Agenda for 11th Meeting of Board of Studies for B. Tech. (Computer Science and Engineering) on 15-07-2020 at 10:30 AM
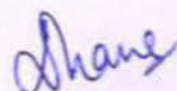
1. Action taken report on minutes/ resolutions of 10th BOS meeting.

2. Report on implementation of autonomy with respect to syllabi & academic regulations for IV B. Tech (under SVEC16) and I B.Tech under SVEC-19 regulations.

3. Academic Calendar for II, III and IV Year B.Tech for 2020-21.

4. Vision and Mission of the Department, PEOs, POs & PSOs for B. Tech (CSSE) Program and B. Tech (CSBS) Program

5. Administrative set-up for B. Tech(CSSE) Program and B. Tech (CSBS) Program

6. Syllabi with Course Objectives, Course Outcomes, Lesson Plans and Model Question Papers for the Courses of II B. Tech (CSSE) Program and I B. Tech (CSBS) Program

7. Panel of Examiners for Question paper setting for II B.Tech courses of CSSE Program and I B. Tech courses of CSBS Program

8. Amendments to SVEC-19 B.Tech Academic Regulations

9. Implementation of Teaching, Learning and Evaluation Process.

10. Substitute Courses.

11. Research Activities.

12. Faculty Development Activities.

13. Staff Development Activities.

14. Student Development Activities.

15. Student Support Systems.

16. Extension Activities.

17. Any other item.

Assoc.Prof P.Dhana Lakshmi

Chairperson, BOS (CSSE)

Department of Computer Science and Systems Engineering

Action taken report on Resolutions of 10th BoS Meeting held on 10-06-2019

1. Academic Calendars

Resolution: The admission dates were not finalized for I B. Tech. classes during the academic year 2019-20. So, it was resolved to authorize the Chairperson BOS to prepare academic calendar for I B. Tech. and to submit to the Chairman (Academic Council) for approval.

Action Taken: As authorized, the academic calendar for I B. Tech. classes for the academic year 2019-20 was prepared and got approved by the Chairman (Academic Council).

1. Suggestions on courses

1. Suggestion : Replace Basic Civil and Mechanical Engineering course with Digital Logic Design.

    Action Taken : Implemented

2. Suggestion : Introduce the computer networks lab in place of system simulation lab

    Action Taken: Introduced Computer Networks Lab

3. Suggestion : Rearrangement of courses at II, III B.Tech Level

    Action Taken : Implemented

Department of Computer Science and Systems Engineering
11th Board of Studies Meeting held on 15-07-2020

11th Board of Studies Meeting of the department of CSSE was held on 15-07-2020 at 10:30AM in Zoom Platform.

MEMBERS Present

S.No	Name	Designation	Phone Numbers	Mail IDs
1	**Dr. P. Dhana Lakshmi** Associate Professor Dept. of CSSE, SVEC	Chairperson	9440101946	bos_csse@vidyanikethan.edu
2	**Dr. S. VASUNDARA** Professor, Dept. of CSE JNTUA, College of Engineering, JNTU Anantapur, Ananthapuramu-515002	External Member Nominated by ViceChancellor, JNTUA	9440505837	vasundaras.cse@jntua.ac.in
3	**Dr. B. K. TRIPATHY** Senior Professor & Dean, School of Computing Science and Engineering, VIT University,Vellore-632014, Tamil Nadu	External Member Nominated by ViceChancellor, JNTUA	09489343018	tripathybk@rediffmail.com
4	**Dr. P. VARALAKSHMI** Associate Professor of Computer Technology, Madras Institute of Technology, MIT Road, Radha Nagar, Chromepet,Chennai - 600044	External Member Nominated by ViceChancellor, JNTUA	9444485594	varanip@gmail.com, varanip@annauniv.edu
5	**Mr. PAVAN YARA** Vice President Technology, First Walkin Technologies #736 4th Floor, Gupta House, 7th Cross Koramangala, Bengaluru-560034,Karnataka	Alumni	8971100449	yarapavan@gmail.com
6	**Prof. C. Madhusudhana Rao** Professor & HoD Dept. of CSSE, SVEC	Internal Member	9959990001	hod_csse@vidyanikethan.edu
7	**Dr. G. Sasi Kumar** Professor, Dept. of CSSE, SVEC	Internal Member	8870919338	sasikumar.g@vidyanikethan.edu
8	**Dr. C. Sushama**	Internal Member	9848307199	sushama.c@vidyanikethan.edu

