

(Autonomous Institution Affiliated to VTU, Belagavi)

Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Departments of CSE*, AIML & CSBS

I Semester (Physics Cycle)

SI.	Course	devined to	alignos est mai tradicioles A.A.D. Promis 196	Teaching /	C	redits	Distrib	oution	zaliaju.	Exa	aminatio	n Tradau	
No.	Category	Course Code	Course Name	QP Setting Department	L	T	Р	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/week
1.	ASC(IC)	24MATCS11	Multivariate Calculus and Linear Algebra	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24PHYCS12	Quantum Computing and Photonics	Physics	3	0.5	0.5	4	50	50	100	3	5
3	ESC	24POP13	Principles of Programming using C	CSE/AIML /CSBS	2	0	1	3	50	50	100	3	4
4	ESC-I	24ESC14X	Engineering Science Course I	Concerned Department	3	0	0	3	50	50	100	3	3
5	ETC-I	24ETC15X	Emerging Technology Course I	Any Department	3	0	0	3	50	50	100	3	3
6	AEC	24ENG16	Communicative English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24SKK17/ 24BKK17	Samskrutika Kannada/ Balake Kannada	Humanities	1	0	0	1	50	50	100	1	1
8	AEC/SDC	24IDT18	Innovation and Design Thinking	Any Department	0	0	1	1	50	50	100	2	2
			TOTAL		15	1	4	20	400	400	800	. Service A	25

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course).

^{*} Time table applicable for CSE section CSE - 15.

24MATCS11 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different facultymembers.

24PHYCS12 SEE shall have the 03 hours of theory examination.

Student's Induction Program: Motivating (Inspiring) Activities under the Induction program – The main aim of the induction program is to provide newly admitted students a broad understanding of society, relationships, and values. Along with the knowledge and skill of his/her study, students' character needs to be nurtured as an essential quality by which he/she would understand and fulfill the responsibility as an engineer. The following activities are to be covered in 21 days. Physical Activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to Local areas, Familiarization with Department/Branch and Innovation, etc.

	Engine	ering Science Courses-I (ESC-I)					E	Emerging Technology Courses-I (ETC-I)			
Sl.	Course Code	Course Name		Credits tributi		SI.	Course	Course Name		Credit stribut	
NO.			L	Т	P	No.	Code		L	T	P
1	24ESC14A	Introduction to Civil Engineering	3	0	0	1	24ETC15A	Introduction to IoT	3	0	0
2	24ESC14B	Introduction to Electrical Engineering	3	0.	0	2	24ETC15B	Introduction to Cyber Security	3	0	0
3	24ESC14C	Introduction to Electronics Engineering	3	0	0	3	24ETC15C	Introduction to Cloud Computing	3	0	0
4	24ESC14D	Introduction to Mechanical Engineering	3	0	0	4	24ETC15D	Rapid Prototyping	3	0	0
5	24ESC14E	Introduction to C Programming	2	0	1	5	24ETC15E	Introduction to Robotics	3	0	0
						6	24ETC15F	Introduction to Green Buildings	3	0	0
						7	24ETC15G	Introduction to Intelligent Transportation Systems	3	0	0
						8	24ETC15H	Introduction to Bio Sensors	3	0	0
						9	24ETC15I	Introduction to Nano Technology	3	0	0
						10	24ETC15J	Introduction to Renewable Energy Systems	3	0	0
						11	24ETC15K	Introduction to Electric Vehicles	3	0	0

- CSE/AIML/CSBS branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC14E Introduction to C Programming.
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from ETC-I group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



(Autonomous Institution Affiliated to VTU, Belagavi)

Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Departments of CSE*, AIML & CSBS

II Semester (Chemistry Cycle)

