

**B V V Sangha,
Basaveshwara Engineering College, Bagalkot
Scheme of Teaching and Evaluation of 1st year
(Effective from the academic year 2025-26)**

2nd Semester Chemistry Group (For those who studied Physics group in I sem)

Sl. No	Course Type	Course Code	Course Title	Teaching-Learning Scheme				Exam Duration (Hrs)		Total Duration(Hrs)/sem	Exam Scheme and Evaluation			Credits
				Hrs/Week (Hrs/Sem.)	Hrs/Week (Hrs/Sem.)	Hrs/Week (Hrs/Sem.)	Term Work (TW) & Self Learning (SL), (TW+SL) Hrs/Sem.	CIE	SEE		CIE Marks	SEE Marks	Total Marks	
				L	T	P								
1	ASC	1BMAx201C	Applied Mathematics-II (Stream Specific)	03/42	02/28	0	44	03	03	120	50	50	100	04
2	ASC(IC)	1BCHx202C	Applied Chemistry (Stream Specific)	03/42	0	02/28	44	03	03	120	50	50	100	04
3	ETC	1BAIA203C	Introduction to AI and Applications	03/42	0	0	42	03	03	90	50	50	100	03
4	ESC II	1Byyx204N	Engineering Science Course-II	03/42	0	0	42	03	03	90	50	50	100	03
5	PLC(IC)	1BCSx205D	Programming Language Course	03/42	0	02/28	44	03	03	120	50	50	100	04
6	AEC	1BHBSB206C	Communication Skills	01/14	0	0	13	02	01	30	50	50	100	01
7	AEC (NCMC)	1BHSC207M	Indian Constitution & Engineering Ethics	01/14	0	0	13	02	01	30	50	50	100	PP
8	AEC/SDC	1BxxA208P	Interdisciplinary Project Work (Project Based Learning)	0	0	02/26	0	02	02	30	50	50	100	01
			TOTAL	17/238	02/28	06/82	242	21	19	630	400	400	800	20
9	AICTE Activity Points (students have to earn 100 activity points between 01 to 08 semesters)			Compulsory requirement for the award of degree										

Science Course, **IC** – Integrated Course (Practical Course Integrated with Theory Course), **ESC**- Engineering Science Courses, **PLC(IC)**- Programming Language Course (Integrated Course), **AEC**- Ability Enhancement Course, **NCMC**: Non Credit Mandatory Course, **HSMC**- Humanity, Social Science and management Course, **AEC/SDC**: Ability Enhancement Course/Skill Development course, **CIE** –Continuous Internal Evaluation, **SEE**- Semester End Examination, **PP** : (Pass/Pass) is assigned to a noncredit

course. “PP” represents pass in course provided students have successfully completed the CIE requirements. Otherwise, “NP-not pass shall be awarded. “PP” is essential for the award of the degree.

Credit Definition:

1-hour Lecture (L) per week=**1Credit** 2-hours Tutorial(T) per week=**1Credit** 2-hours Practical / Drawing (P) per week=**1Credit**

Applied Mathematics-II					Applied Chemistry				
Code	Title	L	T	P	Code	Title	L	T	P
1BMAC201C	Calculus and Numerical Methods: CV Stream	3	2	0	1BCHC202C	Applied Chemistry for CV Stream	3	0	2
1BMAM201C	Multivariable Calculus and Numerical Methods: ME Stream	3	2	0	1BCHM202C	Applied Chemistry for ME Stream	3	0	2
1BMAE201C	Calculus, Laplace Transform And Numerical Techniques: EEE stream	3	2	0	1BCHE202C	Applied Chemistry for EEE Stream	3	0	2
1BMAS201C	Differential Equations and Numerical Methods: CSE Stream	3	2	0	1BCHS202C	Applied Chemistry CS Stream	3	0	2
Engineering Sciences Courses II(ESC-II)					Programming Language Courses (PLC) Integrated				
1BCVA204N	Introduction to Civil Engineering	3	0	0	1BCSA205D	Introduction to C Programming (for non-IT programmes)	3	0	2
1BEEA204N	Introduction to Electrical Engineering	3	0	0	1BCSB205D	Python Programming (For CSE and allied programmes)	3	0	2
1BECA204N	Introduction to Electronics & Communication Engineering	3	0	0					
1BMEA204N	Introduction to Mechanical Engineering	3	0	0					
1BISA204N	Essentials of Information Technology	3	0	0					

Integrated courses (IC), combining theory with practical components.

1. The theory sessions shall be conducted for 3 hours per week, while the practical sessions shall be conducted for 2 hours per week.
2. The theory component will be evaluated through both Continuous Internal Evaluation (CIE) and Semester End Examination (SEE).