S.No	Name	Designation	Phone Numbers	Mail IDs
	Associate Professor Dept. of CSSE, SVEC			
9	**Dr. D. R. Kumar Raja** Associate Professor Dept. of CSSE, SVEC	Internal Member	9441449744	Kumarraja.dr@vidyanikethan.edu
10	**Mr. A. Chandra** Assistant Professor Dept. of CSSE, SVEC	Internal Member	7799666819	chandra.adhimulam@vidyanikethan.edu
11	**Mr. M. Ramu** Assistant Professor Dept. of CSSE, SVEC	Internal Member	7780680227	ramu.m@vidyanikethan.edu
12	**Mr. S. Shiva Praksh** Assistant Professor Dept. of CSSE, SVEC	Internal Member	9440656515	shivaprakash.s@vidyanikethan.edu
13	**Dr. K. Parthiban** Assistant Professor Dept. of CSSE, SVEC	Internal Member	9677737387	Parthiban.k@vidyanikethan.edu

The external member from industry Mr. V. K. SATHYAMOORTHY CHELLACHAMY could not attend the meeting.

11th Meeting of Board of Studies of Computer Science and Systems Engineering (CSSE) was conducted **through online video conferencing** using ZOOM platform. The screenshots taken during the meeting are shown below.

Minutes:

1. **Action Taken Report on minutes of 10th BOS meeting held on 11th June 2019**
   The Chairperson BOS appraised the members the action taken report on the minutes/ resolutions of 10th BOS meeting held on 11th June 2019. After deliberations the members ratified the report.

2. **Report on implementation of Autonomy**
   The Chairperson BOS presented a report on implementation of autonomy pertaining to syllabi & academic regulations for IV B.Tech(under SVEC16) and I B.Tech(under SVEC-19)

regulations to the members. The feedback of students and faculty on the courses of IV B.Tech.-CSSE (under SVEC16) and I B.Tech.-CSSE (under SVEC19) are apprised.

3. **Academic Calendars**

Members of B.O.S have been apprised that due to Covid-19 pandemic, the Chairman, Academic Council is empowered to prepare the Academic calendar pertaining to I, II, III and IV B.Tech. program for the academic year 2020-21, in accordance with the A. P. State Government/APSCHE/JNTUA, Ananthapuramu directives.

4. **Vision and Mission of the Department, PEOs, POs & PSOs for B.Tech.(CSSE) B.Tech.(CSBS) Programs and Course Structures**

Members of B.O.S approved the Vision, Mission, PEOs and POs, and they also suggested to modify the PSOs of B.Tech CSSE and CSBS Programs. The approved PSOs for both the programs are enclosed in **Annexure-I.**

5. **Administrative Setup for B.Tech Program**

The Chairperson BOS appraised the members that the syllabi is prepared in a decentralized way involving all the faculty members and keeping checks at multiple levels to ensure quality output. The Administrative Setup for II, III & IV B.Tech courses under SVEC-19 regulations was presented . Members noted and approved the same.

6. **Course structure, Syllabi with Course Objectives, Course Outcomes, Lesson Plans and Model Question Papers for the Courses of II B. Tech (CSSE) Program and I B. Tech (CSBS) Program**

The chairperson BOS presented the Course Structure, syllabi with Course Objectives, Course Outcomes, Lesson Plans and Model Question Papers for the Courses of II B. Tech (CSSE) Program and I B. Tech (CSBS) Program prepared by the department. The Chairperson BOS appraised the members with the procedure followed in articulation of CEOs, COs and mapping of COs with POs & PSOs. The members suggested modifications and then approved the course structures, syllabus of II B.Tech (CSSE) and I B.Tech (CSBS) after thorough discussion. **(Annexure-II)**

The following suggestions are given by the board members on the syllabi and course structure proposed by the department:

In CSSE Course structure:
1. Rearrange the courses in CSSE Course structure as students are overloaded during II year I-Sem and II-Sem
2. Move the Artificial Intelligence course to III B.Tech- I semester.
3. Replace software Testing course with Software debugging and Testing
4. Check prerequisites for interdisciplinary electives and Minor degree courses.
5. May consider Certificate Programs /MOOC Courses for honor degree courses in place of regular contact classes.
6. Verify balance of courses in all Knowledge areas (Network component, software component, database component, and security component) in the syllabus.

