Alexa based experiments in IoT Application Development Lab

They gave following suggestions on Minor Degree:

- a. The external member Dr. Zayaraz suggested keeping Honors degree title as Information Technology.
- b. Mr. Srinivasa Kongara suggested to replace DevOps topics with AWS IoT in IoT on Cloud course.
- c. Mr. B. Jaya Chandra Reddy suggested to include Compliance standards such as GDPR, HIPPA, HIPAA, PCI-DSS, ISO 27000 series, NIST, CIS etc.
- 5. Course Structure, Syllabl with Course Objectives, Course Outcomes, for the Courses of II, III & IV B.Tech (Under SVEC-20) and Course structures of Minor & Honors Degrees (Under SVEC-20) were presented to the members. They gave the following suggestions on syllabl:

- a. Dr. Zayaraz suggested to include PHP framework in Web Technologies course.
- b. Mr. Srinivasa Kongara suggested to replace the course title Web Development using Bootsrap and Angular JS as Web Development using Angular and Bootsrap.
- C. Mr. B. Jaya Chandra Reddy suggested to add Proxy servers like WAMP/XAMP servers for web application deployment in a local host in Advanced Web Development Lab.
- d. Mr. Srinivasa Kongara suggested to include few experiments on Augmented Reality Applications Lab.
- 6. Regulation-wise, list of courses in which the content of the syllabus is changed more than 20% was appraised to the members and they agreed for the same.
- List of new courses introduced in SVEC-19 and SVEC-20 were appraised to the members and they appreciated for including industry demand oriented courses in curriculum.
- 8. Course wise Panel of Examiners for Question paper setting were presented and BoS members accepted the same.
- 9. Substitute Courses for rejoining students in new regulations were discussed.
- 10. The B.O.S members have appreciated the research, teaching, extension and other academic activities, achievements of the Department.



Dr. K. Ramani Chairperson, BoS-IT

APPROVED COURSE STRUCTURE

PROGRAM: INFORMATION TECHNOLOGY

REGULATION: SVEC-20

INFORMATION TECHNOLOGY (IT)

I B.Tech. - I Semester

SI.	Course Code	Course Title	Co		Perio week	ds	С	Scheme of Examination Max. Marks		
No.			L	т	Р	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT1BS01	Differential Equations and Multivariable Calculus	3	-	-	3	3	30	70	100
2.	20BT1BS02	Engineering Chemistry	3	-	-	3	3	30	70	100
3.	20BT1HS01	Communicative English	3	-	-	3	3	30	70	100
4.	20BT11201	Programming for Problem Solving	3	-	-	3	3	30	70	100
5.	20BT10201	Basic Electrical and Electronics Engineering	3	-	-	3	3	30	70	100
6.	20BT1BS31	Engineering Chemistry Lab	-	-	3	3	1.5	30	70	100
7.	20BT1HS31	Communicative English Lab	-	-	3	3	1.5	30	70	100
8.	20BT11231	Programming for Problem Solving Lab	-	-	3	3	1.5	30	70	100
9.	20BT1MC01	Universal Human Values (Mandatory Course)	2	-	-	2	-	30	-	30
		Total:	17	-	09	26	19.5	270	560	830

I B.Tech. - II Semester

SI.	Course Code	Course Title		Contact Periods per week				Scheme of Examination Max. Marks		
No.			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT2BS01	Transformation Techniques and Linear Algebra	3	-	-	3	3	30	70	100
2.	20BT1BS03	Engineering Physics	3	-	-	3	3	30	70	100
3.	20BT20501	Digital Logic Design	3	-	-	3	3	30	70	100
4.	20BT21501	Object Oriented Programming through Java	3	-	-	3	3	30	70	100
5.	20BT10331	Computer Aided Engineering Drawing	-	1	4	5	3	30	70	100
6.	20BT1BS32	Engineering Physics Lab	-	-	3	3	1.5	30	70	100
7.		Engineering Workshop	•	-	3	3	1.5	30	70	100
8.	20BT10332 20BT21531	Object Oriented Programming through Java Lab	-	-	3	3	1.5	30	70	100
9.	20BT1HSAC	Spoken English (Audit Course)	2	-	-	2	-	-	-	-
-	ZUBITHSAC	Total:	14	1	13	28	19.5	240	560	800

