

# (Autonomous Institution Affiliated to VTU, Belagavi) Scheme of Teaching and Examinations – 2025 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the Academic Year 2025-26 onwards)

#### I Semester (PHYSICS CYCLE)

CI			Y .	Teaching	Cı	redits D Sum	istribut mary	ion		Exan	nination		
SI. No.	Course Category	Course Code	Course Name	Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (Hours)	Contact Hours/week
1	BSC	1BMATXX101	Applied Mathematics I Course (Stream Specific)	Maths	3	1	0	4	50	50	100	3	5
2	BSC (IC)	1BPHYXX102	Applied Physics Course (Stream Specific)	Physics	3	0	. 1	4	50	50	100	3	5
3	ESC	1BCEDXX103	Computer Aided Engineering Drawing (Stream Specific)	. ME	2	0	1	3	50	50	100	3	4
4	ESC	1BESC104X	Engineering Science Course I	Concerned Department	3	0	0	3	50	50	100	3	3
5	PSC	1BXXX105	Program Specific Course	Concerned Department	3	0	0	3	50	50	100	3	3
6	PSC	1BXXXL106	Program Specific Course Laboratory	Concerned Department	0 .	0	1	1	50	50	100	3	2
7	AEC (NCMC)	1BSS107	Soft Skills	Humanities	. 0	0	0	0	100	-	100	-	2
8	AEC	1BIDTL108	Innovation and Design Thinking	Any Department	0	0	1	1	50	50	100	2	2
9	HSMC	1BSK109/ 1BBK109	Samskrutika Kannada / Balake Kannada	Humanities	1	0	0	1	50	50	100	1	1
		n Francisco Paller	TOTAL		15	1	4	20	500	400	900		27

BSC- Basic Science Course, IC- Integrated Course (Practical course integrated with theory course). PSC- Program Specific Course, ESC- Engineering Science Course, ETC- Emerging Technology Course, AEC- Ability Enhancement Course. HSMC- Humanities, Social Sciences, and Management Courses, NCMC- Non Credit Mandatory Course. PLC- Programming language Course, CIE - Continuous Internal Evaluation. SEE- Semester End Examination.

Credit Definition: 1-hour Lecture (L) per week = 1 Credit

2-hoursTutorial (T) per week = 1 Credit

2-hours Practical (P) / Drawing (P) / Project Work (PW) per week = 1 Credit

04-Credit courses are designed for 50 hours of Teaching-Learning Session.

04-Credit (IC) is designed for 40 hours' theory and 10-12 practical sessions of 2 hours

03-Credit courses are designed for 40 hours of Teaching-Learning Session

02- Credit courses are designed for 25 hours of Teaching-Learning Session

01-Credit courses are to be designed for 15 hours of Teaching-Learning sessions

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	Applied	d Mathematics I Course (Program Specific	2)				App	lied Physics Course (Program Specific	ic)		
SI.	Course	Course Name	Tead	hing I	Hours	Sl.	Course	Course Name	Teac	ching I	lours
No.	Code		L	T	P	No.	Code	•	L	T	P
1	1BMATCS101	Calculus and Linear Algebra (CSE and allied programs)	3	2	0	1	1BPHYCS102	Physics of Quantum Computing and Applications (CSE and allied programs)	3	0	2
2	1BMATEC101	Differential Calculus, Ordinary Differential Equations and Linear Algebra (ECE and EEE programs)	3	2	0	2	1BPHYEC102	Quantum Physics and Optoelectronics (ECE program)	3	0	2
3	1BMATME101	Differential Calculus and Linear Algebra (ME program)	3	2	0	3	1BPHYEE102	Physics of Electrical Engineering Materials (EEE programs)	3	0	2
4	1BMATCV101	Linear Algebra, Differential Calculus and Ordinary Differential Equations (CV program)	3	2	0	4	1BPHYME102	Physics of Materials (ME program)	3	0	2
						5	1BPHYCV102	Physics of Structural Materials (CV program)	3	0	2

