

Department of Basic Science and Humanities

DEPARTMENT OF CHEMSITRY

MINUTES OF 2st BOARD OF STUDIES MEETING

Virtual Mode, Date: 11-09-2026 @ 11am

Suggestions given by the experts during BOS-2026

Subject : Chemsitry& Eng. Chemistry

Board of studies for the academic year **2026-27** was conducted on **11thSeptember, 2026**.The meeting was chaired by Principal and HOD B.S&H.While all the members of faculty of Chemsitryparticipated along with subject experts in professor cadre from reputed universities.

After clearly discussing each and every unit in each paper of Chemsitry (Theory and practical) and V26 curriculumobtained in the acadamic years**2026-27**.**The board has finalized to continue the same syllabi** for (V26) with few suggestions.The following suggestions are enclosed here with attested by the experts.

1. The proposed **Applied Chemistry (I CSE and Alliened Branches &I ECE Alliened Branches) syllabus,Chemistry for Electrical Systems (I EEE) Syllabus,Chemistry for Mechanical Engineers(IMechanical) Syllabus**,was discussed and recommended for implementation subject to institutional/university approval.
2. The **Course Outcomes (COs)** were reviewed and suitable modifications were recommended wherever necessary.
3. The **CO-PO/PSO mapping** was reviewed and recommendations were made for better alignment.
4. The existing Chemistry laboratory experiments were reviewed, and relevant application-oriented experiments were recommended.
5. Greater emphasis was recommended on **practical learning, problem-solving, laboratory skills, and engineering applications**.
6. The members recommended updating the course contents periodically in accordance with emerging developments in Chemistry and engineering.
7. Appropriate assessment methods may be adopted to measure the attainment of Course Outcomes effectively.
8. The suggestions of the external subject experts were taken into consideration for further academic improvement.

The following members are drafted as internal members to Board of Studies for the Department ofChemistry are

B.Tech CSE Course Structure

B.Tech. – I Year I Semester

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		Linear Algebra and Calculus	3	0	0	3
3	BSC		Physics for advanced computing	3	0	0	3
4	ESC		C and Data Structures	4	0	0	4
5	ESC		AI Tools and Applications	0	1	3	2.5
6	HSM		English for Technical Communications and MOODLES laboratory	0	0	3	1.5
7	BSC		Physics for Advanced Computing Lab	0	0	3	1.5
8	ESC		C and Data Structures Lab	0	0	3	1.5
9	ESC		IT and Electronics Workshop	0	0	3	1.5
10	MNC		Universal Human Values-II	2	0	0	0
Total				15	1	15	21.5

B.Tech (I year-II Semester)–II semester

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	BSC		Differential Equations and Vector Calculus	3	0	0	3
2	BSC		Applied Chemistry for Emerging Technologies	3	0	0	3
3	ESC		Computational Thinking and Problem Solving using Python	3	0	0	3
4	ESC		Digital Logic Design	3	0	0	3
5	ESC		Design Thinking and Innovation	0	1	3	2.5
6	ESC		Basic Electrical and Electronics Engineering	3	0	0	3
7	ESC		Computational Thinking and Problem	0	0	3	1.5

Course Structure for B. Tech (Electronics and Communication Engineering)
B.Tech. – I Year I Semester (5 Theory 4 laboratory, 01 MNC)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM	—	English for Technical Communications	3	0	0	3
2	BSC	—	Linear Algebra and Calculus	3	0	0	3
3	BSC	—	Applied Physics	3	0	0	3
4	ESC	—	Computational Thinking and Problem Solving using 'C'	3	0	0	3
5	ESC	—	Principles of Electrical and Mechanical Engineering	3	0	0	3
6	HSM	—	English for Technical Communications and MOODLES Laboratory	0	0	3	1.5
7	BSC	—	Applied Physics Laboratory	0	0	3	1.5
8	ESC	—	Computational Thinking and Problem Solving using 'C' Laboratory	0	0	3	1.5
9	ESC	—	Principles of Electrical and Mechanical Engineering Laboratory	0	0	3	1.5
10	MNC-1	—	Universal Human Values – 2	2	0	0	0
Total				17	0	12	21

B.Tech (I year - II Semester) – II semester (4 Theory & 5 Laboratories & 01 MNC)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC	—	Applied Chemistry	3	0	0	3
3	ESC	—	Data Structures and Algorithms using 'C' and Python	0	1	3	2.5
4	PCC	—	Network Analysis	3	0	0	3
5	ESC	—	Foundations of Quantum Technologies	3	0	0	3
6	ESC	—	AI Tools and Applications	0	1	3	2.5
7	PCC	—	Network Analysis Laboratory	0	0	3	1.5
8	ESC	—	IT and Electronic Workshop Laboratory	0	0	2	1
9	BSC	—	Applied Chemistry Laboratory	0	0	3	1.5
10	MNC-2	—	NSS / NCC / Scouts & Guides / Community Service / Sports	0	0	2	0
Total				12	2	16	21

Course Structure for B. Tech CSE(AIML)
B.Tech. – I Year I Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM	—	English for Technical Communication	3	0	0	3
2	BSC	—	Linear Algebra and Calculus	3	0	0	3
3	BSC	—	Physics for Advanced Computing	3	0	0	3
4	ESC	—	C and Data Structures	4	0	0	4
5	ESC	—	AI Tools and Applications	0	1	3	2.5
6	HSM	—	English for Technical Communications and MOODLES Laboratory	0	0	3	1.5
7	BSC	—	Physics for Advanced Computing Lab	0	0	3	1.5
8	ESC	—	C and Data Structures Lab	0	0	3	1.5
9	ESC	—	IT and Electronics Workshop	0	0	3	1.5
10	MNC	—	Universal Human Values – II	2	0	0	0
Total				14	2	15	21.5

I B.Tech I Year - II Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC	—	Applied Chemistry for Emerging Technologies	3	0	0	3
3	ESC	—	Computational Thinking and Problem Solving using Python	3	0	0	3
4	ESC	—	Digital Logic Design	3	0	0	3
5	ESC	—	Design Thinking and Innovation	0	1	3	2.5
6	ESC	—	Basic Electrical and Electronics Engineering	3	0	0	3

7	ESC	—	Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
8	BSC	—	Applied Chemistry for Emerging Technologies Lab	0	0	3	1.5
9	MNC	—	NSS / NCC	0	0	2	0
Total				15	1	11	20.5

Course Structure for B. Tech CSE(DS)
B.Tech. – I Year I Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Linear Algebra and Calculus	3	0	0	3
2	BSC	—	Applied Chemistry for Emerging Technologies	3	0	0	3
3	ESC	—	C and Data Structures	4	0	0	4
4	ESC	—	AI Tools and Applications	0	1	3	2.5
5	ESC	—	Design Thinking and Innovation	0	1	3	2.5
6	BSC	—	Applied Chemistry for Emerging Technologies Lab	0	0	3	1.5
7	ESC	—	C and Data Structures Lab	0	0	3	1.5
8	ESC	—	IT and Electronics Workshop	0	0	3	1.5
9	MNC	—	Universal Human Values – II	2	0	0	0
Total				12	2	15	19.5