In CSBS Course structure:
1. Rename the subject "Foundations of Computer science"
2. Add the Artificial Intelligence Theory Course
3. Increase the more number of courses related to Business Systems.
4. Divide Data Mining Analytics course into two separate courses.
5. R Programming or Julia programming languages can be used for statistical modeling course.
6. Professional electives are to be separated as Business Systems group and Computer Science group.

7. To start Honors degree in Blockchain Technologies with B.Tech (CSBS) Program.
8. Include UX/UI and Game Theory courses in CSSE and CSBS course structures.

It is resolved to authorize the Chairperson BOS to adapt the improvements suggested and submit to the Chairman(Academic council) for further processing.

7. **Panel of Examiners for Question paper setting for II B.Tech courses of CSSE Program and I B. Tech courses of CSBS Program**
The board authorizes the Chairperson, BoS to prepare and submit the model question papers and panel of examiners for question paper setting for II B.Tech courses of CSSE Program and I B. Tech courses of CSBS Program theory courses as and when requested by the Chairman, Academic Council or Chief Controller of Exams.

8. **Amendments to SVEC-19 B.Tech Academic Regulations**
The Chairperson BOS presented the amendments to SVEC-19 B.Tech Academic Regulations. Members of BoS were apprised of the amendments proposed to SVEC19 B.Tech. Academic regulations. Members noted and approved the same.

9. **Teaching, Learning and Evaluation**

The Chairperson BOS presented the teaching, learning and evaluation practices followed in the department. The members of BOS have appreciated the good practices followed by the department in the conduct of diagnostic and formative tests and remedial classes and suggested to continue the same.
The following suggestions are given by the board members for slow learners and advanced learners while conducting remedial classes:
1. Train the advanced learners to produce research papers and on product development.
2. Go through the course on "Learning How to Learn: Powerful mental tools to help you master tough subjects" for slow learners offered by Course era by Dr.Barbara Oakley.

10. **Research Activities**
The Chairperson, BOS (CSSE) has briefed the members on research initiatives in the Department. The Chairperson also submitted the details of faculty publications in refereed Journals and Technical talks delivered during the academic year. Members of BOS suggested the following to improve research activities in the department.
1. Maintain knowledge repository of faculty/students in terms of video Lectures, lecturer notes pdf, Research Talks, Talks by the Guests/experts, Research Publications, Patents.
2. MoU with TCS for corporate funding for research/ establishment of specialized laboratories / training for faculty.
3. Use Google cloud, Microsoft Azure cloud for all academic /research activities.

11. **Substitute courses**
The board authorized Head of the Department and BOS chairperson to identify substitute courses for students who rejoin B.Tech program under other regulations and submit to the Chairman(Academic council) for further processing.

12. **Faculty Development Activities**
The BoS Chairperson apprised the board about the faculty incentives, FDPs attended, events attended by faculty on online platforms, FDPs/SDPs organized, paper publications/presentations, books published, patents filed and faculty qualification upgradation. The members have appreciated the efforts of the department and suggested to continue the same.

13. **Staff Development Activities**

The Chairperson BOS has presented the members the activities carried out under staff development. The members suggested to organize more number of staff development programs in emerging areas suggested by AICTE.

14. **Students Development Activities**

The Chairperson, BOS (CSSE) submitted the details of student development activities such as Remedial/Reinforcement classes, Awards/Medals, Guest and Expert Lectures organized, Add-on/Workshop/Training courses conducted, Student Association Activities, Internships , student paper publications and technical association activities. Members have expressed their satisfaction regarding the student development activities.

15. **Student Support Systems**

The members noted the information on good practices such as Counseling Mechanism, Training Activities by the Companies, Campus Selections, Companies visited for placement, Entrepreneurship Activities, and IIIC activities followed for all round growth and development of students. The BOS members have appreciated the proactive approach of the college in organizing the above activities for increasing the employability of the students and suggested to continue the same.

16. **Extension Activities**

The members have perused, noted and appreciated the efforts of department/ college in organizing professional, technical and community development activities. The BOS members have suggested to conduct more number of NSS activities.
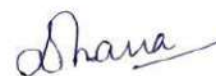
17. **Any other item**

The HOD and Chairperson BOS appraised the members that the B. Tech. program is accredited by NBA for a period of three years. The members have appreciated the efforts of the department in the quality initiatives.