SI.	Course			Teaching /	(Credits	Distrib	oution		Exa	aminatio	n	
No.	Category	Course Code	Course Name	QP Setting Department	L	T	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/week
1	ASC(IC)	24MATCS21	Ordinary Differential Equations and Numerical Methods	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24CHECS22	Materials Chemistry for Energy and Data Processing	Chemistry	3	0	1	4	50	50	100	3	5
3	ESC	24CED23	Computer Aided Engineering Drawing	ME	2	0	1	3	50	50	100	3	4
4	ESC-II	24ESC24X	Engineering Science Course II	Concerned Department	3	0	0	3	50	50	100	3	3
5	PLC-II	24PLC25X	Programming Language Course II	Any Department	2	0	1	3	50	50	100	3	4
6	AEC	24PWS26	Professional Writing Skills in English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24ICO27	Indian Constitution	Humanities	1	0	0	1	50	50	100	1	1
8	HSMC	24SFH28	Scientific Foundations of Health	Any Department	1	0	0	1	50	50	100	1	1
			TOTAL		15	0.5	4.5	20	400	400	800		25

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE -Continuous Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course). Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course).

* Time table applicable for CSE section CSE - 15.

24MATCS21 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members.

24CHECS22 - SEE shall have the 03 hours of theory examination.

	Engineerin	g Science Courses-II (ESC-II)					Prog	gramming Language Courses-II (PLC-II)	aral 1	
SI.	Course Code	Course Name	1	redits ributio		SI.	Course Code	Course Name		Credi stribu	
140.			L	T	P	No.			L	T	P
1	24ESC24A	Introduction to Civil Engineering	3	0	0	1	24PLC25A	Introduction to Web Programming	2	0	1
2	24ESC24B	Introduction to Electrical Engineering	3	0	0	2	24PLC25B	Introduction to Python Programming	2	0	1
3	24ESC24C	Introduction to Electronics Engineering	3	0	0	3	24PLC25C	Basics of JAVA programming	2	0	1
4	24ESC24D	Introduction to Mechanical Engineering	3	0	0	4	24PLC25D	Introduction to C++ Programming	2	0	1
5	24ESC24E	Introduction to C Programming	2	0	1	100					1/11/11

- CSE/AIML/CSBS branch students shall opt for any one of the courses from the ESC-II group except, 24ESC24E -Introduction to C Programming
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from PLC-II group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



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Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Departments of ECE and EEE

I Semester (Physics Cycle)

SI.	Course		te against businel careal areas have a collec-	Teaching /	C	redits	Distrib	ution	U may it	Exa	aminatio	n	RITHORAL -
No.	· Category	Course Code	Course Name	QP Setting Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/week
1.	ASC(IC)	24MATEE11	Calculus and Ordinary Differential Equations	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24PHYEE12	Optoelectronics and Electrodynamics	Physics	3	0.5	0.5	4	50	50	100	3	5
3	ESC	24BEE13	Basic Electronics	ECE		1 10 10 10					ary man	Spire and the mases	Janua I I
	LSC	24EEE13	Elements of Electrical Engineering	EEE	3	0	0	3	50	50	100	3	3
4	ESC-I	24ESC14X	Engineering Science Course I	Concerned Department	3	0	0	3	50	50	100	3	3
5	ETC-I	24ETC15X	Emerging Technology Course I	Any Department	3	0	0	3	50	50	100	3	3
6	AEC	24ENG16	Communicative English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24SKK17/ 24BKK17	Samskrutika Kannada/ Balake Kannada	Humanities	1	0	0	1	50	50	100	1	ī
8	AEC/SDC	24IDT18	Innovation and Design Thinking	Any Department	0	0	1	1	50	50	100	2	2
			TOTAL		16	1	3	20	400	400	800		24

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE -Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course).

24MATEE11 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members.

24PHYEE12 SEE shall have the 03 hours of theory examination.

Students of Electronics & Communication Engineering (ECE) have to study the course "Basic Electronics" (24BEE13) mandatorily as Program Core Course. Whereas, Students of Electrical & Electronics Engineering (EEE) have to study "Elements of Electrical Engineering" (24EEE14) mandatorily as Program Core Course.

