

			B V V Sangha, Basaveshwara Engineering College, Bagalkot Scheme of Teaching and Evaluation of 1 st year (Effective from the academic year 2026-27)												
			I Semester (Physics Group)												
SI/No	Course Category	Course Code	Course Title	TD/PSB	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Scheme and Evaluation			Credits (C) = Total Hours /30
					L Hrs/Week (Hrs/Sem.)	T Hrs/Week (Hrs/Sem.)	P Hrs/Week (Hrs/Sem.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem.	CIE	SEE		CIE Marks	SEE Marks	Total Marks	
1	ASC	1BMAS101C	Calculus and Linear Algebra: CSE Stream	Maths Dept	3(42)	2(28)	0	44	3	3	120	50	50	100	4
2	ASC(IC)	1BPHS102C	Quantum Physics and Applications (CSE stream)	PHY Dept	3(42)	0	2(26)	44	5	3	120	50	50	100	4
3	ESC	1BMES103C	Computer-Aided Engineering Drawing for CSE stream	ME Dept	2(28)	0	2(26)	28	5	3	90	50	50	100	3
4	ESC -I	1BECA104N	Introduction to Electronics & Communication Engineering	Respective Engg Dept	3(42)	0	0	42	3	3	90	50	50	100	3
5	PSC	1BBTA105C	Elements of Biotechnology	BT Dept	3(42)	0	0	42	3	3	90	50	50	100	3
6	AEC (NCMC)	1BHSA106M	Soft Skills	Humanities Dept	1(14)	0	0	14	2	-	30	100	-	100	PP
7	HSMS	1BHSA107C/ 1BHBS107C	Samskrutika Kannada/	Humanities Dept	1(14)	0	0	13	2	1	30	50	50	100	1

			Balake Kannada												
8	AEC/SDC	1BBTA108P	Innovation and Design Thinking (Project-based learning)	Respective Dept	Two contact hours/week for interaction between the faculty and students				1	3	30	50	50	100	1
9	PSC	1BBTA109L	Elements of Biotechnology Lab	BT Dept	0	0	2(26)	-	2	2	30	50	50	100	1
	TOTAL				16	2	6					500	400	900	20
10	AICTE Activity Points (students have to earn 100 activity points between 01 to 08 semesters)										Compulsory requirement for the award of a degree				

Applied Mathematics-I					Applied Physics				
Code	Title	L	T	P	Code	Title	L	T	P
1BMAC101C	Differential Calculus And Linear Algebra: CV Stream	3	2	0	1BPHC102C	Physics for Sustainable Structural Systems (CV stream)	3	0	2
1BMAM101C	Differential Calculus and Linear Algebra: ME Stream	3	2	0	1BPHM102C	Physics of Materials (Mech stream)	3	0	2
1BMAE101C	Differential Calculus And Linear Algebra: EEE stream	3	2	0	1BPHE102C	Quantum Physics and Electronics Sensors (EEE stream)	3	0	2
1BMAS101C	Calculus and Linear Algebra: CSE Stream	3	2	0	1BPHS102C	Quantum Physics and Applications (CSE stream)	3	0	2
Computer-Aided Engineering Drawing					Engineering Science Courses-I(ESC-I)				
1BMEC103C	Computer-Aided Engineering Drawing for CV Stream	2	0	2	1BCVA104N	Introduction to Civil Engineering	3	0	0
1BMEM103C	Computer-Aided Engineering Drawing for ME stream	2	0	2	1BEEA104N	Introduction to Electrical Engineering	3	0	0
1BMEC103C	Computer-Aided Engineering Drawing for EEE stream	2	0	2	1BECA104N	Introduction to Electronics & Communication Engineering	3	0	0
1BMES103C	Computer-Aided Engineering Drawing for CSE stream	2	0	2	1BMEA104N	Introduction to Mechanical Engineering	3	0	0
					1BISA104N	Essentials of Information Technology	3	0	0
Programme Specific Courses (PSC)					Program-Specific Course Lab (PSCL)				
1BCVA105C	Engineering Mechanics	3	0	0	1BCVA109L	Mechanics and Materials Lab	0	0	2

[illegible]