	(	Computer Aided Engineering Drawing (Program	n Spe	cific)			En	gineering Science Course - I (ESC	(I)		
Sl.	Course	Course Name	Teacl	ning H	ours	SI.	Course	Course Name	Teac	hing H	ours
No.	Code		L	T	P	No	Code		L	Т	P
1	1BCEDCS103	Computer Aided Engineering Drawing for CSE Stream	2	0	2	1	1BESC104A	Essentials of Information Technology	3	0	0
2	1BCEDEC103	Computer Aided Engineering Drawing for ECE Program	2	0	2	2	1BESC104B	Introduction to Electronics Engineering	3	0	0
3	1BCEDEE103	Computer Aided Engineering Drawing for EEE Program	2	0	2	3	1BESC104C	Introduction to Electrical Engineering	3	0	0
4	1BCEDME103	Computer Aided Engineering Drawing for ME Stream	2	0	2	4	1BESC104D	Introduction to Mechanical Engineering	3	0	0
5	1BCEDCV103	Computer Aided Engineering Drawing for CV Stream	2	0	2	5	1BESC104E	Building Science and Mechanics	3	0	0

		Program Specific Course (F	PSC)				Pro	gram Specific Course Laboratory (PS	SCL)		
Sl.	Course	Course Name	Teac	hing I	lours	Sl.	Course	Course Name	Tea	ching H	ours
No.	Code		L	T	P	No.	Code		L	T	P
1	1BPIC105	Programming in C	3	0	0	1	1BPICL106	C Programming Laboratory	0	0	2
2	1BBEE105	Basic Electronics	3	0	0	2	1BBEEL106	Basic Electronics Laboratory	0	0	2
3	1BEEE105	Elements of Electrical Engineering	3	0	0	3	1BEEEL106	Basic Electrical Engineering Laboratory	0	0	2
4	1BEME105	Elements of Mechanical Engineering	3	0	0	4	1BEMEL106	Basic Mechanical Engineering Laboratory	0	0	2
5	1BEMM105	Engineering Mechanics	3	0	0	5	1BEMML106	Mechanics and Materials Laboratory	0	0	2

- (i) Theory sessions shall be conducted for 3 hours per week, while the practical sessions shall be conducted for 2 hours per week.
- (ii) Theory components shall be evaluated through both Continuous Internal Evaluation (CIE) and Semester End Examination (SEE).
- (iii) The practical component shall be assessed only through CIE.

The Mathematics / Physics courses shall be taught by a single faculty member per session, with no sharing of the course modules. Tutorial sessions for Mathematics will be conducted to strengthen students' problem-solving skills.

Programme Specific Courses (PSC): Programme Specific Courses (PSC) are a set of core courses tailored to a specific branch or discipline of engineering in which a student is enrolled (e.g., Mechanical Engineering, Computer Science, Civil Engineering, etc.). These courses are intended to provide students with in-depth knowledge and specialized skills essential for professional competence in the chosen field. Students must select and complete the course from this group that corresponds to their admitted program stream. Similarly, students are also required to choose and pass laboratory courses that are specific to their stream from the Programme Specific Courses Laboratory (PSCL) group.

Computer-Aided Engineering Drawing: The courses under this category are stream-specific. Students must select and complete the course that corresponds to their admitted engineering stream.

Engineering Sciences Courses-I (ESC-I): These courses are designed to broaden the technical knowledge of students beyond their core area of study. These courses enable students to gain a foundational understanding of engineering principles from other stream courses. Students are required to select and complete two courses that are not belong to their admitted program stream. For example, a student admitted to Mechanical Engineering program should not select 'Introduction to Mechanical Engineering' but to select any other two courses. One course shall be selected under ESC-I and another course under ESC-II. The two courses must be different from the other.