Student's Induction Program: Motivating (Inspiring) Activities under the Induction program – The main aim of the induction program is to provide newly admitted students a broad understanding of society, relationships, and values. Along with the knowledge and skill of his/her study, students' character needs to be nurtured as an essential quality by which he/she would understand and fulfill the responsibility as an engineer. The following activities are to be covered in 21 days. Physical Activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to Local areas, Familiarization with Department/Branch and Innovation, etc.

	Engine	ering Science Courses-I (ESC-I)					E	Emerging Technology Courses-I (ETC-I)			
SI.	Course Code	Course Name		Credits tributi		Sl.	Course	Course Name		Credits stributi	
No. 1 2 3 4			L	T,	P	No.	Code	Children of State of State (State State St	L	T	P
1 2 3	24ESC14A	Introduction to Civil Engineering	3	0	0	1	24ETC15A	Introduction to IoT	3	0	0
2	24ESC14B	Introduction to Electrical Engineering	3	0	0	2	24ETC15B	Introduction to Cyber Security	3	0	0
3	24ESC14C	Introduction to Electronics Engineering	3	0	0	3	24ETC15C	Introduction to Cloud Computing	3	0	0
4	24ESC14D	Introduction to Mechanical Engineering	3	0	0	4	24ETC15D	Rapid Prototyping	3	0	0
5	24ESC14E	Introduction to C Programming	2	0	1	5	24ETC15E	Introduction to Robotics	3	0	0
						6	24ETC15F	Introduction to Green Buildings	3	0	0
						7	24ETC15G	Introduction to Intelligent Transportation Systems	3	0	0
						8	24ETC15H	Introduction to Bio Sensors	3	0	0
						9	24ETC15I	Introduction to Nano Technology	3	0	0
						10	24ETC15J	Introduction to Renewable Energy Systems	3	0	0
						11	24ETC15K	Introduction to Electric Vehicles	3	0	0

- EEE branch Students shall opt for any one of the courses from the ESC-l group except, 24ESC14B Introduction to Electrical Engineering
- ECE branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC14C Introduction to Electronics Engineering
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from ETC-I group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



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Outcome-Based Education (OBE)and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Department of ECE and EEE

II Semester (Chemistry Cycle)

					C	redits	Distrib	ution	awit it	Exa	aminatio	n .	
Sl. No.	Course Category	Course Code	Course Name	Teaching / QP Setting Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/week
1	ASC(IC)	24MATEE21	Numerical Methods and Linear Algebra	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24CHEEE22	Materials Chemistry for Energy and Display Systems	Chemistry	3	0	1	4	50	50	100	3	5
3	ESC	24CED23	Computer Aided Engineering Drawing	ME	2	0	1	3	1- 50	50	100	3	4
4	ESC-II	24ESC24X	Engineering Science Course II	Concerned Department	3	0	0	3	50	50	100	3	3
5	PLC-II	24PLC25X	Programming Language Course-II	Any Department	2	0	1	3	50	50	100	3	4
6	AEC	24PWS26	Professional Writing Skills in English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24ICO27	Indian Constitution	Humanities	1	0	0	1	50	50	100	1	1
8	HSMC	24SFH28	Scientific Foundations of Health	Any Department	1	0	0	1	- 50	50	100	1	1
			TOTAL		15	0.5	4.5	20	400	400	800		25

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE -Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course). Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course).

24MATEE21 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members. **24CHEEE22** - SEE shall have the 03 hours of theory examination.