The practical component will 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 (subject) modules. The tutorial sessions for the **mathematics course** shall be conducted in the laboratory environment using **Maxima/Mathematica/ Python/Scilab/MATLAB software** to enhance computational understanding and application skills

Communication Skills: This course shall be conducted in a Class room/laboratory environment

Students admitted to a specific engineering stream are required to select and successfully complete **Applied Mathematics-II** and **Applied Chemistry courses** that are aligned to their program 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 Work** (Project Based Learning)(**1Bxx208P**), 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 (ECE), and Computer Science and Engineering (CSE), working collaboratively to design and implement the project.

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Scheme of Teaching and Evaluation of 1st year
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2nd Semester Physics Group (For those who studied Chemistry group in I sem)

[illegible]

ASC Applied Science Course, **IC**: Integrated Course (Practical Course Integrated with Theory Course), **ESC**: Engineering Science Courses, **PSC**-Programme Specific Course, **ESC**- Engineering Science Courses, **ETC**- Emerging Technology Course, **AEC**- Ability Enhancement Course, **NMC**: Non Credit Mandatory Course, **PP**: (Pass/Pass) is assigned to a non credit course. “PP” represents pass in course provided students have successfully completed the CIE requirements. Otherwise, “NP-not pass shall be awarded. “PP” is essential for the award of the degree **HSMC**: Humanity, Social Science and management Course, **AEC/SDC**: Ability Enhancement Course/Skill Development course, **CIE**: Continuous Internal Evaluation, **SEE**: Semester End Examination

Credit Definition:

1-hour Lecture (**L**) per week=**1Credit** 2-hours Tutorial(**T**) per week=**1Credit** 2-hours Practical / Drawing (**P**) per week=**1Credit**

Applied Mathematics-II					Applied Physics				
Code	Title	L	T	P	Code	Title	L	T	P
1BMAC201C	Differential Calculus and Numerical Methods: CV stream	3	2	0	1BPHC202C	Physics for Sustainable Structural Systems (CV stream)	3	0	2
1BMAM201C	Differential Calculus and Numerical Methods: ME stream	3	2	0	1BPHM202C	Physics of Materials (Mech stream)	3	0	2
1BMAE201C	Differential Calculus and Numerical Methods: EEE stream	3	2	0	1BPHE202C	Quantum Physics and Engineering Materials (EEE stream)	3	0	2
1BMAS201C	Differential equations and Numerical Methods: CSE Stream	3	2	0	1BPHS202C	Quantum Physics and Quantum Computing(CSE stream)	3	0	2
Programme Specific Courses (PSC)					Programme Specific Courses Lab (PSCL)				
1BCVA205C	Engineering Mechanics	3	0	0	1BCVA209L	Engineering Mechanics Lab	0	0	2
1BMEA205C	Elements of Mechanical Engineering	3	0	0	1BMEA209L	Basic Mechanical Engineering Lab	0	0	2
1BEEA205C	Basic Electrical Engineering	3	0	0	1BEEA209L	Basic Electrical Engineering Lab	0	0	2
1BCEA205C	Fundamentals of Electronics & Communication Engineering	3	0	0	1BCEA209L	Fundamentals of Electronics & Communication Lab	0	0	2
1BCSA205C	Programming in C	3	0	0	1BCSA209L	C Programming Lab	0	0	2
1BBTA205C	Elements of Biotechnology	3	0	0	1BBTA209L	Elements of Biotechnology Lab	0	0	2
Engineering Science Courses-II (ESC-II)					Computer-Aided Engineering Drawing				
Code	Title	L	T	P	Code	Title	L	T	P
1BVCA204N	Introduction to Civil Engineering	3	0	0	1BMEC203C	Computer-Aided Engineering Drawing for CV Stream	2	0	2
1BEEA204N	Introduction to Electrical Engineering	3	0	0	1BMEM203C	Computer-Aided Engineering Drawing for ME stream Engineering	2	0	2
1BECA204N	Introduction to Electronics & Communication Engineering	3	0	0	1BMEE203C	Computer-Aided Engineering Drawing for EEE stream	2	0	2
1BCSA204N	Introduction to Mechanical Engineering	3	0	0	1BMES203C	Computer-Aided Engineering Drawing for CSE stream	2	0	2
1BISA204N	Essentials of Information Technology	3	0	0					

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3. The practical component will 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 (subject) modules. The tutorial sessions for the mathematics course shall be conducted in a laboratory environment using Maxima/Mathematica/ Python/Scilab/MATLAB software to enhance computational understanding and application skills.
Students admitted to a specific engineering stream are required to select and successfully complete Applied Mathematics-I and Applied Physics courses that are aligned to their program stream.
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 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 <i>Interdisciplinary Project work (Project based Learning) (1BxxA208P)</i>, 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 (ECE), and Computer Science and Engineering (CSE), working collaboratively to design and implement the project.