The Student Induction Programme (SIP), initiated by the All India Council for Technical Education (AICTE), is designed to help newly admitted students in technical institutions transition smoothly into the higher education environment. It aims to familiarize students with the institutional culture, foster connections with peers and faculty, and provide a foundation for holistic learning. Activities under SIP may include Physical Activities, Creative Arts, Universal Human Values, Literary Events, Proficiency Modules. Lectures shall be by Eminent Personalities, Local Area Visits, Department/Branch Familiarization, and Innovation-related sessions.

#### AICTE Activity Points Requirement for BE/B. Tech. Programmes

As per AICTE guidelines (refer Chapter 6 – AICTE Activity Point Program, Model Internship Guidelines), in addition to academic requirements, students must earn a specified number of Activity Points to be eligible for the award of their degree.

- Regular students admitted to a 4-year degree program must earn 100 Activity Points.
- · Lateral entry students (joining from the second year) must earn 75 Activity Points.
- · Students transferred from other universities directly into the fifth semester must earn 50 Activity Points from the date of entry into the Institution.

These Activity Points are non-credit and will not be considered for the SGPA/CGPA or be used for vertical progression. However, they are mandatory for the award of the degree, and the points earned will be reflected on the eighth semester Grade Card. The hours spent for earning the activity points shall not be counted for regular attendance requirements. Students can accumulate these points at any time during their program, including weekends, holidays, and vacations starting from the year of admission, provided they meet the minimum hours of engagement prescribed for each activity. If a student fails to earn the required Activity Points, the eighth-semester Grade Card will be withheld until the requirement is fulfilled. Consequently, the degree will be awarded only after the Grade Card has been released.



# (Autonomous Institution Affiliated to VTU, Belagavi) Scheme of Teaching and Examinations – 2025 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the Academic Year 2025-26 onwards)

## II Semester (For the students who have studied Physics cycle courses in the I semester)

			1	Teaching	Cre		stributi mary	ion		Exan	nination		
SI. No.	Course Category	Course Code	Course Name	Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (Hours)	Contact Hours/week
1	BSC	1BMATXX201	Applied Mathematics II Course (Stream Specific)	Maths	3	1	0	4	50	50	100	3	5
2	BSC (IC)	1BCHEXX202	Applied Chemistry Course (Stream Specific)	Chemistry	3	0	1	4	50	50	100	3	5
3	ETC	1BAI203	Introduction to AI and Applications	CSE and Allied Departments	3	0	0	3	50	50	100	3	3
4	ESC	1BESC204X	Engineering Science Course II	Concerned Department	3	0	0	3	50	50	100	3	3
5	PLC (IC)	1BPLC205X	Programing Language Course	CSE and Allied departments	3	0	1	4	50	50	100	3	5
6	AEC	1BPECL206	Professional English Communication	Humanities	. 0	0	1	1	50	50	100	2	2
7	HSMC (NCMC)	1BIC207	Indian Constitution and Engineering Ethics	Humanities	0	0	0	0	100	-	100	1	1
8	AEC	1BPRJ208	Interdisciplinary Project	Any Department	0	0	1	1	50	50	100	2	2
			TOTAL		15	1	4	20	450	350	· 800		26

BSC- Basic Science Course, IC- Integrated Course (Practical course integrated with theory course), PSC- Program Specific Course, ESC- Engineering Science Course, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC- Humanities, Social Sciences, and Management Courses, NCMC- Non Credit Mandatory Course, PLC- Programming language Course, CIE- Continuous Internal Evaluation, SEE- Semester End Examination.

Credit Definition: 1-hour Lecture (L) per week = 1 Credit

2-hoursTutorial (T) per week = 1 Credit

2-hours Practical (P) / Drawing (P) / Project Work (PW) per week = 1 Credit

04-Credit courses are designed for 50 hours of Teaching-Learning Session.