I B.Tech I Year - II Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM	—	English for Technical Communication	3	0	0	3
2	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
3	BSC	—	Physics for Advanced Computing	3	0	0	3
4	ESC	—	Computational Thinking and Problem Solving using Python	3	0	0	3
5	ESC	—	Digital Logic Design	3	0	0	3
6	ESC	—	Basic Electrical and Electronics Engineering	3	0	0	3
7	HSM	—	English for Technical Communications and MOODLES Laboratory	0	0	3	1.5
8	ESC	—	Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
9	BSC	—	Physics for Advanced Computing Lab	0	0	3	1.5
10	MNC	—	NSS / NCC	0	0	2	0
Total				18	0	11	22.5

I B. TECH - ELECTRICAL & ELECTRONICS ENGINEERING

Course Structure

B.Tech. – I Year I Semester (I semester)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Linear Algebra and Calculus	3	0	0	3

2	BSC	—	Physics for Electrical Systems	3	0	0	3
3	ESC	—	Computational Thinking and Problem Solving with C	3	0	0	3
4	ESC	—	Basic Electrical Circuits	3	0	0	3
5	HSM	—	English for Technical Communication	3	0	0	3
6	BSC	—	Physics for Electrical Systems Lab	0	0	3	1.5
7	ESC	—	Computational Thinking and Problem Solving with C Lab	0	0	3	1.5
8	HSM	—	English for Technical Communications and MOODLES Lab	0	0	3	1.5
9	ESC	—	Basic Electrical Circuits Lab	0	0	3	1.5
10	MNC	—	NSS / NCC / Community Service	0	0	2	0
Total				15	0	14	21

B.Tech (I year - II Semester) – II semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC	—	Chemistry for Electrical Systems	3	0	0	3
3	PCC	—	Electrical Circuit Analysis	3	0	0	3
4	PCC	—	Semiconductor Devices	3	0	0	3
5	ESC	—	Engineering Graphics	0	1	3	2.5

6	BSC	—	Chemistry for Electrical Systems Lab	0	0	3	1.5
7	PCC	—	Electrical Circuit Analysis Lab	0	0	3	1.5
8	ESC	—	Design Thinking and Innovation	0	1	3	2.5
9	ESC	—	IT & Electronic Workshop	0	0	2	1
10	MNC	—	Sports and Yoga	0	0	2	0
Total				12	2	16	21

I B. TECH MECHANICAL ENGINEERING COURSE STRUCTURE AND SYLLABUS

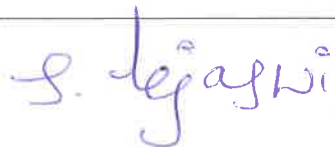
B. Tech I Year I Semester (I Semester)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM-1	—	English for Technical Communication	3	0	0	3
2	BSC-1	—	Linear Algebra and Calculus	3	0	0	3
3	BSC-2	—	Physics for Mechanical Systems	3	0	0	3
4	ESC-1	—	Computational Thinking and Problem Solving Using Python	3	0	0	3
5	ESC-2	—	Engineering Graphics	0	1	3	2.5
6	HSM-1 Lab	—	English for Technical Communications and MOODLES Lab	0	0	3	1.5
7	BSC-1 Lab	—	Physics for Mechanical Systems Lab	0	0	3	1.5
8	ESC-1 Lab	—	Computational Thinking and Problem Solving Using Python Lab	0	0	3	1.5
9	ESC-2 Lab	—	AI Tools and Applications	0	1	3	2.5

10	MNC-1	—	Environmental Science for Engineers	2	0	0	0
Total				14	2	15	21.5

B. Tech- I year - II Semester (II Semester)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC-3	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC-4	—	Chemistry for Mechanical Engineers	3	0	0	3
3	ESC-3	—	Basic Electrical and Electronics Engineering	3	0	0	3
4	ESC-4	—	Engineering Mechanics	3	0	0	3
5	ESC-5	—	Design Thinking and Innovation	0	1	3	2.5
6	ESC-3 Labs	—	Basic Electrical and Electronics Engineering Lab	0	0	3	1.5
7	ESC-4 Labs	—	Engineering Mechanics Lab	0	0	3	1.5
8	ESC-5 Labs	—	Workshop Practice	0	0	3	1.5
9	BSC-2 Labs	—	Chemistry for Mechanical Engineers Lab	0	0	3	1.5
10	MNC-2	—	NCC / NSS	0	0	2	0
Total				12	1	17	20.5

S.No	Name and Designation of Member	Signature
1	Chairperson: Mr. M.Visweswara Rao, Assoc. Professor & HOD	
UNIVERSITY NOMINEE		
1	Dr.Dhurke Kashinath Professor NIT Warangal, Warangal, Telangana. Mobile: 8332969502 EmailId :kashinath@nitw.ac.in	Present (Online)
SUBJECT EXPERT		
1	Dr. B.Hari Babu Professor Andra KesariUniversity Ongole, Andhra Pradesh. Mobile No: 8500338866 Email.Id:dr.b.haribabu@gmail.com	Present (Online)
FACULTY (INTERNAL) MEMBERS		
4	Dr.A. Koteswara Rao, Professor	
5	Smt. S Tejaswi, Asst. Professor	




Chairman
Board of Studies





SREE VAHINI INSTITUTE OF SCIENCE AND TECHNOLOGY

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Sri Vahini Nagar, NH-30 . TIRUVURU, PIN: 521 235. NTR Dist. A.P. India.

DEPARTMENT OF ENGLISH

MINUTES OF 1st BOARD OF STUDIES MEETING

Virtual Mode, Date: 08-09-2026 @ 10:30 am

The board of studies meeting was held on **8th September, 2026** in the **Department of English** to discuss the following points for V26 regulations of I B.Tech I Sem & II Sem based on the model syllabus given by AICTE & JNTUK

Detailed discussion on the following has been done .

- Introduction to the College and an overview of its academic structure, vision, mission, and institutional practices.
- Discussion on Strength Particulars, including the student strength and section-wise/branch-wise allocation.
- Discussion on the allotted syllabus, course objectives, Course Outcomes (COs), and course details, including the structure and requirements of the respective courses.
- Discussion on Moodle Lab LMS course details, including course structure, learning resources, activities, assignments, quizzes, and other digital learning components.
- Discussion on Staff Particulars and the Staff-Student Ratio, considering the available teaching staff in relation to the student strength and effective allocation of faculty for course delivery.
- Discussion on additional non-credit courses and activities, including Universal Human Values (UHV), National Service Scheme (NSS), and Sports, and their inclusion in the academic and co-curricular framework despite having no academic credits.