II B.Tech I-Semester

s.	Course	Course Title		Contact Periods per Week			Credits	Scheme of Examination Max. Marks		
No.	Code		L	т	P	Total	(c)	Int. Marks	Ext. Marks	Total Marks
1.	20BT3BS01	Numerical Methods, Probability and Statistics	3	-	-	3	3	30	70	100
2.	20BT31201	Discrete Mathematical Structures	3	-	-	3	3	30	70	100
3.	20BT31202	Software Engineering	3	-	-	3	3	30	70	100
4.	20BT30502	Data Structures	3	-	-	3	3	30	70	100
5.	20BT31502	Operating Systems	3	-	-	3	3	30	70	100
6.	20BT31532	Operating Systems Lab	-	-	3	3	1.5	30	70	100
7.	20BT30531	Data Structures Lab	-	-	3	3	1.5	30	70	100
8.	20BT31231	Software Engineering	-	-	3	3	1.5	30	70	100
9.	20BT31232	Programming with	-	1	2	3	2	30	70	900
	1	Total	15	01	11	27	21.5	270	630	900
10	20BT315AC	Design Thinking	2	-	-	2	-	-	-	_

II B.Tech II-Semester

s.	Course	Course Title	Contact Periods per Week			Credi ts	Scheme of Examination Max. Marks			
No.	Code	Course have	L	Т	Р	Total	(c)	Int. Marks	Ext. Marks	Total Marks
1.	20BT50502	Design and Analysis of Algorithms	3	-	-	3	3	30	70	100
2.	20BT41501	Theory of Computation	3	-	-	3	3	30	70	100
3.	20BT50501	Computer Networks	3	-	-	3	3	30	70	100
4.	20BT40501	Database Management	3	-	-	3	3	30	70	100
_		Systems					3	30	70	100
5.	Open Electiv	IoT Application	_	_	3	3	1.5	30	70	100
6.	20BT41231	Davidonment Lab			3	3	1.5	30	70	100
7.	20BT50531	Computer Networks Lab	-	-	3	3	1.5	+ 30	10	100
8.	20BT40531	Database Management	-	-	3	3	1.5	30	70	100
	20011000	Systems Lab	-	1	2	3	2	30	70	100
9.	20BT3HS31	Soft Skills Lab	15	01	11	27	21.5	270	630	900
10	. 20BT3MC01	Environmental	2	-	-	2	-	30	-	30

III B. Tech. - I Semester

5l. No.	Course Code	Course Title	Con	tact Pe	riods ek	per	c	Exa	heme of mination x. Mark	s
			L	Т	P	Total		Int. Marks	Ext. Marks	Total Marks
	20BT5HS01	Organizational Behaviour	3	-	-	3	3	30	70	100
· ·	20BT51201	Data Warehousing and Data Mining	3	-	-	3	3	30	70	100
3.	20BT51202	Web Technologies	3	-	-	3	3	30	70	100
. (Open Electiv	e-1	3	-	-	3	3	30	70	100
	Professional	Elective-1								
	20BT51203	Advanced Databases								
5.	20BT60504	Cryptography and Network Security	3	_	_	3	3	30	70	100
	20BT51506	Software Testing					J	50		
	20BT51204	Linux Programming								
	20BT60503	Soft Computing								
5.	20BT51231	Data Warehousing and Data Mining Lab	-	i - i	3	3	1.5	30	70	100
7.	20BT51232	Web Technologies Lab	-	-	3	3	1.5	30	70	100
8.	20BT50531	Python for Data Science Lab	-	1	2	3	2	30	70	100
9.	20BT51233	Summer Internship	-	-	-	<u> </u> -	1.5	-	100	100
		Total:	15	01	08	24	21.5	240	660	900
10.	20BT5MC01	Professional Ethics	2	-	-	2	-	30	-	30

III B. Tech. - II Semester

1	no Code	Course Title	Co	onta		erio eek	ds pe	er	c		Exa	neme minat x. Mai	ion	
il. 10.	Course Code		L		Т	P	To	tal			rks	Ext. Mark	Tot	
 I.	20BT5HS02	Principles of Business Economics and Accountancy	3		-	-		3	3	3	30	70	10	0
_	20BT61201	Cloud Computing	3	3	-	-		3	3	3	30	70	10	00
2. 3.	20BT70505	Blockchain Technologies	:	3	-	-		3	3] :	30	70	10	00
_	Prof	essional Elective-2		1										
	20BT61202	Information Retrieval Systems												
	20BT61203	Semantic Web and Social Networks		3	-			3	3		30	70) 1	.00
	20BT60502	Compiler Design		1										1
	20BT61204	Web Development using Angular and Bootstrap												
	20BT70501	Computer Vision				\perp	\perp			\perp		+	+	\dashv
	Pro	fessional Elective-3												1
	20BT61205	Information Security and Management												
5.	20BT50504	Cyber Security		3			-	3	3	,	30		70	100
	20BT61506	User Interface Design												
	20BT70502	Full Stack Development								- 1				
	20BT43101	Artificial Intelligence			+	+	-		+-	\rightarrow		+		
	Inte	rdisciplinary Elective-1												
	20BT4044	Microprocessors and		3		_	_	3		3	3	0	70	100
5 .	20BT6120	ting.		1										
	20BT6040	6 Image Processing		1							1			
	20BT6120	7 Wireless Networks		-	+		3	3	+	1.5	1	30	70	100
7.	20BT6123	1 Cloud Computing Lab		<u> </u>	+	<u>-</u>	3	3	-	1.5	+	30	70	10
3.	20BT6123	AT Tools Lab	men		+		2	3	_	2	T	30	70	10
9.	20BT6123		-	+	-	1	08	-	+	23	+	170	630	-
_		1	otal	: 1	8	01	08	+	+		+			-
10). 20BT503	AC Foundations of Entrepreneurship]:	2	-	-	2		-		-		

