#### **B.E. in AGRICULTURAL ENGINEERING**

## **Scheme of Teaching and Examinations2022**

Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2023-24)

V SEN	IESTER												
					1	Teaching	Hours /Wee	k		Exam	ination		
SI. No		ourse and urse Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Theory Lecture	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
				۵	L	T	P	S				•	
1	HSMS	BAG501	Industrial Management & Entrepreneurship		3	0	0		03	50	50	100	3
2	IPCC	BAG502	Farm Machinery & Equipment-I		3	0	2		03	50	50	100	4
3	PCC	BAG503	Thermal Engineering		4	0	0		03	50	50	100	4
4	PCCL	BAGL504	Manufacturing Process Lab		0	0	2		03	50	50	100	1
5	PEC	BAG515x	Professional Elective Course		3	0	0		03	50	50	100	3
6	PROJ	BAG586	Mini Project		0	0	4		03	100		100	2
7	AEC	BRMK557	Research Methodology and IPR		2	2	0		02	50	50	100	3
8	MC	BESK508	Environmental Studies		2	0	0		02	50	50	100	2
		BNSK559	National Service Scheme (NSS)	NSS coordinator									
9	MC	BPEK559	Physical Education (PE) (Sports and Athletics)	Physical Education Director	0	0	2			100		100	0
		BYOK559	Yoga	Yoga Teacher									
									Total	550	350	900	22

	Professional Elective Course					
BAG515A	Precision Farming Techniques for Protected Cultivation	BAG515C	Storage & Packaging Technology			
BAG515B	Landscape Irrigation Design and Management	BAG515D	Water Harvesting and Soil Conservation Structures			

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: The letter in the course code indicates common to all the stream of engineering. PROJ: Project /Mini Project. PEC: Professional Elective Course

**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

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.

Mini-project work: Mini Project is a laboratory-oriented/hands on course that will provide a platform to students to enhance their practical knowledge and skills by the development of small systems/applications etc. Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini- project can be assigned to an individual student or to a group having not more than 4 students.

#### **CIE procedure for Mini-project:**

- (i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two faculty members of the Department, one of them being the Guide. The CIE marks awarded for the Mini-project work shall be based on the evaluation of the project report, project presentation skill, and question and answer session in the ratio of 50:25:25. The marks awarded for the project report shall be the same for all the batches mates.
- (ii) Interdisciplinary: Continuous Internal Evaluation shall be group-wise at the college level with the participation of all the guides of the project.

The CIE marks awarded for the Mini-project, shall be based on the evaluation of the project report, project presentation skill, and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

No SEE component for Mini-Project.

Professional Elective Courses (PEC): A professional elective (PEC) course is intended to enhance the depth and breadth of educational experience in the Engineering and Technology curriculum. Multidisciplinary courses that are added supplement the latest trend and advanced technology in the selected stream of engineering. Each group will provide an option to select one course. The minimum number of students' strengths for offering a professional elective is 10. However, this conditional shall not be applicable to cases where the admission to the program is less than 10.

### **B.E. in AGRICULTURAL ENGINEERING**

## **Scheme of Teaching and Examinations2022**

Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2023-24)

						Teaching	Hours /Wee	k		Exam	ination		
SI. No		urse and rse Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Theory	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
				<u> </u>	L	Т	P	S					
1	IPCC	BAG601	Farm Machinery & Equipment-II		3	0	2		03	50	50	100	4
2	PCC	BAG602	Soil & Water Conservation Engineering		4	0	0		03	50	50	100	4
3	PEC	BAG613x	Professional Elective Course		3	0	0		03	50	50	100	3
4	OEC	BAG654x	Open Elective Course		3	0	0		03	50	50	100	3
5	PROJ	BAG685	Project Phase I		0	0	4		03	100		100	2
6	PCCL	BAGL606	AI and Image Processing Lab		0	0	2		03	50	50	100	1
7			If the course is offered as a		Theory								
	AFC/SDC	BAG657x	Ability Enhancement Course/Skill Development		1	0	0		01	50	50	100	1
	AEC/SDC	BAGGS/X	Course V		If cours	e is offe	red as a p	ractical	01	50	30	100	
					0	0	2						
		BNSK658	National Service Scheme (NSS)	NSS coordinator									
8	MC	BPEK658	Physical Education (PE) (Sports and Athletics)	Physical Education Director	0	0	2			100		100	0
		BYOK658	Yoga	Yoga Teacher									
9	IKS	BIKS609	Indian Knowledge System		1	0	0		01	100	0	100	0
			·	•	•		·		Total	600	300	900	18

Professional Elective Course					
BAG613A	IOT Architecture & Protocols	BAG613C	Waste Land Development		
BAG613B	Agricultural Structures and Environmental Control	BAG613D	Sustainable Agriculture and Food Security		
	Open Electi	ve Course			
BAG654A	Micro Irrigation Engineering	BAG654C	Hydrology, Ground Water & Well Engineering		
BAG654B	Design of Agricultural Machinery	BAG654D	Watershed Development		

	Ability Enhancement Course / Skill Enhancement Course-V					
BAG657A	Digital Society [0-2-0]	BAG657C	Spread sheets for Engineers			
BAG657B	Fundamental of Virtual Reality ARP Development	BAG657D	Introduction Augmented Reality			

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: The letter in the course code indicates common to all the stream of engineering. PROJ: Project /Mini Project. PEC: Professional Elective Course. PROJ: Project Phase -I, OEC: Open Elective Course

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

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.