I SEMESTER

Branch – CSE

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		Applied Chemistry for Emerging Technologies	3	0	0	3
3	BSC		Linear Algebra and Calculus	3	0	0	3
4	ESC		Computational Thinking and Problem Solving using C	3	0	0	3
5	ESC		Fundamentals of Digital Logic	2	0	0	2

2	BSC		Physics for Electrical Systems	3	0	0	3
3	ESC		Computational Thinking and Problem Solving with C	3	0	0	3
4	ESC		Basic Electrical Circuits	3	0	0	3
5	HSM		English for Technical Communication	3	0	0	3
6	BSC		Physics for Electrical Systems Lab	0	0	3	1.5
7	ESC		Computational Thinking and Problem Solving with C Lab	0	0	3	1.5
8	HSM		English for Technical Communications and Moodles Lab	0	0	3	1.5
9	ESC		Basic Electrical Circuits Lab	0	0	3	1.5
10	MNC		NSS / NCC / Community Service	0	0	2	0
		Total		15	0	14	21

Branch – Mechanical

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	HSM-1		English for Technical Communication	3	0	0	3
2	BSC-1		Linear Algebra and Calculus	3	0	0	3
3	BSC-2		Physics for Mechanical Systems	3	0	0	3
4	ESC-1		Computational Thinking and Problem Solving Using Python	3	0	0	3
5	ESC-2		Engineering Graphics	0	1	3	2.5
6	HSM-1 Lab		English for Technical Communications and MOODLES lab	0	0	3	1.5
7	BSC-1 Lab		Physics for Mechanical Systems Lab	0	0	3	1.5
8	ESC-1 Lab		Computational Thinking and Problem Solving Using Python Lab	0	0	3	1.5

10	MNC-I		Universal Human Values -2 (No credits)	2	0	0	0
Total				17	0	12	21

Branch – CSE(AI ML)

S.No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		Linear Algebra and Calculus	3	0	0	3
3	BSC		Physics for advanced computing	3	0	0	3
4	ESC		C and Data Structures	4	0	0	4
5	ESC		AI Tools and Applications	0	1	3	2.5
6	HSM		English for Technical Communications and MOODLES laboratory	0	0	3	1.5
7	BSC		Physics for Advanced Computing Lab	0	0	3	1.5
8	ESC		C and Data Structures Lab	0	0	3	1.5
9	ESC		IT and Electronics Workshop	0	0	3	1.5
10	MNC		Universal Human Values-II	2	0	0	0
Total				14	2	15	21.5

Branch – EEE

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	BSC		Linear Algebra and Calculus	3	0	0	3

6	HSM		English for Technical Communication and MOODLE Lab	0	0	3	1.5
7	BSC		Applied Chemistry for Emerging Technologies Lab	0	0	3	1.5
8	ESC		Computational Thinking and Problem Solving using C Lab	0	0	3	1.5
9	ESC		IT Workshop	0	0	3	1.5
10	MNC		Sports and Yoga or NSS/NCC	0	0	2	0
Total				14	0	14	20

Branch – ECE

S. No.	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communications	3	0	0	3
2	BSC		Linear Algebra and Calculus	3	0	0	3
3	BSC		Applied Physics	3	0	0	3
4	ESC		Computational Thinking and Problem Solving using 'C'	3	0	0	3
5	ESC		Principles of Electrical and Mechanical Engineering	3	0	0	3
6	HSM		English for Technical Communications and MOODLES laboratory	0	0	3	1.5
7	BSC		Applied Physics Laboratory	0	0	3	1.5
8	ESC		Computational Thinking and Problem Solving using 'C' Laboratory	0	0	3	1.5
9	ESC		Principles of Electrical and Mechanical Engineering Laboratory	0	0	3	1.5

9	ESC- 2 Lab	AI Tools and Applications	0	1	3	2.5
10	MNC-1	Environmental Science for Engineers	2	0	0	0
Total			14	2	15	21.5

II SEMESTER

Branch – CSE(DS)

S. No.	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		Differential Equations and Vector Calculus	3	0	0	3
3	BSC		Physics for advanced computing	3	0	0	3
4	ESC		Computational Thinking and Problem Solving using Python	3	0	0	3
5	ESC		Digital Logic Design	3	0	0	3
6	ESC		Basic Electrical and Electronics Engineering	3	0	0	3
7	HSM		English for Technical Communications and MOODLES laboratory	0	0	3	1.5
8	ESC		Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
9	BSC		Physics for Advanced Computing Lab	0	0	3	1.5
10	MNC		NSS/NCC	0	0	2	0
Total				15	1	11	22.5

Decision: Noted and approved the course structure, Syllabus

Suggestions given by the experts during BOS-2026

Subject : English

Board of studies for the academic year **2026-27** was conducted on **8th September, 2026**. The meeting was chaired by HoD.BS&H. While all the members of faculty of English, participated along with subject experts in professor cadre from reputed institutions & universities. After clearly discussing each and every unit in each paper of English (Theory and practical) besides UHV, NSS and sports, the board has finalized the syllabi for new regulation (V26) with few suggestions.

The finalized papers are enclosed here with attested by the experts.

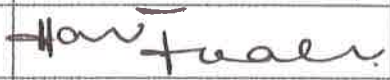
A few changes suggestions are made with by the University nominees and Subject experts (V26 regulations)

- Review and revision of Course Outcomes (COs) with appropriate action verbs to ensure clarity, measurability, and alignment with the intended learning outcomes.
- Identification and incorporation of Knowledge Levels (K1–K6) for the Course Outcomes to ensure appropriate coverage of different levels of learning.
- Discussion on the selection of experiments/activities for the English for Technical Communication Lab, with a decision to select any 10 experiments from the prescribed list based on relevance, skill development, and course requirements.
- Identification and segregation of advanced learners and slow learners based on their academic performance, with appropriate support, enrichment activities, and focused attention to be provided after the Mid-1 examination.
- Collaboration with the CSE Department for the implementation of Part-B activities through the Moodle-based Laboratory Learning Management System (LMS) to facilitate digital learning, activity-based learning, and effective monitoring of student participation

Department of English

Department Composition of Board of Studies:

The following members are drafted as internal members to Board of Studies for the Department of English

S.No	Name and Designation of Member	Signature
1	Chairperson: M.VisweswaraRao HOD Department of B.S&H	
UNIVERSITY NOMINEE		
1	Professor N. Usha Registrar, Krishna University, Machilipatnam	Present (Online)
SUBJECT EXPERT		
1	Dr. K Madhavi HOD Department of Humanities and Social Sciences, NIT, Warangal.	Present (Online)
FACULTY (INTERNAL) MEMBERS		
1	Mr B.Madhu, Assoc. Professor	
2	Mr. Y. Pulla Reedy, Asst. Professor	
3	Mr. V. Hari Babu, Asst. Professor	
4	Mr. Nannam Rajeswaramma Asst. Professor	

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Hearty Welcome
to
Hon'ble Members of BoS



Presentation
By
Mr. M. Visweswara Rao
Associate Professor & HoD, B.S&H

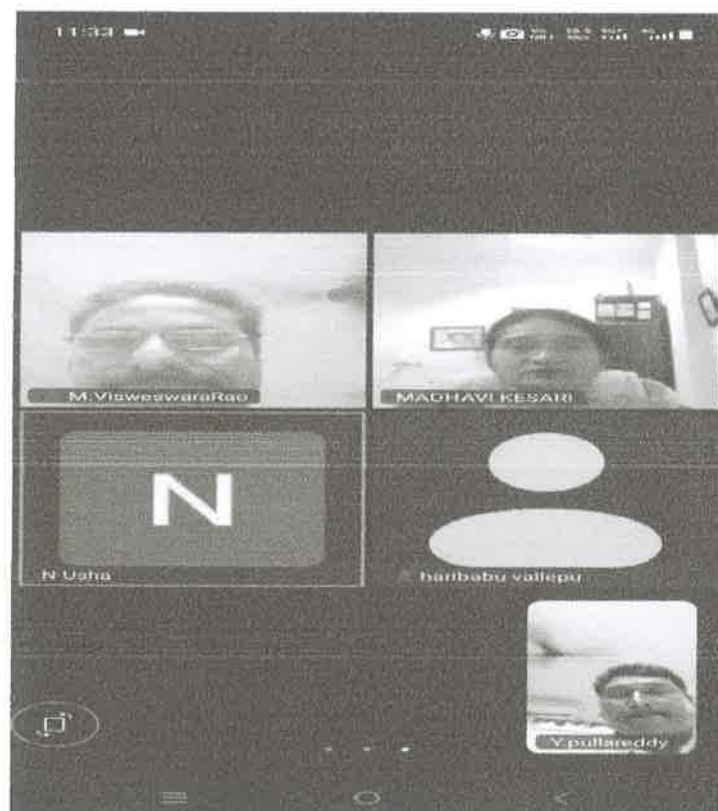
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Notes