IV B. Tech. - I Semester

SI.			Con		eriod eek	ls per	С	Ex	cheme d aminati ax. Mar	on ks
No.	Course Code	Course Title	L	т	P	Total		Tot.	Ext. Marks	Total
— I.	20BT71201	Mobile Application Development	3	-	-	3	3	30	70	100
2.	20BT71202	Data Analytics	3	-	-	3	3	30	70	100
	Professional	Elective-4								
	20BT71203	Big Data Technologies								
	20BT71204	Computer Forensics							70	100
3.	20BT71205	System Administration and Maintenance	3	-	-	3	3	30	70	100
	20BT71206	Game Development								
	20BT71207	Decision Support and Intelligent Systems								
	Professiona	Elective-5								
	20BT71208	Mobile Databases								
	20BT71209	Digital and Social Media Marketing	3	_	_	3	3	30	70	100
ŀ.	20BT50503	Advanced Computer Architecture								
	20BT71210	. Net Technologies								
	20BT60501	Machine Learning						-	-	+-
	Interdiscipi	inary Elective-2								
	20BT70401	Embedded Systems								
i.	20BT60541	Ad-hoc and Wireless sensor networks	3	-	-	3	3	30	70	100
	20BT70441	Pattern Recognition								
	20BT71211	Intrusion Detection Systems			_	2	1.5	30	70	100
).	20BT71231	Mobile Application Development Lab	-	-	3	3	-	-	-	-
<u> </u>	20BT71232	Data Analytics Lab	-	-	3	3	1.5	30	70	100
	20BT71233	Augmented Reality and Virtual Reality Applications		1	2	3	2	30	70	100
		Summer Internship	-	-	-	-	1.5	-	100	100
),	20BT71234	Total:	15	01	08	24	21.5	240	660	900
0.	200771246	Deep Learning Technologies	2	-	-	2	-	-		

IV B.Tech II-Semester

Course Code	course Code Course	,	Peri		per	Credits	Scheme of Examination Max. Marks				
Course code	Title	L	T	Vee P	Total	(c)	Int. Marks	Ext. Marks	Tota Mark		
20BT81231	Project Work	-	-	-	-	12					
20BT81232	Internship	-	-	-	-						
	Total	-	-	-	-	12					

LIST OF COURSES FOR OPEN ELECTIVE-1 AND OPEN ELECTIVE-2

Course	Open Elective -1	Code	Open Elective -2
Code	Material Science	20BT4HS01	Banking and Insurance
20014000	Business Communication and	20BT4HS03	Cost Accounting and Financial Management
	Career Skills Entrepreneurship for Micro, Small and Medium Enterprises	20BT4HS05	Gender and Environment
		20BT4HS07	Indian Economy
	German Language	20BT4HS09	Life Skills
	Indian History		Professional Ethics
20BT4H S10	Personality Development		Indian Tradition and Culture
	Women Empowerment	20BT40106	Disaster Mitigation and
20BT4HS14	Constitution of India		I I E sissering
20BT 40205	Reliability and Safety Engineering	20BT40108	A Resulations
20BT50107	Environmental Pollution and Control	20BT40306	1.T. shaalaau
20BT50108	Planning for Sustainable Development	20BT40307	
20BT50109	Rural Technology	20BT40502	Cyber Laws and Security
20BT50506	Ethical Hacking	20BT50208	1.5 1.5
²⁰ BT51205	AI in Healthcare	20BT50409	Green Technologies
20BT51506	Bioinformatics		

LIST OF PROFESSIONAL ELECTIVES (PEs)

S.	Knowledge Area	PE-1	PE-2	PE-3	PE-4	PE-5
No.	Information Management	Advanced Databases	Informati on Retrieval Systems	Information Security and Management	Big Data Technologies	Mobile Databases
2.	Networks	Cryptography and Network Security	Semantic Web and Social Networks	Cyber Security	Computer Forensics	Digital and Social Media Marketing
3.	Platform Technologies	Software Testing	Compiler Design	User Interface Design	System Administratio n and Maintenance	Advanced Computer Architecture
4.	Programming	Linux Programming	Web Developm ent using Angular and Bootstrap	Full Stack Development	Game Development	.Net Technologies
5.	Intelligent Systems	Soft Computing	Computer Vision	Artificial Intelligence	Decision Support and Intelligent Systems	Machine Learning