		B V V Sangha, Basaveshwara Engineering College, Bagalkot Scheme of Teaching and Evaluation of 1 st year (Effective from the academic year 2026-27)													
		II Semester (For those who have studied Physics Group in I semester) F div IS+BT													
Sl/ No	Course Category	Course Code	Course Title	TD/PSB	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Scheme and Evaluation			Credits (C) =Total Hours/ 30
					L Hrs/W eek (Hrs/S em.)	T Hrs/ Week (Hrs/S em.)	P Hrs/W eek (Hrs/S em.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem.	CIE	SEE		CIE Mark s	SEE Mar ks	Total Mar ks	
1	ASC	1BMAS201C	Differential Equations and Numerical Methods	Maths Dept	3(42)	2(28)	0	44	3	3	120	50	50	100	04
2	ASC(IC)	1BCHS202C	Applied Chemistry for CSE Stream(Stream Specific)	CHE Dept	3(42)	0	2(26)	44	5	3	120	50	50	100	04
3	ETC	1BAIA203C	Introduction to AI and Applications	Any Dept	3(42)	0	0	42	3	3	90	50	50	100	03

4	ESC	1BISA20 4N	Essentials of Information Technology	Respec tive Engg Dept	3(42)	0	0	42	3	3	90	50	50	100	03
5	PLC(IC)	1BCSB20 5D	Python Programmi ng	CSE & allied Dept	3(42)	0	2(26)	44	5	3	120	50	50	100	04
6	AEC	1BHSB20 6C	Communica tion Skills	Humani tiesDep t.	1(14)	0	0	13	2	1	30	50	50	100	01
7	AEC (NCCMC)	1BHSC20 7M	Indian Constitutio n & Engineering Ethics	Humani ties Dept	1(14)	0	0	14	2	-	30	100	0	100	PP
8	AEC/SD C	1BBTA20 8P	Interdiscipli nary Project- Based Learning	Respec tive Dept	Two contact hours/week for interaction between the faculty and students				1	3	30	50	50	100	01
	TOTAL				17	2	4					450	350	800	20
10	AICTE Activity Points (students have to earn 100 activity points between 01 to 08 semesters)								Compulsory requirement for the award of a degree						

Applied Mathematics-II					Applied Chemistry				
Code	Title	L	T	P	Code	Title	L	T	P
1BMAC201C	Differential Calculus and Numerical Methods: CV Stream	3	2	0	1BHC202C	Applied Chemistry for Sustainable Structure & Material Design (CV)	3	0	2
1BMAM201C	Multivariable Calculus and Numerical Methods: ME Stream	3	2	0	1BCHM202C	Applied Chemistry for Advanced Metal Protection and Sustainable Energy Systems (ME)	3	0	2
1BMAE201C	Calculus, Laplace Transform And Numerical Techniques: EEE stream	3	2	0	1BCHE202C	Applied Chemistry for Emerging Electronics and Futuristic Devices (EEE, ECE)	3	0	2
1BMAS201C	Numerical Methods: CSE Stream	3	2	0	1BCHS202C	Applied Chemistry for Smart Systems (CSE)	3	0	2
Engineering Sciences Courses II(ESC-II)					Programming Language Courses (PLC)				
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/ Elements of Biotechnology	3	0	0					

Basaveshwar Engineering College, Bagalkote
Department of Biotechnology
B. E. III SEMESTER

Sl. No	Course Category	Course Code	Course Title	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Scheme and Evaluation			Credits (C) =Total Hours/30
				L Hrs/Week (Hrs/Sem.)	T Hrs/Week (Hrs/Sem.)	P Hrs/Week (Hrs/Sem.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem.	CIE	SEE		CIE	SEE	TOTAL	
1.	PCC	1BBTA301C	Cell Biology & Genetics	3(42)	0	0	42	3	3	90	50	50	100	3
2.	IPCC	1BBTA302C	Microbiology	3(42)	0	2(26)	44	5	3	120	50	50	100	4
3.	IPCC	1BBTA303C	Biochemistry	3(42)	0	2(26)	44	5	3	120	50	50	100	4
4.	IPCC	1BBTA304C	Immunotechnology	3(42)	0	2(26)	44	5	3	120	50	50	100	4
5.	PCC	1BBTA308C	Unit Operation and Transport Processes	3(42)	0	0	42	3	3	90	50	50	100	3
6.	PCC	1BBTA306C	Cell Culture Techniques	2(28)	0	0	26	3	3	60	50	50	100	2
7.	PCCL	1BBTA307L	Unit Operation and Transport Processes	0	0	2(26)	-	2	2	30	50	50	100	1
8.	MC	1BHSA360M	Yoga-I	0	0	2(28)	-	2	-	30	100	-	100	PP
		1BHSA360M	National Service Scheme (NSS)-I											
		1BHSC360M	Physical Education-I											
		1BHSD360M	Music-I											
Total				17	0	10					450	350	800	21