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HOD & CHAIRMAN 18/09/2020

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DEAN

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Chairman
Board of Studies

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PRINCIPAL



SREE VAHINI INSTITUTE OF SCIENCE AND TECHNOLOGY

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Sai Vahini Nagar, NH-30, Tiruvuru-NTR Dist, A.P. Pin : 521235



BOS Meeting - Mathematics – A.Y.2026-27

Department of Basic Science and Humanities

MINUTES OF BOARD OF STUDIES MEETING A.Y.2026-27

Virtual Mode, Date: 10.09.2026

The Board studies meeting was held on 10th September, 2026 in the Department of Mathematics to discuss the following points for V26 regulations of I B. Tech I Sem & II Sem based on the model syllabus given by AICTE & JNTUK.

Detailed discussion on the following has been done

- Implementation of Course under V26 regulations.
- Disillusions on the allocation of Branches in CSE, CSE(AIML), CSE - DS, ECE, MECHANICAL. ~~EEE~~
- Course out comes & Mapping with PO statement along with justification.
- Innovation teaching & Evaluation Techniques in Mathematics
- Implementation of curriculum as per NEP(New Education Policy)
- Various steps to improve the skills & Knowledge of the students.

Course Structure for B. Tech (Electronics and Communication Engineering)

B. Tech I Year I Semester (5 Theory, 4 Laboratory, 01 MNC)

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communications	3	0	0	3
2	BSC		Linear Algebra and Calculus	3	0	0	3
3	BSC		Applied Physics	3	0	0	3
4	ESC		Communicational Thinking and Problem Solving using 'C'	3	0	0	3
5	ESC		Principles of Electrical and Mechanical Engineering	3	0	0	3
6	HSM		English for Technical Communications and MOODLES	0	0	3	1.5
7	BSC		Applied Physics Laboratory	0	0	3	1.5
8	ESC		Computational Thinking and Problem Solving 'C' Laboratory	0	0	3	1.5
9	ESC		Principles of Electrical and Mechanical Engineering Laboratory	0	0	3	1.5
10	MNC-1		Universal Human Values-2(No Credits)	2	0	0	0
Total				17	0	12	21

B. Tech (I Year II Semester)- II Semester (4 Theory & 5 Laboratories & 01 MNC)

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	BSC		Differential Equations and Vector Calculus	3	0	0	3
2	BSC		Applied Chemistry	3	0	0	3
3	ESC		Data Structures and Algorithms using 'C' and 'Python'	0	1	3	2.5
4	PCC		Network Analysis	3	0	0	3
5	ESC		Foundations of Quantum Technologies	3	0	0	3
6	ESC		AI Tools and Applications	0	1	3	2.5
7	PCC		Network Analysis Laboratory	0	0	3	1.5
8	ESC		IT and Electronic Workshop Laboratory	0	0	2	1.0

9	BSC		Applied Chemistry Laboratory	0	0	3	1.5
10	MNC-2		NSS/NCC/Scouts & Guides/Community Service/Sports (No Credits)	0	0	2	0
			Total	12	2	16	21

Course Structure for B. Tech CSE-AIML

B. Tech - I Year I Semester (5 Theory, 4 Laboratory, 01 MNC)

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		Linear Algebra and Calculus	3	0	0	3
3	BSC		Physics for advanced computing	3	0	0	3
4	ESC		C and Data Structures	4	0	0	4
5	ESC		AI Tools and Applications	0	1	3	2.5
6	HSM		English for Technical Communications and MOODLES	0	0	3	1.5
7	BSC		Physics for Advanced Computing Lab	0	0	3	1.5
8	ESC		C and Data Structures Lab	0	0	3	1.5
9	ESC		IT and Electronics Workshop	0	0	3	1.5
10	MNC		Universal Human Values-II	2	0	0	0
			Total	15	1	15	21.5

B.Tech I Year - II Semester

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	BSC		Differential Equations and Vector Calculus	3	0	0	3
2	BSC		Applied Chemistry for Engineering Technologies	3	0	0	3
3	ESC		Computational Thinking and Problem Solving using Python	3	0	0	3
4	ESC		Digital Logic Design	3	0	0	3
5	ESC		Design Thinking and Innovation	0	1	3	2.5
6	ESC		Basic Electrical and Electronics Engineering	3	0	0	3
7	ESC		Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
8	BSC		Applied Chemistry for	0	0	3	1.5

			<i>Engineering Technologies Lab</i>				
9	MNC		NSS/NCC	0	0	2	0
			<i>Total</i>	15	1	11	20.5

B. Tech - I Year I Semester CSE-DS

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	BSC		<i>Linear Algebra and Calculus</i>	3	0	0	3
2	BSC		<i>Applied Chemistry for Engineering Technologies</i>	3	0	0	3
3	ESC		<i>C and Data Structure</i>	4	0	0	4
4	ESC		<i>AI Tools and Applications</i>	0	1	3	2.5
5	ESC		<i>Design Thinking and Innovation</i>	0	1	3	2.5
6	BSC		<i>Applied Chemistry for Engineering Technologies Lab</i>	0	0	3	1.5
7	ESC		<i>C and Data Structure Lab</i>	0	0	3	1.5
8	ESC		<i>IT and Electronics Workshop</i>	0	0	3	1.5
9	MNC		<i>Universal Human Values-II</i>	2	0	0	0
			<i>Total</i>				19.5

B. Tech (I Year - II Semester)

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		<i>Differential Equations and Vector Calculus</i>	3	0	0	3
3	BSC		<i>Physics for advanced computing</i>	3	0	0	3
4	ESC		<i>Computational Thinking and Problem Solving using Python</i>	3	0	0	3
5	ESC		<i>Digital Logic Design</i>	3	0	0	3
6	ESC		<i>Basic Electrical and Electronics Engineering</i>	3	0	0	3
7	HSM		<i>English for Technical Communications and MOODLES laboratory</i>	0	0	3	1.5
8	ESC		<i>Computational Thinking and Problem Solving using Python Lab</i>	0	0	3	1.5
9	BSC		<i>Physics for advanced Computing Lab</i>	0	0	3	1.5

			<i>Total</i>	<i>12</i>	<i>1</i>	<i>17</i>	<i>20.5</i>
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B. TECH – ELECTRICAL & ELECTRONICS ENGINEERING