- 04-Credit (IC) is designed for 40 hours' theory and 10-12 practical sessions of 2 hours
- 03-Credit courses are designed for 40 hours of Teaching-Learning Session
- 02- Credit courses are designed for 25 hours of Teaching-Learning Session
- 01-Credit courses are to be designed for 15 hours of Teaching-Learning sessions

	Applie	d Mathematics II Course (Program S	Specifi	c)			App	olied Chemistry Course (Program Specifi	ic)	3	
SI.	Course	Course Name	Teac	hing I	lours	SI.	Course	Course Name		hing I	Hours
No.	Code		L	T	P	No.	Code	•	I.	T	P
1	1BMATCS201	Ordinary Differential Equations and Numerical Methods (CSE and allied programs)	3	2	0	1	1BCHECS202	Chemistry of Smart Materials and Devices (CSE and allied programs)	3	0	2
2	1BMATEC201	Calculus, Numerical Methods and Laplace Transforms (ECE and EEE programs)	3	2	0	2	1BCHEEC202	Smart Materials for Energy Applications (ECE and EEE programs)	3	0	2
3	1BMATME201	Multivariate Calculus and Numerical Methods (ME program)	3	2	0	3	1ВСНЕМЕ202	Advanced Metal Protection and Sustainable Energy Systems (ME program)	3	0	2
4	1BMATCV201	Calculus and Numerical Methods (CV program)	3	2	0	4	1BCHECV202	Structural Materials and Sustainable Technologies (CV program)	3	0	2

	Engi	neering Science Course II (ESC II)					Pr	ograming Language Course (PLC)			
SI.	Course	Course Name	Teac	hing I	Iours	SI.	Course	Course Name	Tea	ching I	lours
No.	Code		L	T	P	No.	Code	Monta di ciliano di della sulta di succioni di sulta di s	I.	T	P
1	1BESC204A	Essentials of Information Technology	3	0	0	1	IBPLC205A	Introduction to C Programming (For ECE, EEE, ME and CV Programs)	3	0	2
2	1BESC204B	Introduction to Electronics Engineering	3	0	0	2	1BPLC205B	Python Programming (For CSE and Allied Programs)	3	0	2
3	1BESC204C	Introduction to Electrical Engineering	3	0	0			(1 of con una / timed 1 tograms)			
4	1BESC204D	Introduction to Mechanical Engineering	3	0	0						
5	1BESC204E	Building Science and Mechanics	3	0	0	,					

- i. Theory sessions shall be conducted for 3 hours per week, while the practical sessions shall be conducted for 2 hours per week.
- ii. Theory components shall be evaluated through both Continuous Internal Evaluation (CIE) and Semester End Examination (SEE).
- iii. The practical component shall be assessed only through CIE.

The Mathematics / Chemistry courses shall be taught by a single faculty member per session, with no sharing of the course modules. Tutorial sessions for Mathematics will be conducted to strengthen students' problem-solving skills.

Professional English Communication course shall be conducted in a laboratory environment with 1 hour of teaching followed by another 1 hour of laboratory session.

Engineering Sciences Courses-II (ESC-II): These courses are designed to broaden the technical knowledge of students beyond their core area of study. These courses enable students to gain a foundational understanding of engineering principles from other disciplines. Students are required to select and complete a course under ESC-II that does not belong to their admitted program stream. Students should select a course other than that was selected under ESC-I and other than course not belonging to their stream.

For the course Interdisciplinary Project, it is mandatory to form a team comprising students from multiple engineering disciplines. For example, a project team may include students from Mechanical Engineering, Electronics and Communication Engineering, and Computer Science and Engineering, working collaboratively to design and implement the project.