Meeting concluded with thanks to the Chair.

Members suggested the following:

1. Conduct add-on courses on Health care systems and product Development.
2. Conduct skill development programs on App development, Azure and other cloud courses.
3. Conduct Value added courses on
    1. Amazon Service mesh
    2. Kubernetes
    3. Bug bounty program.
    4. API Programming
4. Conduct IPR related workshops for students from II B.Tech onwards
5. Develop own LMS with OBE to support Teaching, Learning and Evaluation.
6. Associate with ZOHO to start entrepreneurship and other activities for students.
7. Adopt the process of adding dynamic experiments in the laboratories due to technology advancement in market.
8. Start Idea club, Entrepreneurship Development club in the department.

Chairperson BOS, CSSE

Approved Course Structure

Program: B.Tech.- Computer Science and Systems Engineering

Regulations: SVEC-19

Mandatory Induction Program	03 weeks duration
Induction program offered before commencement of the I-Semester course work	Physical activity
	Creative Arts
	Universal Human Values
	Literary
	Proficiency Modules
	Lectures by Eminent People
	Visits to local Areas
	Familiarization to Department/Branch and Innovations

I B.Tech. – I Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT1BS01	Differential Equations and Multivariable Calculus	3	1	-	4	4	40	60	100
2	19BT1BS04	Engineering Chemistry	3	-	-	3	3	40	60	100
3	19BT1HS01	Communicative English	3	-	-	3	3	40	60	100
4	19BT10501	Programming for Problem Solving	3	1	-	4	4	40	60	100
5	19BT1BS32	Engineering Chemistry Lab	-	-	2	2	1	50	50	100
6	19BT1HS31	Communicative English Lab	-	-	2	2	1	50	50	100
7	19BT10331	Computer Aided Engineering Drawing	-	1	2	3	2	50	50	100
8	19BT10531	Programming for Problem Solving Lab	-	-	2	2	1	50	50	100
		Total:	12	3	8	23	19	360	440	800

I B.Tech. – II Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT2BS01	Transformation Techniques and Linear Algebra	3	1	-	4	4	40	60	100
2	19BT1BS02	Biology for Engineers	2	-	-	2	2	40	60	100
3	19BT1BS03	Engineering Physics	3	-	-	3	3	40	60	100
4	19BT10201	Basic Electrical and Electronics Engineering	3	-	-	3	3	40	60	100
5	19BT20501	Digital Logic Design	3	-	-	3	3	40	60	100
6	19BT21501	Object Oriented Programming through Java	3	-	-	3	3	40	60	100
7	19BT1BS31	Engineering Physics Lab	-	-	2	2	1	50	50	100
8	19BT10231	Basic Electrical and Electronics Engineering Lab	-	-	2	2	1	50	50	100
9	19BT20331	Engineering Workshop	-	-	2	2	1	50	50	100
10	19BT21531	Object Oriented Programming through Java Lab	-	1	2	3	2	50	50	100
		Total:	17	2	8	27	23	440	560	1000
11	19BT1AC01	Spoken English	2	-	-	2	-	-	-	-

II B.Tech. – I Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT3BS01	Numerical Methods, Probability and Statistics	3	1	-	4	4	40	60	100
2	19BT30502	Computer Organization	3	-	-	3	3	40	60	100
3	19BT31201	Discrete Mathematical Structures	3	-	-	3	3	40	60	100
4	19BT31501	Data Structures and Algorithms	3	1	-	4	4	40	60	100
5	19BT31502	Operating Systems	3	-	-	3	3	40	60	100
6	19BT31503	System Programming	3	-	-	3	3	40	60	100
7	19BT31531	Data Structures and Algorithms Lab	-	-	2	2	1	50	50	100
8	19BT31532	Operating Systems Lab	-	-	2	2	1	50	50	100
9	19BT31533	Workshop in Computer Science and Systems Engineering	-	-	2	2	1	50	50	100
		Total:	18	2	6	26	23	390	510	900
10	19BT315AC	Design Thinking	2	-	-	2	-	-	-	-