	Engineering	g Science Courses-II (ESC-II)					Pro	gramming Language Courses-II (PLC-II	1)		
SI.	Course Code	Course Name		redits ribution		Sl.	Course Code	Course Name	100	Credi istribu	
NO.			L	T	P	No.			L	T	P
1	24ESC24A	Introduction to Civil Engineering	3	0	0	1	24PLC25A	Introduction to Web Programming	2	0	1
2	24ESC24B	Introduction to Electrical Engineering	3	0	0	2	24PLC25B	Introduction to Python Programming	2	0	1
3	24ESC24C	Introduction to Electronics Engineering	3	0	0	3	24PLC25C	Basics of JAVA programming	. 2	0	1
4	24ESC24D	Introduction to Mechanical Engineering	3	0	0	4	24PLC25D	Introduction to C++ Programming	2	0	1
5	24ESC24E	Introduction to C Programming	2	0	1						

- EEE branch Students shall opt for any one of the courses from the ESC-l group except, 24ESC24B Introduction to Electrical Engineering
- ECE branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC24C Introduction to Electronics Engineering
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from PLC-II group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



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Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Department of ME

I Semester (Physics Cycle)

7 114		Salahagan a vigital	erations bearing the articles of charge (paramole charge)	Teaching /	C	Credits	Distrib	ution	h mort a	Exa	minatio	n	
SI. No.	Course Category	Course Code	Course Name	QP Setting Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/week
1	ASC(IC)	24MATMC11	Calculus and Linear Algebra	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24PHYME12	Material Science and Metallurgy	Physics	3	0.5	0.5	4	50	50	100	3	5
3	ESC	24EME13	Elements of Mechanical Engineering	ME	3	0	0	3	50	50	100	3	3
4	ESC-I	24ESC14X	Engineering Science Course I	Concerned Department	3	0	0	3	50	50	100	3	3
5	ETC-I	24ETC15X	Emerging Technology Course I	Any Department	3	0	0	3	50	50	100	3	3
6	AEC	24ENG16	Communicative English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24SKK17/ 24BKK17	Samskrutika Kannada/ Balake Kannada	Humanities	1	0	0	1	50	50	100	1	1
8	AEC/SDC	24IDT18	Innovation and Design Thinking	Any Department	0	0	1	1	50	50	100	2	2
			TOTAL		16	1	3	20	400	400	800		24

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course).

24MATMC11 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members.

24PHYME12 SEE shall have the 03 hours of theory examination.

Student's Induction Program: Motivating (Inspiring) Activities under the Induction program – The main aim of the induction program is to provide newly admitted students a broad understanding of society, relationships, and values. Along with the knowledge and skill of his/her study, students' character needs to be nurtured as an essential quality by which he/she would understand and fulfill the responsibility as an engineer. The following activities are to be covered in 21 days. Physical Activity, Creative Arts, Universal Human Values. Literary, Proficiency Modules, Lectures by Eminent People, Visits to Local areas, Familiarization with Department/Branch and Innovation, etc.

	Engine	ering Science Courses-I (ESC-I)					F	Emerging Technology Courses-I (ETC-I)	WWW.10308		
Sl. No.	Course Code	Course Name		Credits tributi		Sl.	Course	Course Name		Credits stributi	
140.			L	T	P	No.	Code		L	T	P
1 2 3	24ESC14A	Introduction to Civil Engineering	3	0.	0	1	24ETC15A	Introduction to IoT	3	0	0
2	24ESC14B	Introduction to Electrical Engineering	3	0	0	`2	24ETC15B	Introduction to Cyber Security	3	0	0
3	24ESC14C	Introduction to Electronics Engineering	3	0	0	3	24ETC15C	Introduction to Cloud Computing	3	0	0
4	24ESC14D	Introduction to Mechanical Engineering	3	0	0	4	24ETC15D	Rapid Prototyping	3	0	0
5	24ESC14E	Introduction to C Programming	2	0	1	5	24ETC15E	Introduction to Robotics	3	0	0
						6	24ETC15F	Introduction to Green Buildings	3	0	0
						7	24ETC15G	Introduction to Intelligent Transportation Systems	3	0	0
						8	24ETC15H	Introduction to Bio Sensors	3	0	0
						9	24ETC15I	Introduction to Nano Technology	3	0	0
						10	24ETC15J	Introduction to Renewable Energy Systems	3	0	0
						11	24ETC15K	Introduction to Electric Vehicles	3	0	0