Interdisciplinary Elective	IDE1	IDE2
Computing	Microprocessors and Interfacing	Embedded Systems
Communications	Mobile Computing	Ad-hoc and Wireless sensor networks
Intelligent Systems	Image Processing	Pattern Recognition
Networks	Wireless Networks	Intrusion Detection Systems

MINOR DEGREE

Internet of Things

		Interne	t of	f Th	ing	5			1000	-	
	Course Code	Course Title	Contact Periods per week					Scheme of Examination Max. Marks			
semester			L	Т	P	Total	C	Int. Marks	Ext. Marks	Total Marks	
Minor	20BTM1201	Embedded System Design and Architecture	3	1	-	4	4	30	70	100	
	20BTM1202	IoT Architecture and Protocols		1	-	4	4	30	70	100	
	20BTM1203	Sensor Technology		1	-	4	4	30	70	100	
	20BTM1204	Cloud Storage and Computing	3	1	-	4	4	30	70	100	
	20BTM1205	Privacy and Security in IoT	3	1	-	4	4	30	70	100	
	20BTM1206	Software Defined Networks for IoT	3	1	-	4	4	30	70	100	
	20BTM1207	Advanced IoT	3	1	-	4	4	30	70	100	
	20BTM1208	Big Data		1	-	4	4	30	70	100	
	20BTMMC01	моос	-	-	-	-	2				
	20BTMMC02	моос	-	-	-	-	2				

		3	1	-	4	. 4
III B.Tech. I-Sem	2 Courses from the above list.	3	1	-	4	4
	Any one course from the remaining	3	1	-	4	4
III B.Tech.II-Sem	list.		-	-	- 33	2
	Another one course from the	3	1	-	4	4
IV B.Tech.I-Sem	remaining list.	-	-	-	-	2
IV B. IECH.I Sem	MOOC Total Credits					20

Note: If any student has chosen a course from the above list in their regular curriculum If any student has chosen a course from the above has in their regular curriculum then, he/she is not eligible to opt the same course/s for the Minor degree. It is then, he/sne is not eligible to opt the same coalse, and the millior degree. It is the responsibility of the student to acquire/complete prerequisite before taking the respective course.

HONORS DEGREE

Information Technology

	COURSE CO		Cont	c			
Semester		Course Title	L	Т	eek P	Total	
Pool-1 III B.Tech. I-Sem (Any 1 Course)	20BTH1201	Cloud Architectures	3	1	-	4	4
	20BTH1202	NoSQL Databases					
	20BTH1203	Virtualization Techniques					
Pool-2 III B.Tech. I-Sem (Any 1 Course)	20BTH1504	Business Analytics	3	1	-	4	4
	20BTH1203	Cloud Storage and Computing					
	20BTH1204	Natural Language Processing and Text Analytics					
Pool-3 III B.Tech.II-Sem (Any 1 Course and another 1 course through MOOC)	20BTH1205	Advanced Machine Learning	3	1	-	4	4
	20BTH1206	Cloud and DevOps					
	20BTH1207	Cloud Application Development					
	20BTHMC01	моос	•	-	-	-	2
Pool-4 IV B.Tech.I-Sem (Any 1 Course and another 1 course	20BTH1208	Backup and Disaster Recovery	3	1	-	4	4
	20BT H1209	Cloud Security					
	20BTH1210	IoT cloud and data analytics					
through MOOC)	20BTHMC02	моос	-	-	-	-	2
		Total Credits					20

Note: If any student has chosen a course from the above list in their regular curriculum then, he/she is not eligible to opt the same course/s for the Honors degree. It is then, he/she is not eligible to acquire/complete prerequisite before taking the respective course.

Dr. K. Ramani Chairperson, BoS (IT)

LIST OF NEW COURSES INTRODUCED

Program: INFORMATION TECHNOLOGY

Regulation: SVEC-20

Course Code	Course Title
20BT31232	Programming with Python Lab (Skill Oriented)
20BT50531	Python for Data Science Lab (Skill Oriented)
20BT61204	Web Development using Angular and Bootstrap
20BT61232	AI Tools Lab
20BT61233	Advanced Web Development Lab (Skill Oriented)
20BT71209	Digital and Social Media Marketing
20BT71233	Augmented Reality and Virtual Reality Applications Lab (Skill Oriented)
20BT712AC	Deep Learning Technologies (Audit Course)
20BTH1202	NoSQL Databases
20BTH1204	Natural Language Processing and Text Analytics
20BTH1504	Business Analytics
20BTH1205	Advanced Machine Learning

Dr. K. Ramani Chairperson, BoS (IT)