

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI  
**B.E. in Agricultural Engineering**  
**Scheme of Teaching and Examinations 2022**  
 Outcome Based Education (OBE) and Choice Based Credit System (CBCS)  
 (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)	Teaching Hours /Week				Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	PCC/BSC	BAG301	Basics Concepts and Applications of Agrochemicals	TD-PSB	3	0	0		03	50	50	100	3
2	IPCC	BAG302	Fundamentals of Agriculture & Crop Production Technology	TD: PSB	3	0	2		03	50	50	100	4
3	IPCC	BAG303	Soil Mechanics, Surveying & Levelling	TD: PSB	3	0	2		03	50	50	100	4
4	PCC	BAG304	Mechanics of Materials & Machine	TD: PSB	3	0	0		03	50	50	100	3
5	PCCL	BAGL305	Basic Workshop Practise Lab	TD: PSB	0	0	2		03	50	50	100	1
6	ESC	BAG306x	ESC/ETC/PLC	TD: PSB:	3	0	0		03	50	50	100	3
7	UHV	BSCK307	<b>Social Connect and Responsibility</b>	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									
<b>Total</b>									<b>550</b>	<b>350</b>	<b>900</b>	<b>20</b>	

**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

#### Engineering Science Course (ESC/ETC/PLC)

BAG306A	Information Technology for Land and Water Management	BAG306C	Analog and Digital Electronics Circuit
BAG306B	Artificial Intelligence and Machine learning	BAG306D	Solid Waste And By-Product Utilization

#### Ability Enhancement Course – III

BAGL358A	Advanced Python Programming [0-0-2]	BAGL358C	Spreadsheet for Engineers [0-0-2]
BAG358B	Fundamentals of Virtual Reality [0-2-0]	BAGL358D	Tools in Scientific Computing [0-0-2]

**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/BSC	BAG401	Thermodynamics & Fluid Mechanics		3	0	0		03	50	50	100	3
2	IPCC	BAG402	Tractor & Automotive Engines		3	0	2		03	50	50	100	4
3	IPCC	BAG403	Agricultural Process Engineering		4	0	0		03	50	50	100	4
4	PCCL	BAGL404	Machine Drawing and GD & T Lab		0	0	2		03	50	50	100	1
5	ESC	BAG405x	ESC/ETC/PLC		3	0	0		03	50	50	100	3
6	AEC/ SEC	BAG456x	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											
4	BSC	BBOK407	Biology For Engineers	TD / PSB: BT, CHE,	3	0	0		03	50	50	100	3
7	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									
<b>Total</b>									<b>500</b>	<b>400</b>	<b>900</b>	<b>20</b>	
<b>PCC:</b> Professional Core Course, <b>PCCL:</b> Professional Core Course laboratory, <b>UHV:</b> Universal Human Value Course, <b>MC:</b> Mandatory Course (Non-credit), <b>AEC:</b> Ability Enhancement Course, <b>SEC:</b> Skill Enhancement Course, <b>L:</b> Lecture, <b>T:</b> Tutorial, <b>P:</b> Practical <b>S= SDA:</b> Skill Development Activity, <b>CIE:</b> Continuous Internal Evaluation, <b>SEE:</b> Semester End Evaluation. <b>K :</b> This letter in the course code indicates common to all the stream of engineering.													

<b>Ability Enhancement Course / Skill Enhancement Course - IV</b>			
BAGL456A	Simulation and Analysis using Ansys workbench [0-0-2]	BAGL456C	Introduction to Data Analytics [0-0-2]
BAG456B	Economics for Engineers [0-2-0]	BAG456D	Human Engineering & Safety
<b>Engineering Science Course (ESC/ETC/PLC)</b>			
BAG405A	Tractor Systems and Controls	BAG405C	Non-Conventional Energy Resources
BAG405B	Industrial Instrumentation	BAG405D	Robotics and Automation
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