- ME branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC14D Introduction to Mechanical Engineering
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from either ETC-I group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



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For the students of Department of ME

II Semester (Chemistry Cycle)

				Too ohing /	C	redits	Distrib	ution		Exa	aminatio	n	
Sl. No.	Course Category	Course Code	Course Name	Teaching / QP Setting Department	L	Ţ	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/week
1	ASC(IC)	24MATMC21	Numerical Techniques and Differential Equations	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24CHEME22	Chemistry of Engineering Materials	Chemistry	3	0	1	4	50	50	100	3	5
3	ESC	24CED23	Computer Aided Engineering Drawing	ME	2	0	1	3	50	50	100	3	4
4	ESC-II	24ESC24X	Engineering Science Course II	Concerned Department	3	0	. 0	3	50	50	100	3	3
5	PLC-II	24PLC25X	Programming Language Course-II	Any Department	2	0	1	3	50	50	100	3	4
6	AEC	24PWS26	Professional Writing Skills in English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24ICO27	Indian Constitution	Humanities	1	0	0	1	50	50	100	1	1
8	HSMC	24SFH28	Scientific Foundations of Health	Any Department	ı	0	0	1	50	50	100	1	1
			TOTAL		15	0.5	4.5	20	400	400	800		25

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE -Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course). Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course).

24MATMC21 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members. **24CHEME22** - SEE shall have the 03 hours of theory examination.

	Engineering	g Science Courses-II (ESC-II)					Prog	gramming Language Courses-11 (PLC-II))		
SI.	Course Code	Course Name		redits ributio		SI.	Course Code	Course Name		Credit tribut	
140.			L	T	P	110.			L	T	P
1	24ESC24A	Introduction to Civil Engineering	3	0	0	1	24PLC25A	Introduction to Web Programming	2	0	1
2	24ESC24B	Introduction to Electrical Engineering	3	0	0	2	24PLC25B	Introduction to Python Programming	2	0	1
3	24ESC24C	Introduction to Electronics Engineering	3	0	0	3	24PLC25C	Basics of JAVA programming	2	0	1
4	24ESC24D	Introduction to Mechanical Engineering	3	0	0	1	24PLC25D	Introduction to C++ Programming	2	0	1
5	24ESC24E	Introduction to C Programming	2	0	1				***************************************		

- ME branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC24D Introduction to Mechanical Engineering
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from PLC-II group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



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Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Department of CV

I Semester (Physics Cycle)

Si. No. 1 2 3	Course	by Licenses and the		Teaching /	C	redits	Distrib	ution		Exa	minatio	n - E (TEE	AND THE
	Course Category	Course Code	Course Name	QP Setting Department	L	T	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/week
1.	ASC(IC)	24MATMC11	Calculus and Linear Algebra	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24PHYCV12	Materials and wave properties for structural applications	Physics	3	0.5	0.5	4	50	50	100	3	5
3	ESC	24EEM13	Elements of Engineering Mechanics	CV	3	0	0	3	50	50	100	3	3
4	ESC-I	24ESC14X	Engineering Science Course I	Concerned Department	3	0	0	3	50	50	100	3	3
5	ETC-I	24ETC15X	Emerging Technology Course I	Any Department	3	0	0	3	50	50	100	3	3
6	AEC	24ENG16	Communicative English	Humanities	0	0	1	1	50.	50	100	2	2
7	HSMC	24SKK17/ 24BKK17	Samskrutika Kannada/ Balake Kannada	Humanities	1	0	0	ı	50	50	100	1	1
8	AEC/SDC	24IDT18	Innovation and Design Thinking	Any Department	0	0	1	1	50	50	100	2	2
			TOTAL		16	1	3	20	400	400	800	and the same of th	24

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE -Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course).

