



## AUTONOMOUS SCHEME OF TEACHING & EXAMINATIONS (STE)

### Under Graduate (UG) - BE First Year

**SCHEME: 2025**

**PHYSICS CYCLE**

**SEM: I**

**Date: 08-09-2025**

S. #	Course Type (CT)	Course Code	Course Title	BOS	Credits	Teaching Hrs/Week				Examinations				
						L	T	P	S	CIE Marks	SEE			Tot. Marks
						Lec.	Tut.	Pra.	SAAE		Dur.	Th. Marks	Lab. Marks	
1	ASC	25MAT11x	Applied Mathematics - I (Stream specific)	MATHS	4	3	2	0	1	50	03	50	-	100
2	IASC	25PHI12x	Applied Physics (Stream specific)	PHY	4	3	0	2	1	50	03	50	-	100
3	ESC	25yyT13	Engineering Science Course - I	Respective Engg. dept.	3	3	0	0	1	50	03	50	-	100
4	IESC	25yyI14	Programme Specific Course	Respective Engg. dept.	4	3	0	2	1	50	03	50	-	100
5	ETC	25ITT15	Introduction to AI and Applications	CSE^	3	3	0	0	1	50	03	50	-	100
6	SDC	25IDTS01	Innovation and Design Thinking Lab (IDEA Lab) {Project-based learning / workshop / maker's space}	Respective Engg. dept.	1	0	0	2	1	50	02	-	50	100
7	HSMC	25SKAH01/ 25BKAH02	Sanskritika Kannada / Balake Kannada	HSS	1	1	0	0	1	50	2	50	-	100
8	AEC	25AECH03	Skills for success: An approach to Aptitude and Soft Skills	HSS	PP/ NP	0	0	0	3	50	-	-	-	50
SEM-I Total					20	16	2	6	10	400		300	50	750
9	AICTE Activity points: Students have to earn 100 activity points between 01 to 08 semesters. Refer to the guidelines issued time to time.					Compulsory requirement for the award of degree								
10	Student Induction Program: The participation of students and their attendance is compulsory.													
ASC - Applied Science Course; IASC - Integrated Applied Science Course; ESC - Engineering Science Course; IESC - Integrated Engineering Science Course; HSMC- Humanities, Social sciences & Management Course; NCMC: Non Credit Mandatory course. PP/NP grade is awarded for NCMC: PP - Pass; NP-Not Pass. SAAE: Students Academic Activity engagement Hours - Self learning, project based learning, activity based learning, peer learning, etc. - Compulsory min. hours to be adopted per week by the faculty is mentioned. More no. of hours may be planned by the faculty. Holistic planning shall be done by the HOD at the class level for effective & productive outcomes. However, allocation of these hours in the timetable is not required. 25IDTS01: IDEA Lab - IDEA Lab - Respective Engg. departments to conduct the IDEA Lab based on the common guidelines issued. Tutorial sessions for mathematics course shall be conducted in laboratory Environment using MATLAB software to enhance computational understanding and application skills														





## AUTONOMOUS SCHEME OF TEACHING & EXAMINATIONS (STE)

### Under Graduate (UG) - BE First Year

**SCHEME: 2025**

**CHEMISTRY CYCLE**

**SEM: I**

**Date: 08-09-2025**

S. #	Course Type (CT)	Course Code	Course Title	BOS	Credits	Teaching Hrs/Week				Examinations				
						L	T	P	S	CIE Marks	SEE			Tot. Marks
						Lec.	Tut.	Pra.	SAAE		Dur.	Th. Marks	Lab. Marks	
1	ASC	25MAT11x	Applied Mathematics - I (Stream specific)	MATHS	4	3	2	0	1	50	03	50	-	100
2	IASC	25CHI12x	Applied Chemistry (Stream specific)	CHE	4	3	0	2	1	50	03	50	-	100
3	ESC	25yyT13	Engineering Science Course - I	Respective Engg. dept.	3	3	0	0	1	50	03	50	-	100
4	IESC	25CDI14	Computer-Aided Engineering Drawing	ME	3	2	0	2	1	50	03	-	50	100
5	IESC	25PLT15x	Programming Language Course	CSE^	4	3	0	2	1	50	03	50	-	100
6	SDC	25IDTS01	Innovation and Design Thinking Lab (IDEA Lab) {Project-based learning / workshop / maker's space}	Respective Engg. dept.	1	0	0	2	1	50	02	-	50	100
7	AEC	25ENGH04	Communicative Skills In English	HSS	1	0	2	0	1	50	02	50	-	100
8	NCMC	25CIPH05	Constitution of India and Professional Ethics	HSS	PP/ NP	1	0	0	1	50	-	-	-	50
SEM-I Total					20	15	4	8	8	400		250	50	750
9	AICTE Activity points: Students have to earn 100 activity points between 01 to 08 semesters. Refer to the guidelines issued time to time.				Compulsory requirement for the award of degree									
10	Student Induction Program: The participation of students and their attendance is compulsory.													

