VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
B.E. in SMART AGRITECH
Scheme of Teaching and Examinations 2022
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
h(Effective from the academic year 2023 - 24)

III SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Theory Lecture L	Tutorial T	Practical/ Drawing P	SDA S	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
1	PCC	BSA301	Engineering Statistics	TD-Maths PSB-Maths	3	0	0		03	50	50	100	3
2	IPCC	BSA302	Plant Water Relations	TD-AG / SA PSB-AG / SA	3	0	2		03	50	50	100	4
3	IPCC	BSA303	Farm Machinery & equipment – I	TD: Mech. Engg. PSB: Mech. Engg.	3	0	2		03	50	50	100	4
4	PCC	BSA304	Principles of Agronomy	TD: AG /SA PSB: AG / SA	3	0	0		03	50	50	100	3
5	PCCL	BSAL305	Basic Workshop Practice Lab	TD: AG /SA PSB: AG / SA	0	0	2		03	50	50	100	1
6	ESC	BSA306x	ESC/ETC/PLC	Any Department	3	0	0		03	50	50	100	3
7	UHV	BSCK307	Social Connect and Responsibility	Any Department	0	0	2		01	100	---	100	1
8	AEC/ SEC	BAG358x	Ability Enhancement Course/Skill Enhancement Course – III	If the course is a Theory					01	50	50	100	1
					1	0	0						
				If a course is a laboratory					02				
					0	0	2						
9	MC	BNSK359	National Service Scheme (NSS)	NSS coordinator	0	0	2			100	---	100	0
		BPEK359	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK359	Yoga	Yoga Teacher									
								Total		550	350	900	20

PCC: Professional Core Course, **PCCL**: Professional Core Course laboratory, **UHV**: Universal Human Value Course, **MC**: Mandatory Course (Non-credit), **AEC**: Ability Enhancement Course, **SEC**: Skill Enhancement Course, **L**: Lecture, **T**: Tutorial, **P**: Practical **S= SDA**: Skill Development Activity, **CIE**: Continuous Internal Evaluation, **SEE**: Semester End Evaluation. K : This letter in the course code indicates common to all the stream of engineering. ESC: Engineering Science Course, ETC: Emerging

Technology Course, PLC: Programming Language Course			
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Engineering Science Course (ESC/ETC/PLC)			
BSA306A	Information Technology for Land and Water Management	BSA306C	Analog and Digital Electronics Circuit
BSA306B	Artificial Intelligence and Machine learning	BSA306D	Solid Waste And By-Product Utilization
Ability Enhancement Course – III			
BSAL358A	Advanced Python Programming	BSAL358C	Spreadsheet for Engineers
BSA358E	Personality Development & Soft Skills	BSA358D	Importance of Solar Energy in Agriculture

Professional Core Course (IPCC): Refers to Professional Core Course Theory Integrated with practicals of the same course. Credit for IPCC can be 04 and its Teaching–Learning hours (L : T : P) can be considered as (3 : 0 : 2) or (2 : 2 : 2). The theory part of the IPCC shall be evaluated both by CIE and SEE. The practical part shall be evaluated by only CIE (no SEE). However, questions from the practical part of IPCC shall be included in the SEE question paper. For more details, the regulation governing the Degree of Bachelor of Engineering /Technology (B.E./B.Tech.) 2022-23 may please be referred.

National Service Scheme /Physical Education/Yoga: All students have to register for any one of the courses namely National Service Scheme (NSS), Physical Education (PE)(Sports and Athletics), and Yoga(YOG) with the concerned coordinator of the course during the first week of III semesters. Activities shall be carried out between III semester to the VI semester (for 4 semesters). Successful completion of the registered course and requisite CIE score is mandatory for the award of the degree. The events shall be appropriately scheduled by the colleges and the same shall be reflected in the calendar prepared for the NSS, PE, and Yoga activities. These courses shall not be considered for vertical progression as well as for the calculation of SGPA and CGPA, but completion of the course is mandatory for the award of degree.

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IV SEMESTER

Sl. No	Course and Course Code		Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	PCC	BSA401	Fundamentals of fruit, vegetable and ornamental Crops	TD: AG /SA PSB: AG / SA	3	0	0		03	50	50	100	3
2	IPCC	BSA402	Irrigation and Drainage Engineering	TD: AG /SA PSB: AG / SA	3	0	2		03	50	50	100	4
3	IPCC	BSA403	Agricultural Process Engineering	TD: AG /SA PSB: AG / SA	3	0	2		03	50	50	100	4
4	PCCL	BSAL404	Machine Drawing and GD &T Lab	TD: AG /SA PSB: AG / SA	0	2	0		03	50	50	100	1
5	ESC	BSA405x	ESC/ETC/PLC	TD: AG /SA PSB: AG / SA	3	0	0		03	50	50	100	3
6	AEC/ SEC	BSA456x	Ability Enhancement Course/Skill Enhancement Course- IV	TD and PSB: Concerned department	If the course is Theory				01	50	50	100	1
					1	0	0						
					If the course is a lab				02				
					0	0	2						
7	BSC	BBOK407	Biology For Engineers	TD / PSB: BT, CHE,	3	0	0		03	50	50	100	3
8	UHV	BUHK408	Universal human values course	Any Department	1	0	0		01	50	50	100	1
9	MC	BNSK459	National Service Scheme (NSS)	NSS coordinator	0	0	2			100	---	100	0
		BPEK459	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK459	Yoga	Yoga Teacher									
									Total	**500**	**400**	**900**	**20**

PCC: Professional Core Course, **PCCL**: Professional Core Course laboratory, **UHV**: Universal Human Value Course, **MC**: Mandatory Course (Non-credit), **AEC**: Ability Enhancement Course, **SEC**: Skill Enhancement Course, **L:** Lecture, **T**: Tutorial, **P**: Practical **S= SDA**: Skill Development Activity, **CIE**: Continuous Internal Evaluation, **SEE**:

Semester End Evaluation. K : This letter in the course code indicates common to all the stream of engineering.			
Ability Enhancement Course / Skill Enhancement Course – IV			
BSAL456A	Mastering MS - Office (MS Word, Excel, PPT, Outlook)	BSAL456C	Principles of Soil Science
BSAL456B	Animation in agriculture	BSA456D	Technical writing skills
Engineering Science Course (ESC/ETC/PLC)			
BSA405A	Tractor Systems and Controls	BSA405C	Non-Conventional Energy Sources
BSA405B	Robotics and Automation	BSA405D	Industrial Instrumantation

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