24MATMC11 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different facultymembers. **24PHYCV12** SEE shall have the 03 hours of theory examination.

Student's Induction Program: Motivating (Inspiring) Activities under the Induction program – The main aim of the induction program is to provide newly admitted students a broad understanding of society, relationships, and values. Along with the knowledge and skill of his/her study, students' character needs to be nurtured as an essential quality by which he/she would understand and fulfill the responsibility as an engineer. The following activities are to be covered in 21 days. Physical Activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to Local areas, Familiarization with Department/Branch and Innovation, etc.

*	Engine	ering Science Courses-I (ESC-I)			Ty-11		· F	Cmerging Technology Courses-I (ETC-I)			
Sl. No.	Course Code	Course Name	Credits distribution		SI. No.	Course	Course Name			edits ibution	
1 2 2 2 3 2 4 2			L	T	P	No.	Code		L	T	P
1	24ESC14A	Introduction to Civil Engineering	3	0	0	1	24ETC15A	Introduction to IoT	3	0	0
2	24ESC14B	Introduction to Electrical Engineering	3	0 ·	0	2	24ETC15B	Introduction to Cyber Security	3	0	0
3	24ESC14C	Introduction to Electronics Engineering	3	0.	0	3	24ETC15C	Introduction to Cloud Computing	3	0	0
4	24ESC14D	Introduction to Mechanical Engineering	3	0	0	4	24ETC15D	Rapid Prototyping	3	0	0
5	24ESC14E	Introduction to C Programming	2	0	1	5	24ETC15E	Introduction to Robotics	3	0	0
Market St.						6	24ETC15F	Introduction to Green Buildings	3	0	0
						7	24ETC15G	Introduction to Intelligent Transportation Systems	3	0	0
						8	24ETC15H	Introduction to Bio Sensors	- 3	0	0
						9	24ETC15I	Introduction to Nano Technology	3	0	0
						10	24ETC15J	Introduction to Renewable Energy Systems	3	0	0
						11	24ETC15K	Introduction to Electric Vehicles	3	0	0

- CV branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC14A Introduction to Civil Engineering
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from either ETC-l group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



(Autonomous Institution Affiliated to VTU, Belagavi)

Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Department of CV

II Semester (Chemistry Cycle)

SI.	C	instruction del		Teaching /	(redits	Distrib	oution	2000	Exa	aminatio	n	
No.	Course Category	Course Code	Course Name	QP Setting Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Contact Hours/weel
. 1	ASC(IC)	24MATMC21	Numerical Techniques and Differential equations	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC(IC)	24CHECV22	Chemistry of Structural and Functional Materials	Chemistry	3	0	1	4	50	50	100	3	5
3	ESC	24CED23	Computer Aided Engineering Drawing	ME	2	0	1	3	50	50	100	3	4
4	ESC-II	24ESC24X	Engineering Science Course II	Concerned Department	3	0	0	3	50	50	100	3	3
5	PLC-II	24PLC25X	Programming Language Course-II	Any Department	2	0	1	3	50	50	100	3	4
6	AEC	24PWS26	Professional Writing Skills in English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24ICO27	Indian Constitution	Humanities	1	0	0	1	50	50	100	Ĭ	1
8	HSMC	24SFH28	Scientific Foundations of Health	Any Department	1	0	0	1	50	50	100	1	· 1
			TOTAL		15	0.5	4.5	20	400	400	800	J. H. H. A. H.	25

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course). Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course).

24MATMC21 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members.

24CHECV22 - SEE shall have the 03 hours of theory examination.