B. Tech – I Year I Semester (I Semester)

<i>S.No</i>	<i>Course Category</i>	<i>Course Code</i>	<i>Title</i>	<i>L</i>	<i>T</i>	<i>P</i>	<i>Credits</i>
1	BSC		LINEAR Algebra and Calculus	3	0	0	3
2	BSC		Physics for Electrical Systems	3	0	0	3
3	ESC		Computational Thinking and Problem Solving with C	3	0	0	3
4	ESC		Basic Electrical Circuits	3	0	0	3
5	HSM		English for Technical Communication	3	0	0	3
6	BSC		Physics for Electrical system Lab	0	0	3	1.5
7	ESC		Computational Thinking and Problem Solving with C Lab	0	0	3	1.5
8	HSM		English for Technical Communications and Moodles Lab	0	0	3	1.5
9	ESC		Basic Electrical Circuits Lab	0	0	3	1.5
10	MNC		NSS/NCC/Community Service	0	0	2	0
			<i>Total</i>	<i>15</i>	<i>0</i>	<i>14</i>	<i>21</i>

B. Tech (I Year – II Semester) – II Semester

<i>S.No</i>	<i>Course Category</i>	<i>Course Code</i>	<i>Title</i>	<i>L</i>	<i>T</i>	<i>P</i>	<i>Credits</i>
1	BSC		Differential Equations and Vector Calculus	3	0	0	3
2	BSC		Chemistry for Electrical Systems	3	0	0	3
3	PCC		Electrical Circuits Analysis	3	0	0	3
4	PCC		Semiconductor Devices	3	0	0	3
5	ESC		Engineering Graphics	0	1	3	2.5
6	BSC		Chemistry for Electrical System Lab	0	0	3	1.5
7	PCC		Electrical Circuit Analysis Lab	0	0	3	1.5
8	ESC		Design Thinking and Innovation	0	0	2	1
9	ESC		IT & Electronic Workshop	0	0	2	1
10	MNC		Sports and Yoga	0	0	2	0
			<i>Total</i>	<i>12</i>	<i>2</i>	<i>16</i>	<i>21</i>

Decision : Noted and approved the course structure, syllabus.

The following items were also discussed and approved.

I Semester – Linear Algebra & Calculus

Two changes in Unit-1.

1. The concept of **Diagonal Dominance** should be explained clearly.
2. **Spectral Radius** of Eigen Values (Converging conditions) to be explained.

There are no changes in Unit-II & III

Unit-IV

'Equality constraints' must be added in between 'maxima and minima of functions of two variables without and with constraints.'

Reference Book Recommendation

It is suggested that the latest reference book, R. K. Jain, Advanced Engineering Mathematics, Nirosha Publications.

II SEMESTER : Differential Equations & Vector Calculus :

Suggestion:

The faculty are advised to explain **all five standard methods of finding Particular Integrals (P.I.)** in detail. The **Inverse Operator Method** should also be explained clearly, with suitable examples and emphasis on the conditions and procedures involved in each method.

Unit-II

It is suggested that, **after the topic "Wronskian,"** the following topics may be added to the syllabus:

Linear Differential Equations with Constant Coefficients, Legendre's Differential Equation,
Cauchy's Reducible Constant-Coefficients.

Suggestion Regarding Reference Books

It is suggested that the following standard reference books may be added to the **Mathematics syllabus**:

1. **R. K. Jain & S. R. K. Jain** – *Advanced Engineering Mathematics*.

After reviewing the submitted syllabus, again it was scrutinized by Dr. Kasi Viswanadhamgar, NIT Warangal and Member BoS, SVIST, and also verified by Our Subject Expert, Dr. Ch. Baby Rani garu, Siddhartha Academy of higher Education, Vijayawada.

10	MNC		NSS/NCC	0	0	2	0
			Total	15	1	11	22.5

B.Tech CSE Course Structure

B.Tech - I Year - I Semester

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		Linear Algebra and Calculus	3	0	0	3
3	BSC		Physics for advanced computing	3	0	0	3
4	ESC		C and Data Structure	4	0	0	4
5	ESC		AI Tools and Applications	0	1	3	2.5
6	HSM		English for Technical Communications and MOODLES laboratory	0	0	3	1.5
7	BSC		Physics for Advanced Computing Lab	0	0	3	1.5
8	ESC		C and Data Structures Lab	0	0	3	1.5
9	BSC		IT and Electronics Workshop	0	0	3	1.5
10	MNC		Universal Human Values-II	2	0	0	0
			Total	15	1	15	21.5

B.Tech(I Year - II Semester)

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	BSC		Differential Equations and Vector Calculus	3	0	0	3
2	BSC		Applied Chemistry for Engineering Technologies	3	0	0	3
3	ESC		Computational Thinking and Problem Solving using Python	3	0	0	3
4	ESC		Digital Logic Design	3	0	0	3
5	ESC		Design Thinking and Innovation	0	1	3	2.5
6	ESC		Basic Electrical and Electronics Engineering	3	0	0	3
7	ESC		Computational Thinking and Problem Solving using Python Lab	0	0	33	1.5
8	BSC		Applied Chemistry for Engineering Technologies Lab	0	0	3	1.5
9	MNC		NSS/NCC	0	0	2	0

			<i>Total</i>	15	1	11	20.5
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B.Tech I Year I Semester (I Semester) - MECHANICAL

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	HSM-1		English for Technical Communication	3	0	0	3
2	BSC-1		Linear Algebra and Calculus	3	0	0	3
3	BSC-2		Physics for Mechanical System	3	0	0	3
4	ESC-1		Computational Thinking and Problem Solving using Python	3	0	0	3
5	ESC-2		Engineering Graphics	0	1	3	2.5
6	HSM-1 Lab		English for Technical Communications and MOODLES Lab	0	0	3	1.5
7	Bsc-1 Lab		Physics for Mechanical Systems Lab	0	0	3	1.5
8	Esc-1 Lab		Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
9	ESC-2 Lab		AI Tools and Applications	0	1	3	2.5
10	MNC-1		Environmental Science for Engineers	2	0	0	0
			<i>Total</i>	14	2	15	21.5

B.Tech - I Year - II Semester (II Semester)

S.No	Course Category	Course Code	Title	L	T	P	Credits
1	BSC-3		Differential Equations and Vector Calculus	3	0	0	3
2	BSC-4		Chemistry for Mechanical Engineers	3	0	0	3
3	ESC-3		Basic Electrical and Electronics Engineering	3	0	0	3
4	ESC-4		Engineering Mechanics	3	0	0	3
5	ESC-5		Design Thinking and Innovation	0	1	3	2.5
6	ESC-3 Labs		Basic Electrical and Electronics Engineering Lab	0	0	3	1.5
7	ESC-4 Labs		Engineering Mechanics Lab	0	0	3	1.5
8	ESC-5 Labs		Workshop Practice	0	0	3	1.5
9	BSC-2 Labs		Chemistry for Mechanical Engineers Lab	0	0	3	1.5
10	MNC-2		NCC/NSS	0	0	2	0

The following members are drafted as internal members to Board of Studies for the Department of Mathematics.

The following members are drafted as internal members to Board of Studies for the Department of Mathematics.