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Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the Academic Year 2025-26 onwards)

#### I Semester (CHEMISTRY CYCLE)

				Teaching	C	redits   Sur	Distrib nmary			Exan	ination		
SI. No.	Course Category	Course Code	Course Name	Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (Hours)	Contact Hours/week
1	BSC	1BMATXX101	Applied Mathematics I Course (Stream Specific)	Maths	3	1	0	4	50	50	100	3	5
2	BSC (IC)	1BCHEXX102	Applied Chemistry Course (Stream Specific)	Chemistry	3	0	1	4	50	50	100	3	5
3	ETC	1BAI103	Introduction to AI and Applications	CSE and Allied Departments	3	0	0	3	50	50	100	3	3
4	ESC	1BESC104X	Engineering Science Course I	Concerned Department	3	0	0	3	50	50	100	3	3
5	PLC (IC)	1BPLC105X	Programming Language Course	CSE and Allied Departments	3	0	1	4	50	50	100	3	5
6	AEC	1BPECL106	Professional English Communication	Humanities ,	0	0	1	1	50	50	100	2	2
7	HSMC (NCMC)	1BIC107	Indian Constitution and Engineering Ethics	Humanities	0	0	0	0	100	-	100	-	1
8	AEC	1BIDTL108	Innovation and Design Thinking	Any Department	0	0	1	1	50	50	100	2	2
			TOTAL		15	1	4	20	450	350	800		26

BSC- Basic Science Course, IC- Integrated Course (Practical course integrated with theory course). PSC- Program Specific Course, ESC- Engineering Science Course, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC- Humanities, Social Sciences, and Management Courses, NCMC- Non Credit Mandatory Course. PLC- Programming language Course, CIE - Continuous Internal Evaluation, SEE- Semester End Examination.

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01-Credit courses are to be designed for 15 hours of Teaching-Learning sessions

7/21	Appli	ed Mathematics I Course (Program Sp	ecifi	c)			App	olied Chemistry Course (Program Specific	ic)	,	
SI.	Course	Course Name	Tea	ching	Hours	SI.	Course	Course Name		ching I	lours
No.	Code		L	T	P	No.	Code	•	L	T	P
1	1BMATCS101	Calculus and Linear Algebra (CSE and allied programs)	3	2	0	1	1BCHECS102	Chemistry of Smart Materials and Devices (CSE and allied programs)	3	0	2
2	1BMATEC101	Differential Calculus, Ordinary Differential Equations and Linear Algebra (ECE and EEE programs)	Differential 3 2 0 2 1BCHEEC102 Smart Ma		Smart Materials for Energy Applications (ECE and EEE programs)	3	0	2			
3	1BMATME101	Differential Calculus and Linear Algebra (ME program)	3	2	0	3	1BCHEME102	Advanced Metal Protection and Sustainable Energy Systems (ME program)	3	0	2
4	1BMATCV101	Linear Algebra, Differential Calculus and Ordinary Differential Equations (CV program)	3	2	0	4	1BCHECV102	Structural Materials and Sustainable Technologies (CV program)	3	0	2

	Engi	neering Science Course I (ESC I)					Pro	ograming Language Course (PLC)			
SI.	Course	Course Name	Teac	hing l	Hours	Sl.	Course	Course Name	Teac	ching I	lours
No.	Code		L	T	P	No.	Code		L	T	P
1	1BESC104A	Essentials of Information Technology	3	0	0	1	1BPLC105A	Introduction to C Programming (For ECE, EEE, ME and CV Programs)	3	0	2
2	1BESC104B	Introduction to Electronics Engineering	3	0	0	2	1BPLC105B	Python Programming (For CSE and Allied Programs)	3	0	2
3	1BESC104C	Introduction to Electrical Engineering	3	0	0			, and the second			1
4	1BESC104D	Introduction to Mechanical Engineering	3	0	0						
5	1BESC104E	Building Science and Mechanics	3	0	0						

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The Mathematics / Chemistry courses shall be taught by a single faculty member per session, with no sharing of the course modules. Tutorial sessions for Mathematics will be conducted to strengthen students' problem-solving skills.

Engineering Sciences Courses-I (ESC-I): These courses are designed to broaden the technical knowledge of students beyond their core area of study. These courses enable students to gain a foundational understanding of engineering principles from other stream courses. Students are required to select and complete two courses that are not belong to their admitted program stream. For example, a student admitted to Mechanical Engineering program should not select 'Introduction to Mechanical Engineering' but to select any other two courses. One course shall be selected under ESC-I and another course under ESC-II. The two courses must be different from the other.