B. E. IV SEMESTER

Sl. No	Course Category	Course Code	Course Title	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Scheme and Evaluation			Credits (C) =Total Hours /30
				L Hrs/Week (Hrs/Sem.)	T Hrs/Week (Hrs/Sem.)	P Hrs/Week (Hrs/Sem.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem.	CIE	SEE		CIE	SEE	TOTAL	
1.	IPCC	1BBTA401C	Biostatistics & Tools	3(42)	0	2(26)	44	5	3	120	50	50	100	04
2.	PCC	1BBTA403C	Bioprocess Principles and Calculations	3(42)	0	0	42	3	3	90	50	50	100	03
3.	ASC (IPCC)	1BBTA404C	Molecular Biology	3(42)	0	2(26)	44	5	3	120	50	50	100	04
4.	IPCC	1BBTA405C	Upstream Processing Technology	3(42)	0	2(26)	44	5	3	120	50	50	100	04
5.	PCC	1BBTA406C	Environmental Biotechnology	3(42)	0	0	42	3	3	90	50	50	100	03
6.	UHV	1BHSA424C	UHV-II	1(14)	0	0	13	2	1	30	50	50	100	01
7.	MC	1BHSA460M	Yoga-II	0	0	2(28)	-	2	-	30	100	-	100	00
		1BHSA460M	National Service Scheme (NSS)-II											
		1BHSC460M	Physical Education-II											
		1BHSD460M	Music-II											
Total				16	0	08					400	300	700	19

B. E. V SEMESTER

Sl. No	Course Category	Course Code	Course Title	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Marks			Credits (C) = Total Hours/30
				L Hrs/Week (Hrs/Sem.)	T Hrs/Week (Hrs/Sem.)	P Hrs/Week (Hrs/Sem.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem	CIE	SEE		CI E	SE E	TOTAL	
1.	PCC	BBTA501C	Bioinformatics	3(42)	0	0	42	3	3	90	50	50	100	3
2.	IPCC	BBTA502C	Genetic Engineering & Applications + Lab	3(42)	0	2(26)	44	5	6	120	50	50	100	4
3.	PCC	BBTA503C	Bioprocess and Bioreaction Engineering	3(42)	0	0	42	3	3	90	50	50	100	3
4.	PEC	BBTX504E	Elective –I	3(42)	0	0	42	3	3	90	50	50	100	3
5.	OEC	BBTA505N	Open Elective-I	3(42)	0	0	42	3	3	90	50	50	100	3
6.	HSMS/MC	BBTA523C	EVS	1(14)	0	0	13	2	1	30	50	50	100	1
7.	PCCL	BBTA506L	Bioinformatics Lab	0	0	2(26)	-	2	2	30	50	50	100	1
8.	PP	BBTA507P	Mini project	0	0	4(52)	2	3	3	60	50	50	100	2
9.	AEC	BHSA522C	Quantitative Aptitude and Professional Skills	2(28)	0	0	26	3	3	60	50	50	100	2