S.No	Name of the Member	Designation of Member	Signature
1	Mr. M. Visweswara Rao Assoc. Professor, Sree Vahini Institute of Science and Technology.	Chairperson	
2	Dr. K V N Kasi Viswanadham Professor, NIT Warngal, Mobile :9866028867, Email:kasi@nitw.ac.in	University Nominee,	Present(Online)
3	Dr. Ch. Baby Rani Professor, Siddhartha Academy of higher Education, Vijayawada, Mobile: 9959503380, Email:ranicbrl@gmail.com	SubjectExpert	Present(Online)
4	Mr. Ch Someswara Rao Assoc. Professor, Sree Vahini Institute of Science and Technology	Principal Nominee	Ch. Someswara Rao
5	Mr. Sai Pratap Asst. Professor, Sree Vahini Institute of Science and Technology	Principal Nominee	
6	Smt. G Hemalatha Asst. Professor, Sree Vahini Institute of Science and Technology	Principal Nominee	G. Hemalatha
7	Mr. G. Nagarjuna Rao Asst. Professor, Sree Vahini Institute of Science and Technology	Principal Nominee	G. Nagarjuna Rao
8	Mr. M. Gurunadham Asst. Professor, Sree Vahini Institute of Science and Technology	Principal Nominee	



COURSE CODE	LINEAR ALGEBRA AND CALCULUS	L-T-P-C
		3-0-0-3

Course Objectives:

The main objective of this course is to provide the learner with variety of linear algebra techniques to solve linear systems, orthogonal representation of the quadratic surfaces and apply its knowledge in optimization problems.

It aims further to calculate areas, surfaces and volumes in various coordinate systems.

Course Outcomes:

After successful completion of this course, the student will be able to:

CO1: Apply matrix algebra and numerical techniques to determine the rank, inverse, eigenvalues and eigenvectors of matrices, solve homogeneous and non-homogeneous systems of linear equations using direct and iterative methods, and analyze their applications in engineering and scientific problems (K2, K3, K5).

CO2: Analyze and solve engineering problems by applying matrix diagonalization, Singular Value Decomposition (SVD), the Cayley-Hamilton Theorem for matrix inverses and powers, and orthogonal transformations to classify and reduce quadratic forms to canonical forms (K2, K3, K5).

CO3: Find the mean value of a given function and use it to estimate the bounds of a given function (K2, K3, K5).

CO4: Compute change in the dependent variable with respect to many independent variables and Jacobians. Apply the knowledge in optimizing functions of several variables (K2, K3, K5).

CO5: Compute double and triple integrals of functions of several variables and must be able to change the coordinate systems from Cartesian to polar, spherical and cylindrical coordinates (K2, K3, K5).

UNIT I

Matrices, Eigen values, Eigenvectors: Rank of a matrix by echelon form, normal form. Inverse of non-singular matrices by Gauss-Jordan method, System of linear equations: Solving system of Homogeneous and Non-Homogeneous equations, Gauss elimination method, Jacobi and Gauss Seidel Iteration Methods. Eigen values, Eigen vectors and their properties.

UNIT II

Denationalization of a matrix:Diagonalization of a matrix, Cayley-Hamilton Theorem (without proof), finding inverse and power of a matrix by Cayley-Hamilton Theorem, Quadratic forms and Nature of the Quadratic Forms, Reduction of Quadratic form to canonical forms by Orthogonal Transformation. Singular valued Decomposition.

UNIT III

Calculus:Mean Value Theorems: Rolle's Theorem, Lagrange's mean value theorem with their geometrical interpretation, Cauchy's mean value theorem, Taylor's and Maclaurin theorems with remainders (without proof), Problems and applications on the above theorems. Taylor's and Maclaurin series

UNIT IV

Partial differentiation and Applications (Multivariable calculus):Functions of several variables: Continuity and Differentiability, Partial derivatives, total derivatives, chain rule, Euler's Theorem, Taylor's and Maclaurin's series expansion of functions of two variables. Jacobians, Functional dependence, Maxima and Minima of functions of two variables without constraints and with equality Constraints-Method of Lagrange multipliers.

UNIT V

Multiple Integrals:Double integrals, change of order of integration, triple integrals, change of variables from Cartesian to polar, cylindrical and spherical coordinates. Finding areas (by double integrals) and volumes (by double integrals and triple integrals).

Learning Resources:

Text books

Grewal, B.S.(2017).Higher engineering mathematics(44thed.).Khanna Publishers.

Kreyszig, E.(2018).Advanced engineering mathematics(10thed.).John Wiley & Sons.

Reference Books

Ramana, B.V.(2017).Higher Engineering Mathematics. Mc Graw Hill Education.

James, G.(2018).Advanced Modern Engineering Mathematics.5thEditionPearsonpublishers.

Dass, H.K.(2022).Advanced Engineering Mathematics,22ndEdition.S.Chand Publications.

R K Jain and S.R.K.Iyengar (2019) Advanced Engineering in Mathematics (5th edition), Narosha Publications.

Web Resources

https://en.wikipedia.org/wiki/System_of_linear_equations

https://en.wikipedia.org/wiki/Eigenvalues_and_eigenvectors

<https://www.math.hmc.edu/calculus/tutorials/eigenstuff/>

https://en.wikipedia.org/wiki/Quadratic_form

<https://en.wikipedia.org/wiki/Calculus>

https://en.wikipedia.org/wiki/Partial_derivative

https://www.whitman.edu/mathematics/calculus_online/section14.03.html

https://en.wikipedia.org/wiki/Multiple_integral

<http://tutorial.math.lamar.edu/Classes/CalcIII/MultipleIntegralsIntro.aspx>

COURSECODE	DIFFERENTIAL EQUATIONS AND VECTOR CALCULUS	L-T-P-C
		3-0-0-3

Course Objectives:

This course is aimed to provide the learner with several methods for solving differential equations and partial differential equations.

To prepare the student to calculate gradient, surface and volume integrals by applying standard theorems.

Course Outcomes: *After successful completion of this course, the student will be able to:*

CO1: Model simple physical problems involving rate as first order differential equations and solve the resulting equation (K2, K3, K5).

CO2: Apply differential equation techniques to formulate and solve homogeneous and non-homogeneous differential equations, solve simultaneous linear differential equations, and apply these methods to model and analyze L-C-R circuit problems and simple harmonic motion (K2, K3, K5).

CO3: Solve partial differential equations that model physical processes (K2, K3, K5).

CO4: Apply the knowledge of gradient, divergence and curl and interpret the physical meaning of different operators (K2, K3, K5).

CO5: Compute the work done against a field, circulation and flux using vector calculus methods (K2, K3, K5).

UNIT I

Differential equations of first order and first degree

Exact equations and equations reducible to exact form(integrating factor), Linear differential equations – Bernoulli's equations. Orthogonal Trajectories, Applications: Newton's Law of cooling–Law of natural growth and decay–Electrical circuits.

UNIT II

Linear differential equations of higher order (Constant Coefficients): Definitions, homogeneous and non-homogeneous, complementary function, particular integral (for e^{ax} , $\cos(ax + b)$ or $\sin(ax + b)$, polynomial, $e^{ax}V(x)$, x), general solution, Method of variation of parameters -Wronskian, reducible to constant coefficients – Cauchy's and Legendre forms, Simultaneous linear equations, Applications to L-C-R Circuit problems and Simple Harmonic motion.