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- Lateral entry students (joining from the second year) must earn 75 Activity Points.
- Students transferred from other universities directly into the fifth semester must earn 50 Activity Points from the date of entry into the Institution.

These Activity Points are non-credit and will not be considered for the SGPA/CGPA or be used for vertical progression. However, they are mandatory for the award of the degree, and the points earned will be reflected on the eighth semester Grade Card. The hours spent for earning the activity points shall not be counted for regular attendance requirements. Students can accumulate these points at any time during their program, including weekends, holidays, and vacations starting from the year of admission, provided they meet the minimum hours of engagement prescribed for each activity. If a student fails to earn the required Activity Points, the eighth-semester Grade Card will be withheld until the requirement is fulfilled. Consequently, the degree will be awarded only after the Grade Card has been released.



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Scheme of Teaching and Examinations – 2025 Scheme

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the Academic Year 2025-26 onwards)

# II Semester (For the students who have studied Chemistry cycle courses in the I semester)

SI.	Course	Course	4	Teaching	C	redits l	Distrib mmary			Exan	nination		
No.	Category	Code	Course Name	Department	L	Т	P	Total	CIE Marks	SEE Marks	Total Marks	SEE Duration (Hours)	Contact Hours/weel
. 1	BSC	1BMATXX201	Applied Mathematics II Course (Stream Specific)	Maths	3	1	0	4	50	50	100	3	5
2	BSC (IC)	1BPHYXX202	Applied Physics Course (Stream Specific)	Physics	3	0	1	4	50	50	100	3	5
3.	ESC	1BCEDXX203	Computer Aided Engineering Drawing (Stream Specific)	ME	2	0	1	3	50	50	100	3	4
4	ESC	1BESC204X	Engineering Science Course II	Concerned Department	3	0	0	3	50	50	100	3	3
5	PSC	1BXXX205	Program Specific Course	Concerned Department	3	0	0	3	50	50	100	3	3
6	PSC	1BXXXL206	Program Specific Course Laboratory	Concerned Department	. 0	0	1	1	50	50	100	3	2
7	AEC (NCMC)	1BSS207	Soft Skills	Humanities	0	0	0	0	100	-	100	-	2
8	AEC	1BPRJ208	Interdisciplinary Project	Any Department	0	0	1	1	50	50	100	2	2
9	HSMC	1BSK209/ 1BBK209	Samskrutika Kannada / Balake Kannada	Humanities	1	0	0	1	50	50	100	1	1
	D : C:		TOTAL	() =	15	1	4	20	500	400	900		27

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02- Credit courses are designed for 25 hours of Teaching-Learning Session

01-Credit courses are to be designed for 15 hours of Teaching-Learning sessions

	Applie	ed Mathematics II Course (Program Sp	pecifi	c)			Арр	olied Physics Course (Program Specia	fic)		
SI.	Course	Course Name	Teac	hing H	lours	Sl.	Course	Course Name -	Tea	ching H	ours
No.	Code		L	T	P	No.	Code		L	T	P
1	1BMATCS201	Ordinary Differential Equations and Numerical Methods (CSE and allied programs)	3	2	0	1	1BPHYCS202	Physics of Quantum Computing and Applications (CSE and allied programs)	3	0	2
2	1BMATEC201	Calculus, Numerical Methods and Laplace Transforms (ECE and EEE programs)	3	2	0	2	1BPHYEC202	Quantum Physics and Optoelectronics (ECE program)	3	0	2
3	1BMATME201	Multivariate Calculus and Numerical Methods (ME program)	3	2	0	3	1BPHYEE202	Physics of Electrical Engineering Materials (EEE programs)	3	0	2
4	1BMATCV201	Calculus and Numerical Methods (CV program)	3	2	0	4	1ВРНҮМЕ202	Physics of Materials (ME program)	3	0	2
						5	1BPHYCV202	Physics of Structural Materials (CV program)	3	0	2