II B.Tech. – II Semester

SI. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT40502	Database Management Systems	3	1	-	4	4	40	60	100
2	19BT40503	Design and Analysis of algorithms	3	-	-	3	3	40	60	100
3	19BT31202	Software Engineering	3	-	-	3	3	40	60	100
4	19BT41501	Theory of Computation	3	-	-	3	3	40	60	100
5		**Open Elective-2**	3	-	-	3	3	40	60	100
6	19BT3HS31	Soft Skills Lab	-	-	2	2	1	50	50	100
7	19BT40532	Database Management Systems Lab	-	-	2	2	1	50	50	100
8	19BT31232	Software Engineering Lab	-	-	2	2	1	50	50	100
9	19BT41531	Design and Analysis of Algorithms Lab	-	-	2	2	1	50	50	100
		Total:	15	1	8	24	20	400	500	900
10	19BT3MC01	Environmental Science	2	-	-	2	-	40	--	40

III B. Tech. – I Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT50503	Artificial Intelligence	3	-	-	3	3	40	60	100
2	19BT51202	Web Technologies	3	-	-	3	3	40	60	100
3	19BT51501	Computer Networks with Systems Approach	3	-	-	3	3	40	60	100
	Professional Elective-1									
	19BT30501	Computer Graphics	3	-	-	3	3	40	60	100
	19BT51502	Computational Statistics								
	19BT51503	Modern Cryptography								
	19BT51504	Natural Language Processing								
	19BT51505	Parallel Computer Architectures								
5	**Open Elective-1**		3	-	-	3	3	40	60	100
	Open-Elective-3 (Inter Disciplinary Elective-1)									
	19BT50201	Control Systems	3	-	-	3	3	40	60	100
	19BT60313	Optimization Techniques								
	19BT50441	Microprocessors and Interfacing								
	19BT61041	Sensors and Applications								
7	19BT51232	Web Technologies Lab	-	-	2	2	1	50	50	100
8	19BT51531	Computer Networks with Systems Approach Lab	-	-	2	2	1	50	50	100
9	19BT51532	Socially Relevant Project-1	-	-	-	-	1	50	50	100
		Total:	18	-	4	22	21	390	510	900
10	19BT5MC01	Universal Human Values	2	-	-	2	-	40	--	40

III B. Tech. – II Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT6HS02	Organizational Behavior	3	-	-	3	3	40	60	100
2	19BT60501	Compiler Design	3	-	-	3	3	40	60	100
3	19BT51201	Data Warehousing and Data Mining	3	-	-	3	3	40	60	100
	Professional Elective-2									
	19BT60504	Soft Computing	3	-	-	3	3	40	60	100
	19BT60541	Ad Hoc and Wireless Sensor networks								
	19BT51203	Advanced Databases								
	19BT61205	.Net Technologies								
	19BT61501	Parallel and Distributed Systems								
	Professional Elective-3									
	19BT70503	Data Science	3	-	-	3	3	40	60	100
	19BT61502	High Performance Computing								
	19BT61503	Information Security and Privacy								
	19BT61504	Systems Engineering								
	19BT61505	User Interface Design								
	Open-Elective-4 (Inter Disciplinary Elective-2)									
	19BT60317	Industrial Internet of Things	3	-	-	3	3	40	60	100
	19BT60407	Image Processing								
	19BT60441	Pattern Recognition								
	19BT70401	Embedded Systems								
	19BT51231	Data Warehousing and Data Mining Lab	-	-	2	2	1	50	50	100
	19BT61531	Internet of Things Lab	-	1	2	3	2	50	50	100
	19BT61532	Socially Relevant Project-2	-	-	-	-	1	50	50	100
		Total:	18	1	4	23	22	390	510	900
10	19BT503AC	Foundations of Entrepreneurship	2	-	-	2	-	--	--	--

IV B. Tech. – I Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT6HS01	Principles of Business Economics and Accountancy	3	-	-	3	3	40	60	100
2	19BT50501	Machine Learning	3	-	-	3	3	40	60	100
3	19BT71501	System Simulation and Modeling	3	-	-	3	3	40	60	100
4	**Professional Elective–4**		3	-	-	3	3	40	60	100
	19BT50504	Cyber Security								
	19BT61201	Cloud Computing								
	19BT71203	Big Data Technologies								
	19BT71502	Performance Evaluation of Computer Systems								
	19BT71503	Software Testing								
5	**Professional Elective–5**		3	-	-	3	3	40	60	100
	19BT70502	Augmented Reality and Virtual Reality								
	19BT70504	Blockchain Technologies								
	19BT71504	Data Visualization Techniques								
	19BT71505	Deep Learning								
	19BT71506	Robotics and Intelligent Systems								
6	19BT7MOOC	Open Elective–5 (MOOC)	-	-	-	-	3	--	100	100
7	19BT50531	Machine Learning Lab	-	-	2	2	1	50	50	100
8	19BT71531	System Simulation and Modeling Lab	-	-	2	2	1	50	50	100
9	19BT71532	Internship	-	-	-	-	2	--	100	100
		Total:	15	-	4	19	22	300	600	900
10	19BT715AC	Kernel Programming	-	-	2	2	-	-	-	-