	Engineerin	g Science Courses-II (ESC-II)			BI-LUI		Prograi	nming Language Courses-II (PLC-II)	The Gran		R
Sl. No.	Course Code	Course Name		Credits distribution		Sl. No.	Course Code	Course Name		ts tion	
			L	T	P				L	T	P
1	24ESC24A	Introduction to Civil Engineering	3	0	0	1	24PLC25A	Introduction to Web Programming	2	0	1
2	24ESC24B	Introduction to Electrical Engineering	3	0	0	2	24PLC25B	Introduction to Python Programming	2	0	1
3	24ESC24C	Introduction to Electronics Engineering	3	0	0	3	24PLC25C	Basics of JAVA programming	2	0	1
4	24ESC24D	Introduction to Mechanical Engineering	3	0	0	4	24PLC25D	Introduction to C++ Programming	2	0	1
5	24ESC24E	Introduction to C Programming	2	0	1			67/1992			

- CV branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC24A Introduction to Civil Engineering
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from either PLC-II group.
- If students study the subject from ETC-I in 1st semester he/she has to select the course from PLC-II in the 2nd semester and vice-versa.



(Autonomous Institution Affiliated to VTU, Belagavi)

Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE)and Choice Based Credit System (CBCS)
(Effective from the academic year 2024-25 onwards)

For the students of Department of CSE*

I Semester (Chemistry Cycle)

Sl. No. 1 2 3 4	Course	edities of mi	eriologica estillo per il les reformes compares e	Teaching /	(Credits	Distril	oution	2.000	Exa	aminatio	n ing isa.	Contact
1	Category	Course Code	Course Name	QP Setting Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	Hours/week
1	ASC (IC)	24MATCS11	Multivariate Calculus and Linear Algebra	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC (IC)	24CHECS12	Materials Chemistry for Energy and Data Processing	Chemistry	3	0	1	4	50	50	100	3	5
3	ESC	24CED13	Computer Aided Engineering Drawing	ME	2	0	1	3	50	50	100	3	4
4	ESC-I	24ESC14X	Engineering Science Course I-	Concerned Department	3	0	0	3	50	50	100	3	3
5	PLC-I	24PLC15X	Programming Language Course I	Any Department	2	0	1	3	50	50	100	3	4
6	AEC	24ENG16	Communicative English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24ICO17	Indian Constitution	Humanities	1	0	0	1	50	50	100	1	1
8	HSMC	24SFH18	Scientific Foundations of Health	Any Department	1	0	0	1	50	50	100	1	1
			TOTAL		15	0.5	4.5	20	400	400	800		25

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course). *Time table applicable for CSE sections from CSE – 1 to CSE – 14 sections (14 sections)

24MATCS11 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. The mathematics subject should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members.

24CHECS12- SEE shall have the 03 hours of theory examination and 02-03 hours of practical examination.

Student's Induction Program: Motivating (Inspiring) Activities under the Induction program – The main aim of the induction program is to provide newly admitted students a broad understanding of society, relationships, and values. Along with the knowledge and skill of his/her study, students' character needs to be nurtured as an essential quality by which he/she would understand and fulfill the responsibility as an engineer. The following activities are to be covered in 21 days. Physical Activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to Local areas, Familiarization with Department/Branch and Innovation, etc. For details, refer the ANNEXURE- I of Induction Programs notification of the University published at the beginning of the 1st semester.

	Engine	ering Science Courses-I (ESC-I)					Progr	amming Language Courses-I (PLC-I)			
SI.	Course Code	Course Name	Credits distribution			Sl.	Course Code	Course Name		s tion	
No.				L T P		110.			L	T	P
1	24ESC14A	Introduction to Civil Engineering	3	0	0	1	24PLC15A	Introduction to Web Programming	2	0	1
2	24ESC14B	Introduction to Electrical Engineering	3	0	0	2	24PLC15B	Introduction to Python Programming	2	0	1
3	24ESC14C	Introduction to Electronics Engineering	3	0	0	3	24PLC15C	Basics of JAVA programming	2	0	1
4	24ESC14D	Introduction to Mechanical Engineering	3	0	0	4	24PLC15D	Introduction to C++ Programming	2	0	1
5	24ESC14E	Introduction to C Programming	2	0	1		•			designation of the second	

- CSE branch Students shall opt for any one of the courses from the ESC-I group except, 24ESC14E Introduction to C Programming.
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from PLC-I group.
- If students study the subject from PLC I in 1st semester he/she has to select the course from ETC-II in the 2nd semester and vice-versa.