ASC - Applied Science Course; IASC - Integrated Applied Science Course; ESC - Engineering Science Course; IESC - Integrated Engineering Science Course; HSMC- Humanities, Social sciences & Management Course; NCMC: Non Credit Mandatory course. PP/NP grade is awarded for NCMC: PP - Pass; NP-Not Pass.

SAAE: Students Academic Activity engagement Hours - Self learning, project based learning, activity based learning, peer learning, etc. - Compulsory min. hours to be adopted per week by the faculty is mentioned. More no. of hours may be planned by the faculty. Holistic planning shall be done by the HOD at the class level for effective & productive outcomes. However, allocation of these hours in the timetable is not required.

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Tutorial sessions for mathematics course shall be conducted in laboratory Environment using MATLAB software to enhance computational understanding and application skills.





Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi

## AUTONOMOUS SCHEME OF TEACHING & EXAMINATIONS (STE)

### Under Graduate (UG) - BE First Year

**SCHEME: 2025 PHYSICS CYCLE(for CHE in I SEM)**

**SEM: II**

**Date: 08-09-2025**

S. #	Course Type (CT)	Course Code	Course Title	BOS	Credits	Teaching Hrs/Week				Examinations				
						L	T	P	S	CIE Marks	SEE			Tot. Marks
						Lec.	Tut.	Pra.	SAAE		Dur.	Th. Marks	Lab. Marks	
1	ASC	25MAT21x	Applied Mathematics - II (Stream Specific)	MATHS	4	3	2	0	1	50	03	50	-	100
2	IASC	25PHI22x	Applied Physics (Stream Specific)	PHY	4	3	0	2	1	50	03	50	-	100
3	ESC	25yyT23	Engineering Science Course - II	Respective Engg. dept.	3	3	0	0	1	50	03	50	-	100
4	IESC	25yyI24	Programme Specific Course	Respective Engg. dept.	4	3	0	2	1	50	03	50	-	100
5	ETC	25ITT25	Introduction to AI and Applications	CSE^	3	3	0	0	1	50	03	50	-	100
6	HSMC	25SKAH01/ 25BKAH02	Sanskrutika Kannada / Balake Kannada	HSS	1	1	0	0	1	50	02	50	-	100
7	PRJ	25PRJS02	Interdisciplinary Project (Project Based Learning)	Respective Engg. dept.	1	0	0	2	2	50	02	-	50	100
8	AEC	25AECH03	Skills for success: An approach to Aptitude and Soft Skills	HSS	PP/ NP	0	0	0	3	50	-	-	-	50
SEM-I Total					20	16	2	6	11	400		300	50	750
9	AICTE Activity points: Students have to earn 100 activity points between 01 to 08 semesters. Refer to the guidelines issued time to time.				Compulsory requirement for the award of degree									
10	Student Induction Program: The participation of students and their attendance is compulsory.													
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## AUTONOMOUS SCHEME OF TEACHING & EXAMINATIONS (STE)

### Under Graduate (UG) - BE First Year

**SCHEME: 2025 CHEMISTRY CYCLE (for PHY in I SEM)**

**SEM: II**

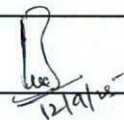
**Date: 08-09-2025**

S. #	Course Type (CT)	Course Code	Course Title	BOS	Credits	Teaching Hrs/Week				Examinations				
						L	T	P	S	CIE Marks	SEE			Tot. Marks
						Lec.	Tut.	Pra.	SAAE		Dur.	Th. Marks	Lab. Marks	
1	ASC	25MAT21x	Applied Mathematics - II (Stream Specific)	MATHS	4	3	2	0	1	50	03	50	-	100
2	IASC	25CHI22x	Applied Chemistry (Stream Specific)	CHE	4	3	0	2	1	50	03	50	-	100
3	ESC	25yyT23	Engineering Science Course - II	Respective Engg. dept.	3	3	0	0	1	50	03	50	-	100
4	IESC	25CDI24	Computer Aided Engineering Drawing	ME	3	2	0	2	1	50	03	-	50	100
5	IESC	25PLT25x	Programming Language Course	CSE^	4	3	0	2	1	50	03	50	-	100
6	AEC	25ENGH04	Communicative Skills In English	HSS	1	1	0	0	1	50	02	50	-	100
7	PRJ	25PRJS02	Interdisciplinary Project (Project Based Learning)	Respective Engg. dept.	1	0	0	2	2	50	02	-	50	100
8	NCMC	25CIPH05	Constitution of India and Professional Ethics	HSS	PP/ NP	1	0	0	1	50	-	-	-	50
SEM-I Total					20	16	2	8	9	400		250	50	750
9	AICTE Activity points: Students have to earn 100 activity points between 01 to 08 semesters. Refer to the guidelines issued time to time.				Compulsory requirement for the award of degree									
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### Choices for the courses in the STE