IV B.Tech. – II Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19BT81531	Project Work	-	-	-	-	10	100	100	200
		Total:	-	-	-	-	10	100	100	200
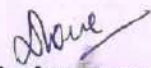
LIST OF COURSES FOR
OPEN ELECTIVE–1 & OPEN ELECTIVE-2

Course Code	Open Elective -1	Course Code	Open Elective -2
19BT4BS01	Material Science	19BT4HS01	Banking and Insurance
19BT4HS02	Business Communication and Career Skills	19BT4HS03	Cost Accounting and Financial Management
19BT4HS04	Entrepreneurship for Micro, Small and Medium Enterprises	19BT4HS05	Gender and Environment
19BT4HS06	German Language	19BT4HS07	Indian Economy
19BT4HS08	Indian History	19BT4HS09	Life Skills
19BT4HS10	Personality Development	19BT4HS11	Professional Ethics
19BT4HS12	Women Empowerment	19BT4HS13	Indian Tradition and Culture
19BT4HS14	Constitution of India	19BT40106	Disaster Mitigation and Management
19BT40205	Reliability and Safety Engineering	19BT40107	Sustainable Engineering
19BT50107	Environmental Pollution and Control	19BT40108	Contract Laws and Regulations
19BT50108	Planning for Sustainable Development	19BT40306	Global Strategy and Technology
19BT50109	Rural Technology	19BT40307	Management Science
19BT50505	Ethical Hacking	19BT40504	Cyber Laws and Security
19BT51207	AI in Healthcare	19BT50208	Intellectual Property Rights
19BT51506	Bioinformatics	19BT50409	Green Technologies

MINOR/HONORS DEGREE
IN
CYBER SECURITY

Semester	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
III B.Tech. I Semester	19BT51503	Modern Cryptography	3	-	-	3	3	40	60	100
	19BT51507	Digital Forensics	3	-	-	3	3	40	60	100
	19BT51508	Malware and Risk Analysis	3	-	-	3	3	40	60	100
	19BT51533	Cryptography Lab	-	-	2	2	1	50	50	100
III B.Tech. II Semester	19BT61503	Information Security and Privacy	3	-	-	3	3	40	60	100
	19BT61506	Software Security	3	-	-	3	3	40	60	100
	19BT61507	Cloud security	3	-	-	3	3	40	60	100
	19BT61508	IoT Security	3	-	-	3	3	40	60	100
	19BT6CB31	Information Security and Privacy Lab	-	-	2	2	1	50	50	100
IV B.Tech. I Semester	19BT70504	Blockchain Technologies	3	-	-	3	3	40	60	100
	19BT71507	Database and Web Security	3	-	-	3	3	40	60	100
	19BT71533	Database and Web Security Lab	-	-	2	2	1	50	50	100

Note: If any of the student has chosen a CORE course from the above list in their curriculum then, he/she is not eligible to opt the same course/s for the Minor/Honor degree.
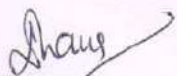
BOS,Chairperson

LIST OF NEW COURSES INTRODUCED

Program: B.Tech.- Computer Science and Systems Engineering

Regulations : SVEC-19 (upto II B.Tech-II semester)

Course Code	Name of the course
19BT31503	System Programming
19BT31533	Workshop in Computer Science and Systems Engineering
19BT315AC	Design Thinking
19BT41531	Design and Analysis of Algorithms Lab
19BT1AC01	Spoken English
19BT1BS02	Biology for Engineers
19BT4BS01	Material Science
19BT4HS05	Gender & Environment
19BT4HS09	Life Skills
19BT4HS11	Professional Ethics
19BT4HS12	Women Empowerment
19BT40107	Sustainable Engineering
19BT31232	Software Engineering Lab
19BT10201	Basic Electrical and Electronics Engineering
19BT10231	Basic Electrical and Electronics Engineering Lab

BOS,Chairperson