Computer Aided Engineering Drawing (Program Specific)						Engineering Science Course - II (ESC II)						
Sl. No.	Course Code	Course Name	Teaching Hours		_	SI. No.	Course Code	Course Name	Teaching Hours			
				T	P					T	P	
1	1BCEDCS203	Computer Aided Engineering Drawing for CSE Stream	2	0	2	1	1BESC204A	Essentials of Information Technology	3	0	0	
2	1BCEDEC203	Computer Aided Engineering Drawing for ECE Program	2	0	2	2	1BESC204B	Introduction to Electronics Engineering	3	0	0	
3	1BCEDEE203	Computer Aided Engineering Drawing for EEE Program	2	0	`2	3	1BESC204C	Introduction to Electrical Engineering	3	0	0	
4	1BCEDME203	Computer Aided Engineering Drawing for ME Stream	2	0	2	4	1BESC204D	Introduction to Mechanical Engineering	3	0	0	
5	1BCEDCV203	Computer Aided Engineering Drawing for CV Stream	2	0	2	5	1BESC204E	Building Science and Mechanics	3	0	0	

Program Specific Course (PSC)						Program Specific Course Laboratory (PSCL)						
SI.	Course	Course Name	Teaching Hours		SI.	Course	Course Name	Teaching Hours				
No.	Code		L	T	P	No.	Code		L	T	P	
1	1BPIC205	Programming in C	3	0	0	1	1BPICL206	C Programming Laboratory	0	0	2	
2	1BBEE205	Basic Electronics	3	0	0	2	1BBEEL206	Basic Electronics Laboratory	0	0	2	
3	1BEEE205	Elements of Electrical Engineering	3	0	0	3	1BEEEL206	Basic Electrical Engineering Laboratory	0	0	2	
4	1BEME205	Elements of Mechanical Engineering	3	0	0	4	1BEMEL206	Basic Mechanical Engineering Laboratory	0	0	2	
5	1BEMM205	Engineering Mechanics	3	0	0	5	1BEMML206	Mechanics and Materials Laboratory	0	0	2	

- i. Theory sessions shall be conducted for 3 hours per week, while the practical sessions shall be conducted for 2 hours per week.
- Theory components shall be evaluated through both Continuous Internal Evaluation (CIE) and Semester End Examination (SEE).
- The practical component shall be assessed only through CIE.

The Mathematics / Physics courses shall be taught by a single faculty member per session, with no sharing of the course modules. Tutorial sessions for Mathematics will be conducted to strengthen students' problem-solving skills.

Programme Specific Courses (PSC): Programme Specific Courses (PSC) are a set of core courses tailored to a specific branch or discipline of engineering in which a student is enrolled (e.g., Mechanical Engineering, Computer Science, Civil Engineering, etc.). These courses are intended to provide students with in-depth knowledge and specialized skills essential for professional competence in the chosen field. Students must select and complete the course from this group that corresponds to their admitted program stream. Similarly, students are also required to choose and pass laboratory courses that are specific to their stream from the Programme Specific Courses Laboratory (PSCL) group.

Computer-Aided Engineering Drawing: The courses under this category are stream-specific. Students must select and complete the course that corresponds to their admitted engineering stream.

Engineering Sciences Courses-II (ESC-II): These courses are designed to broaden the technical knowledge of students beyond their core area of study. These courses enable students to gain a foundational understanding of engineering principles from other disciplines. Students are required to select and complete a course under ESC-II that does not belong to their admitted program stream. Students should select a course other than that was selected under ESC-I and other than course not belonging to their stream.

For the course Interdisciplinary Project, it is mandatory to form a team comprising students from multiple engineering disciplines. For example, a project team may include students from Mechanical Engineering, Electronics and Communication Engineering, and Computer Science and Engineering, working collaboratively to design and implement the project.