UNIT III

Partial Differential Equations: Introduction and formation of Partial Differential Equations by elimination of arbitrary constants and arbitrary functions, solutions of first order linear equations using Lagrange's method, non-linear partial differential equations using Charpit's Method. Homogeneous Linear Partial differential equations with constant coefficients.

UNIT IV

Vector differentiation: Scalar and vector point functions, vector operator Del, Gradient and applications, Directional derivative, Divergence - Solenoidal and Curl-Irrotational Field - Scalar Potential, Vector identities.

UNIT V

Vector integration:

Line integral-circulation- work done by the force, surface integral-flux, Green's theorem in a plan (without proof), Stoke's theorem (without proof), volume integral, Divergence theorem (without proof) and their applications.

Textbooks

1. Grewal, B.S. (2017). Higher engineering mathematics (44th ed.). Khanna Publishers.
2. Kreyszig, E. (2018). Advanced engineering mathematics (10th ed.). John Wiley & Sons.

Reference Books

1. Ramana, B.V. (2017). Higher Engineering Mathematics. Mc Graw Hill Education.
2. James, G. (2018). Advanced Modern Engineering Mathematics. 5th Edition Pearson publishers.
3. Dass, H.K. (2022). Advanced Engineering Mathematics, 22nd Edition. S.Chand Publications.
4. R K Jain and S.R.K. Iyengar (2019) Advanced Engineering in Mathematics (5th edition), Narosha Publications.

Web Resources:

<https://mathworld.wolfram.com/First-OrderOrdinaryDifferentialEquation.html>

https://en.wikipedia.org/wiki/Differential_equation

https://en.wikipedia.org/wiki/Partial_differential_equation

https://en.wikipedia.org/wiki/Vector_calculus

https://en.wikipedia.org/wiki/Vector_calculus



HOD & Chairman


10/9/2026

Dean of Academics



PRINCIPAL

Department of Basic Science and Humanities

DEPARTMENT OF PHYSICS

MINUTES OF 2st BOARD OF STUDIES MEETING

Virtual Mode, Date: 15-09-2026 @ 11am

Suggestions given by the experts during BOS-2026

Subject : Physics & Eng. Physics

Board of studies for the academic year **2026-27** was conducted on **15th September, 2026**. The meeting was chaired by Principal and HOD B.S&H. While all the members of faculty of Physics participated along with subject experts in professor cadre from reputed universities.

After clearly discussing each and every unit in each paper of Physics (Theory and practical) and V26 curriculum obtained in the academic years **2026-27**. **The board has finalized to continue the same syllabi** for (V26) with few suggestions. The following suggestions are enclosed here with attested by the experts.

1. The proposed **Applied Physics (I CSE and Allied Branches & I ECE Allied Branches) syllabus, Physics for Electrical Systems (I EEE) Syllabus, Physics for Mechanical Engineers (I Mechanical) Syllabus**, was discussed and recommended for implementation subject to institutional/university approval.
2. The **Course Outcomes (COs)** were reviewed and suitable modifications were recommended wherever necessary.
3. The **CO-PO/PSO mapping** was reviewed and recommendations were made for better alignment.
4. The existing Physics laboratory experiments were reviewed, and relevant application-oriented experiments were recommended.
5. Greater emphasis was recommended on **practical learning, problem-solving, laboratory skills, and engineering applications**.
6. The members recommended updating the course contents periodically in accordance with emerging developments in Physics and engineering.
7. Appropriate assessment methods may be adopted to measure the attainment of Course Outcomes effectively.
8. The suggestions of the external subject experts were taken into consideration for further academic improvement.

The following members are drafted as internal members to Board of Studies for the Department of Physics are

B.Tech CSE Course Structure

B.Tech.-I Year I Semester

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	HSM		English for Technical Communication	3	0	0	3
2	BSC		Linear Algebra and Calculus	3	0	0	3
3	BSC		Physics for advanced computing	3	0	0	3
4	ESC		C and Data Structures	4	0	0	4
5	ESC		AI Tools and Applications	0	1	3	2.5
6	HSM		English for Technical Communications and MOODLES laboratory	0	0	3	1.5
7	BSC		Physics for Advanced Computing Lab	0	0	3	1.5
8	ESC		C and Data Structures Lab	0	0	3	1.5
9	ESC		IT and Electronics Workshop	0	0	3	1.5
10	MNC		Universal Human Values-II	2	0	0	0
Total				15	1	15	21.5

B.Tech (I year-II Semester)-II semester

S.No.	Course Category	Course Code	Title	L	T	P	Credits
1	BSC		Differential Equations and Vector Calculus	3	0	0	3
2	BSC		Applied Chemistry for Emerging Technologies	3	0	0	3
3	ESC		Computational Thinking and Problem Solving using Python	3	0	0	3
4	ESC		Digital Logic Design	3	0	0	3
5	ESC		Design Thinking and Innovation	0	1	3	2.5
6	ESC		Basic Electrical and Electronics Engineering	3	0	0	3
7	ESC		Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
8	BSC		Applied Chemistry for Emerging Technologies Lab	0	0	3	1.5
9	MNC		NSS/NCC	0	0	2	0
Total				15	1	11	20.5

Course Structure for B. Tech (Electronics and Communication Engineering)
B.Tech. – I Year I Semester (5 Theory 4 laboratory, 01 MNC)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM	—	English for Technical Communications	3	0	0	3
2	BSC	—	Linear Algebra and Calculus	3	0	0	3
3	BSC	—	Applied Physics	3	0	0	3
4	ESC	—	Computational Thinking and Problem Solving using 'C'	3	0	0	3
5	ESC	—	Principles of Electrical and Mechanical Engineering	3	0	0	3
6	HSM	—	English for Technical Communications and MOODLES Laboratory	0	0	3	1.5
7	BSC	—	Applied Physics Laboratory	0	0	3	1.5
8	ESC	—	Computational Thinking and Problem Solving using 'C' Laboratory	0	0	3	1.5
9	ESC	—	Principles of Electrical and Mechanical Engineering Laboratory	0	0	3	1.5
10	MNC-1	—	Universal Human Values – 2	2	0	0	0
Total				17	0	12	21

B.Tech (I year - II Semester) – II semester (4 Theory & 5 Laboratories & 01 MNC)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC	—	Applied Chemistry	3	0	0	3
3	ESC	—	Data Structures and Algorithms using 'C' and Python	0	1	3	2.5
4	PCC	—	Network Analysis	3	0	0	3
5	ESC	—	Foundations of Quantum Technologies	3	0	0	3
6	ESC	—	AI Tools and Applications	0	1	3	2.5
7	PCC	—	Network Analysis Laboratory	0	0	3	1.5
8	ESC	—	IT and Electronic Workshop Laboratory	0	0	2	1
9	BSC	—	Applied Chemistry Laboratory	0	0	3	1.5
10	MNC-2	—	NSS / NCC / Scouts & Guides / Community Service / Sports	0	0	2	0
Total				12	2	16	21

Course Structure for B. Tech CSE(AIML)