1. Applied Mathematics - I (Stream Specific) {25MAT11x}			1. Applied Mathematics-II (Stream Specific) {25MAT21x}		
S. #	Course code	Course Title	S. #	Course code	Course Title
1	25MAT11A	Calculus and Linear Algebra	1	25MAT21A	Numerical Methods and Advanced Linear Algebra
2	25MAT11B	Differential Equations & Linear Algebra	2	25MAT21B	Calculus, Numerical Techniques & Laplace Transforms
3	25MAT11C	Differential Calculus, Equations and Linear Algebra	3	25MAT21C	Advanced Calculus and Numerical Methods
4	25MAT11D	Differential Calculus and Linear Algebra	4	25MAT21D	Vector Calculus and Numerical Methods
A: IT Stream {CSE, ISE, AIML, CSE(DS)}; B: EE Stream {ECE, EEE}; C: CV Stream; D: ME Stream					

2. Applied Physics (Stream Specific) (IASC) {25PHI12x / 25PHI22x}			2. Applied Chemistry (Stream Specific) {25CHI12x / 25CHI22x}		
S. #	Course code	Course Title	S. #	Course code	Course Title
1	25PHI12A / 25PHI22A	Applied Physics of Quantum Systems and Applications	1	25CHI12A / 25CHI22A	Applied Chemistry for Smart Materials
2	25PHI12B / 25PHI22B	Applied Physics for Advanced Materials and Sensors	2	25CHI12B / 25CHI22B	Applied Chemistry for Emerging Electronics and Futuristic Devices
3	25PHI12C / 25PHI22C	Applied Physics for Sustainable Structures & 	3	25CHI12C / 25CHI22C	Applied Chemistry for Environmental Sustainability in Structures & Materials
4	25PHI12D / 25PHI22D	Applied Physics of Materials	4	25CHI12D / 25CHI22D	Applied Chemistry for Advanced Mechanical Materials
A: IT Stream {CSE, ISE, AIML, CSE(DS)}; B: EE Stream {ECE, EEE}; C: CV Stream; D: ME Stream					

3. Engineering Science Course - I & II {25yyT13 / 25yyT23}			Note: 1) Respective departments must offer one course in each semester other than the course offered under Program Specific Course.
S. #	Course code	Course Title	
1	25ITT13 / 25ITT23	Essentials of Information Technology	
2	25ECT13 / 25ECT23	Introduction to Electronics & Communication Engineering	
3	25EET13 / 25EET23	Introduction to Electrical Engineering	
4	25CVT13 / 25CVT23	Introduction to Building Science and Engineering Mechanics	
5	25MET13 / 25MET23	Introduction to Mechanical Engineering	



4. Programme Specific Course {25yyI14 / 25yyI24}			<b>Note:</b> 1) Respective departments shall offer one programme specific course of their respective stream/branch in the semester other than Engineering Science Course. 2) 25ITI14 / 24: Common for all the IT branches {CSE, ISE, AIML, CSE(DS)} 3) 25ECI14 / 24: For ECE 4) 25EEI14 / 24: For EEE 5) 25CVI14 / 24: For Civil Engg. 6) 25MEI14 / 24: For Mech. Engg.
S. #	Course code	Course Title	
1	25ITI14 / 24	Programming in C	
2	25ECI14 / 24	Fundamentals of Electronics & Communication Engineering	
3	25EEI14 / 24	Elements of Electrical Engineering	
4	25CVI14 / 24	Engineering Mechanics	
5	25MEI14 / 24	Elements of Mechanical Engineering	

5. Programming Language Course {25PLT15x / 25PLT25x}			<b>Note:</b> 1) The respective departments shall offer the respective course of their stream. 2) A: IT Stream {CSE, ISE, AIML, CSE(DS)}; B: non-IT Stream {ECE, EEE, CV, & ME}
S. #	Course code	Course title	
1	25PLT15A / 25PLT25A	Python Programming (for IT stream-CSE & Allied programme)	
2	25PLT15B / 25PLT25B	Introduction to C Programming (for non-IT stream)	

ACADEMIC DEAN

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 Prof. & Academic Dean  
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ACADEMIC DIRECTOR