(Autonomous Institution Affiliated to VTU, Belagavi)

Scheme of Teaching and Examinations – 2024 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2024-25 onwards)

For the students of Department of CSE*

II Semester (Physics Cycle)

SI.	Course	Course Code	Course Name	Teaching / QP Setting	(redits I	Distribu	ition		Contact Hours/wee			
No.	Category			Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (H)	
1	ASC (IC)	24MATCS21	Ordinary Differential Equations and Numerical Methods	Maths	3	0.5	0.5	4	50	50	100	3	5
2	ASC (IC)	24PHYCS22	Quantum computing and Photonics	Physics	3	0.5	0.5	4	50	50	100	3	5
3	ESC	24POP23	Principles of Programming using C	CSE/AIML	2	0	1	3	50	50	100	3	4
4	ESC-II	24ESC24X	Engineering Science Course II	Concerned Department	3	0	0	3	50	50	100	3	3
5	ETC-II	24ETC25X	Emerging Technology Course II	Any Department	3	0	0	3	50	50	100	3	3
6	AEC	24PWS26	Professional Writing Skills in English	Humanities	0	0	1	1	50	50	100	2	2
7	HSMC	24SKK27/ 24BKK27	Samskrutika Kannada / Balake Kannada	Humanities	1	0	0	1	50	50	100	1 .	<u> </u>
8	AEC/SDC	24IDT28	Innovation and Design Thinking	Any Department	0	0	1	1	50	50	100	poft.	2
			TOTAL		15	1 ·	4	20	400	400	800		25

ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE -Continuous Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course). *Time table applicable for CSE sections from CSE - 1 to CSE - 14 sections (14 sections)

24MATCS21 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. Mathematics should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members.

24PHYCS22 SEE shall have the 03 hours of theory examination.

	Engine	eering Science Courses-II (ESC-II)	delinite.				Eme	erging Technology Courses-II (ETC-II)		AMIN TO S	
SI. No.	Course Code	Course Name			Credits distribution		Course Code	Course Name		s ion	
				L T P					L	T	P
1	24ESC24A	Introduction to Civil Engineering	3	0	0	1	24ETC25A	Introduction to IoT	3	0	0
2	24ESC24B	Introduction to Electrical Engineering	3	0	0	2	24ETC25B	Introduction to Cyber Security	3	0	0
3	24ESC24C	Introduction to Electronics Engineering	3	0	0	3	24ETC25C	Introduction to Cloud Computing	3	0	0
4 -	24ESC24D	Introduction to Mechanical Engineering	3	0	0	4	24ETC25D	Rapid Prototyping	3	0	0
5 .	24ESC24E	Introduction to C Programming	2	0	1	5	24ETC25E	Introduction to Robotics	3	0	0
					1	6	24ETC25F	Introduction to Green Buildings	3	0	0
						7	24ETC25G	Introduction to Intelligent Transportation Systems	3	0	0
						8	24ETC25H	Introduction to Bio Sensors	3	0	0
						9	24ETC25I	Introduction to Nano Technology	3	0	0
						10	24ETC25J	Introduction to Renewable Energy Systems	3	0	0
						11	24ETC25K	Introduction to Electric Vehicles	3	0	0

- CSE branch Students shall opt for any one of the courses from the ESC-II group except, 24ESC24E Introduction to C Programming
- The students have to opt for the courses from ESC group without repeating the course in either 1st or 2nd semester
- The students must select one course from either ETC-II group.
- If students study the subject from PLC-I in 1st semester he/she has to select the course from ETC-II in the 2nd semester and vice-versa.

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