B.Tech. – I Year I Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM	—	English for Technical Communication	3	0	0	3
2	BSC	—	Linear Algebra and Calculus	3	0	0	3
3	BSC	—	Physics for Advanced Computing	3	0	0	3
4	ESC	—	C and Data Structures	4	0	0	4
5	ESC	—	AI Tools and Applications	0	1	3	2.5
6	HSM	—	English for Technical Communications and MOODLES Laboratory	0	0	3	1.5
7	BSC	—	Physics for Advanced Computing Lab	0	0	3	1.5
8	ESC	—	C and Data Structures Lab	0	0	3	1.5
9	ESC	—	IT and Electronics Workshop	0	0	3	1.5
10	MNC	—	Universal Human Values – II	2	0	0	0
Total				14	2	15	21.5

I B.Tech I Year - II Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC	—	Applied Chemistry for Emerging Technologies	3	0	0	3
3	ESC	—	Computational Thinking and Problem Solving using Python	3	0	0	3
4	ESC	—	Digital Logic Design	3	0	0	3
5	ESC	—	Design Thinking and Innovation	0	1	3	2.5
6	ESC	—	Basic Electrical and Electronics Engineering	3	0	0	3

7	ESC	—	Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
8	BSC	—	Applied Chemistry for Emerging Technologies Lab	0	0	3	1.5
9	MNC	—	NSS / NCC	0	0	2	0
Total				15	1	11	20.5

Course Structure for B. Tech CSE(DS)
B.Tech. – I Year I Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Linear Algebra and Calculus	3	0	0	3
2	BSC	—	Applied Chemistry for Emerging Technologies	3	0	0	3
3	ESC	—	C and Data Structures	4	0	0	4
4	ESC	—	AI Tools and Applications	0	1	3	2.5
5	ESC	—	Design Thinking and Innovation	0	1	3	2.5
6	BSC	—	Applied Chemistry for Emerging Technologies Lab	0	0	3	1.5
7	ESC	—	C and Data Structures Lab	0	0	3	1.5
8	ESC	—	IT and Electronics Workshop	0	0	3	1.5
9	MNC	—	Universal Human Values – II	2	0	0	0
Total				12	2	15	19.5

I B.Tech I Year - II Semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM	—	English for Technical Communication	3	0	0	3
2	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
3	BSC	—	Physics for Advanced Computing	3	0	0	3
4	ESC	—	Computational Thinking and Problem Solving using Python	3	0	0	3
5	ESC	—	Digital Logic Design	3	0	0	3
6	ESC	—	Basic Electrical and Electronics Engineering	3	0	0	3
7	HSM	—	English for Technical Communications and MOODLES Laboratory	0	0	3	1.5
8	ESC	—	Computational Thinking and Problem Solving using Python Lab	0	0	3	1.5
9	BSC	—	Physics for Advanced Computing Lab	0	0	3	1.5
10	MNC	—	NSS / NCC	0	0	2	0
Total				18	0	11	22.5

I B. TECH - ELECTRICAL & ELECTRONICS ENGINEERING

Course Structure

B.Tech. – I Year I Semester (I semester)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Linear Algebra and Calculus	3	0	0	3

2	BSC	—	Physics for Electrical Systems	3	0	0	3
3	ESC	—	Computational Thinking and Problem Solving with C	3	0	0	3
4	ESC	—	Basic Electrical Circuits	3	0	0	3
5	HSM	—	English for Technical Communication	3	0	0	3
6	BSC	—	Physics for Electrical Systems Lab	0	0	3	1.5
7	ESC	—	Computational Thinking and Problem Solving with C Lab	0	0	3	1.5
8	HSM	—	English for Technical Communications and MOODLES Lab	0	0	3	1.5
9	ESC	—	Basic Electrical Circuits Lab	0	0	3	1.5
10	MNC	—	NSS / NCC / Community Service	0	0	2	0
Total				15	0	14	21

B.Tech (I year - II Semester) – II semester

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC	—	Chemistry for Electrical Systems	3	0	0	3
3	PCC	—	Electrical Circuit Analysis	3	0	0	3
4	PCC	—	Semiconductor Devices	3	0	0	3
5	ESC	—	Engineering Graphics	0	1	3	2.5

6	BSC	—	Chemistry for Electrical Systems Lab	0	0	3	1.5
7	PCC	—	Electrical Circuit Analysis Lab	0	0	3	1.5
8	ESC	—	Design Thinking and Innovation	0	1	3	2.5
9	ESC	—	IT & Electronic Workshop	0	0	2	1
10	MNC	—	Sports and Yoga	0	0	2	0
Total				12	2	16	21

I B. TECH MECHANICAL ENGINEERING COURSE STRUCTURE AND SYLLABUS

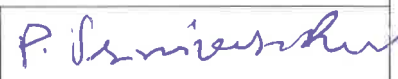
B. Tech I Year I Semester (I Semester)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	HSM-1	—	English for Technical Communication	3	0	0	3
2	BSC-1	—	Linear Algebra and Calculus	3	0	0	3
3	BSC-2	—	Physics for Mechanical Systems	3	0	0	3
4	ESC-1	—	Computational Thinking and Problem Solving Using Python	3	0	0	3
5	ESC-2	—	Engineering Graphics	0	1	3	2.5
6	HSM-1 Lab	—	English for Technical Communications and MOODLES Lab	0	0	3	1.5
7	BSC-1 Lab	—	Physics for Mechanical Systems Lab	0	0	3	1.5
8	ESC-1 Lab	—	Computational Thinking and Problem Solving Using Python Lab	0	0	3	1.5
9	ESC-2 Lab	—	AI Tools and Applications	0	1	3	2.5

10	MNC-1	—	Environmental Science for Engineers	2	0	0	0
Total				14	2	15	21.5

B. Tech- I year - II Semester (II Semester)

S. No.	Course Category	Course Code	Course Title	L	T	P	Credits
1	BSC-3	—	Differential Equations and Vector Calculus	3	0	0	3
2	BSC-4	—	Chemistry for Mechanical Engineers	3	0	0	3
3	ESC-3	—	Basic Electrical and Electronics Engineering	3	0	0	3
4	ESC-4	—	Engineering Mechanics	3	0	0	3
5	ESC-5	—	Design Thinking and Innovation	0	1	3	2.5
6	ESC-3 Labs	—	Basic Electrical and Electronics Engineering Lab	0	0	3	1.5
7	ESC-4 Labs	—	Engineering Mechanics Lab	0	0	3	1.5
8	ESC-5 Labs	—	Workshop Practice	0	0	3	1.5
9	BSC-2 Labs	—	Chemistry for Mechanical Engineers Lab	0	0	3	1.5
10	MNC-2	—	NCC / NSS	0	0	2	0
Total				12	1	17	20.5

S.No	Name and Designation of Member	Signature
1	Chairperson: Mr. M.Visweswara Rao, Assoc. Professor & HOD	
UNIVERSITY NOMINEE		
1	Dr.Sourabh Roy Professor NIT Warangal Warangal Telengana Mobile No: 8332969474 e-mail:sroy@nitw.ac.in	Present (Online)
SUBJECT EXPERT		
1	Dr. V. Venkata Raman Professor Yogi Vemana University Kadapa, Andhra Pradesh. Mobile No: 9885198235 Email.Id:vvramuphd@gmail.com	Present (Online)
FACULTY (INTERNAL) MEMBERS		
4	Mr.P. Srinivasa Rao, Asst. Professor	
5	Smt. P. Madhuri, Asst. Professor	





Chairman
Board of Studies

Head of the Dept.
Dept. of Basic Science and Humanities
Sree Vahini Institute of Science and Technology
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