10	MC	BHS001/002/ 003M	NSS/ Yoga / PE	0	0	2(28)	-	2	-	30	25	-	-	00
Total				18	0	10					475	450	800	22

Elective-I

BBTA504E: Environmental Biotechnology

BBTB504E: Nutraceuticals

BBTC504E: Computational Biology

BBTD504E: Protein Engineering and Drug Design

BBTE504E: Biorefineries and Biofuels

Open Elective

BBTA505N: Biofuels Technology

B. E. VI SEMESTER

Sl. No	Course Category	Course Code	Course Title	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Marks			Credits (C) =Total Hours/30
				L Hrs/Week (Hrs/Sem.)	T Hrs/Week (Hrs/Sem.)	P Hrs/Week (Hrs/Sem.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem.	CIE	SEE		CIE	SEE	TOTAL	
1.	PCC	BBTA601C	Downstream Processing Technology	3(42)	0	0	42	3	3	90	50	50	100	3
2.	PCC	BBTA602C	Biotransformation and Enzyme technology	3(42)	0	0	42	3	3	90	50	50	100	3
3.	PCC	BBTA603C	Genomics & Proteomics	3(42)	0	0	42	3	3	90	50	50	100	3
4.	PEC	BBTA604E	Elective-II	3(42)	0	0	42	3	3	90	50	50	100	3
5.	OEC	BBTA605N	Open Elective –II	3(42)	0	0	42	3	3	90	50	50	100	3
6.	AEC	BHSA600C	Indian Knowledge System	1(14)	0	0	13	2	1	30	50	50	100	1
7.	PCCL	BBTA606L	Biokinetics & Enzyme Technology Lab	0	0	2(26)	-	2	2	30	50	50	100	1
8.	PCCL	BBTA607L	Bioseparation Techniques Lab	0	0	2(26)	-	2	2	30	50	50	100	1
9.	MC	BHS001/002/003M	NSS/ Yoga / PE	0	0	2(28)	-	2	-	30	25	-	-	00
Total				16	0	6					425	400	800	18

Elective-II

BBTB604E: Food Biotechnology

BBTD604E: Bioreactor Design

BBTE604E: Biosensors technology

BBTF604E: Validation and Quality Management /quality management and Regulatory affairs in Biotechnology

Open Elective

BBTA605N : Environmental Technology

B. E. VII SEMESTER

Sl. No	Course Category	Course Code	Course Title	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Marks			Credits (C) = Total Hours/30
				L Hrs/Week (Hrs/Sem.)	T Hrs/Week (Hrs/Sem.)	P Hrs/Week (Hrs/Sem.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem.	CIE	SEE		CIE	SEE	TOTAL	
1.	PCC	22UBT702C	Downstream Processing Technology	3(42)	0	0	42	3	3	90	50	50	100	3
2.	HSMC	22UBT703H	Bioenterpreneurship Development	3(42)	0	0	42	3	3	90	50	50	100	3
3.	HSS	22UHS711C	Research Methodology and IPR	3(42)	0	0	42	3	3	90	50	50	100	3
4.	PEC	22UBT7XXE	Elective –III	3(42)	0	0	42	3	3	90	50	50	100	3
5.	PEC	22UBT7XXE	Electives – IV	3(42)	0	0	42	3	3	90	50	50	100	3
6.	PCCL	22UBT704L	Upstream process & Bioseparation Techniques Lab	0	0	2(26)	-	2	2	30	50	50	100	1
7.	PP	22UBT705P	Project	Two contact hours/week for interaction between the faculty and students			-	1	3	240	50	50	100	8
Total				15	0	28					350	350	700	24

Elective-III

22UBT731E: Industrial Biotechnology

22UBT732E: Food Processing Technology

22UBT733E: Biosimulations

22UBT734E: Bioanalytical techniques

Elective-IV

22UBT741E: Nanobiotechnology & Biomaterials

22UBT742E: Food Product Development

22UBT743E: Clinical Research

22UBT744E: Pharmaceutical Biotechnology

B. E. VIII SEMESTER

Sl. No	Course Category	Course Code	Course Title	Teaching-Learning Scheme				Examination Duration (Hrs/Sem.)		Total Hours	Examination Marks			Credits (C) =Total Hours/30
				L Hrs/Week (Hrs/Sem.)	T Hrs/Week (Hrs/Sem.)	P Hrs/Week (Hrs/Sem.)	Term Work (TW) and Self Learning (SL) (TW+SL) Hrs/Sem.	CIE	SEE		CIE	SEE	TOTAL	
1.	AEC	22UBT0X XO	MOOCs*	3	0	0	90	-	-	90	50	50	100	3
2.	OEC	22UBT0X XO	MOOCs*	3	0	0	90	-	-	90	50	50	100	3
3.	INT	22UBT801 I	Internship	Two contact hours/week for interaction between the faculty and students				3	3	300	50	50	100	10
Total				6	0	-					150	150	300	16