Professional Elective Courses (PEC): A professional elective (PEC) course is intended to enhance the depth and breadth of educational experience in the Engineering and Technology curriculum. Multidisciplinary courses that are added supplement the latest trend and advanced technology in the selected stream of engineering. Each group will provide an option to select one course. The minimum number of students' strengths for offering professional electives is 10. However, this conditional shall not be applicable to cases where the admission to the program is less than 10.

### **Open Elective Courses:**

Students belonging to a particular stream of Engineering and Technology are not entitled to the open electives offered by their parent Department. However, they can opt for an elective offered by other Departments, provided they satisfy the prerequisite condition if any. Registration to open electives shall be documented under the guidance of the Program Coordinator/ Advisor/Mentor. The minimum numbers of students' strength for offering Open Elective Course is 10. However, this condition shall not be applicable to class where the admission to the program is less than 10.

**Project Phase-I:** Students have to discuss with the mentor /guide and with their help he/she has to complete the literature survey and prepare the report and finally define the problem statement for the project work.

JBOS 10.02.2023 / V5

#### **B.E. in AGRICULTURAL ENGINEERING**

### **Scheme of Teaching and Examinations2022**

Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2023-24)

Schem	e-A: VII SEI	MESTER (Swapp	able VII and VIII SEMESTER)										
					1	eaching	Hours /Wee	k		Exam	ination	1	
SI. No		urse and ırse Code	Course Title	Teaching Pepartment (TD) and Question Paper Setting Board (PSB)	Theory	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
				۵	L	T	Р	S					
1	IPCC	BAG701	Dairy and Food Engineering		3	0	2		03	50	50	100	4
2	IPCC	BAG702	Irrigation & Drainage Engineering		3	0	2		03	50	50	100	4
3	PCC	BAG703	Post-Harvest Processing of Horticultural Crops		4	0	0		03	50	50	100	4
4	PEC	BAG714x	Professional Elective Course		3	0	0		03	50	50	100	3
5	OEC	BAG755x	Open Elective Course		3	0	0		01	50	50	100	3
6	PROJ	BAG786	Major Project Phase-II		0	0	12		03	100	100	200	6
										350	350	700	24

	Professional Elective Course					
BAG714A	Remote Sensing and GIS Applications	BAG714C	Food Plant Design and Management			
BAG714B	Bio-energy Systems: Design and Applications	BAG714D	Precision Agriculture and System Management			
	Open Elective	e Course				
BAG755A	Solar Photovoltaic System	BAG755C	Fundamentals of Urban Planning			
BAG755B	Principles of Agronomy & Soil Science	BAG755D	Generation of Energy through Waste			

**PCC**: Professional Core Course, **PCCL**: Professional Core Course laboratory, **PEC**: Professional Elective Course, **OEC**: Open Elective Course PR: Project Work, **L**: Lecture, **T**: Tutorial, **P**: Practical **S= SDA**: Skill Development Activity, **CIE**: Continuous Internal Evaluation, **SEE**: Semester End Evaluation. **TD**- Teaching Department, **PSB**: Paper Setting department, **OEC**: Open Elective Course, **PEC**: Professional Elective Course. **PROJ**: Project work

## Note: VII and VIII semesters of IV years of the program

- (1) Institutions can swap the VII and VIII Semester Schemes of Teaching and Examinations to accommodate research internships/ industry internships after the VI semester.
- (2) Credits earned for the courses of VII and VIII Semester Scheme of Teaching and Examinations shall be counted against the corresponding semesters whether the VII or VIII semesters is completed during the beginning of the IV year or the later part of IV years of the program.

Professional Elective Courses (PEC): A professional elective (PEC) course is intended to enhance the depth and breadth of educational experience in the Engineering and Technology curriculum. Multidisciplinary courses that are added supplement the latest trend and advanced technology in the selected stream of engineering. Each group will provide an option to select one course. The minimum number of students' strengths for offering professional electives is 10. However, this conditional shall not be applicable to cases where the admission to the program is less than 10.

#### **Open Elective Courses:**

Students belonging to a particular stream of Engineering and Technology are not entitled to the open electives offered by their parent Department. However, they can opt for an elective offered by other Departments, provided they satisfy the prerequisite condition if any. Registration to open electives shall be documented under the guidance of the Program Coordinator/ Advisor/Mentor. The minimum numbers of students' strength for offering Open Elective Course is 10. However, this condition shall not be applicable to class where the admission to the program is less than 10.

#### **PROJECT WORK (21XXP75):** The objective of the Project work is

- (i) To encourage independent learning and the innovative attitude of the students.
- (ii) To develop interactive attitude, communication skills, organization, time management, and presentation skills.
- (iii) To impart flexibility and adaptability.
- (iv) To inspire team working.
- (v) To expand intellectual capacity, credibility, judgment and intuition.
- (vi) To adhere to punctuality, setting and meeting deadlines.
- (vii) To install responsibilities to oneself and others.
- (viii)To train students to present the topic of project work in a seminar without any fear, face the audience confidently, enhance communication skills, involve in group discussion to present and exchange ideas.

### **CIE procedure for Project Work:**

(1) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work, shall be based on the evaluation of the project work Report, project presentation skill, and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(2) Interdisciplinary: Continuous Internal Evaluation shall be group-wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable. The CIE marks awarded for the project work, shall be based on the evaluation of project work Report, project presentation skill, and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

**SEE procedure for Project Work:** SEE for project work will be conducted by the two examiners appointed by the University. The SEE marks awarded for the project work shall be based on the evaluation of project work Report, project presentation skill, and question and answer session in the ratio 50:25:25.

#### **B.E. in AGRICULTURAL ENGINEERING**

### Scheme of Teaching and Examinations2022

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2023-24)

Scheme-A: VIIISEMESTER (Swappable VII and VIII SEMESTER)

				T	eaching	Hours /Wee	k		Exam	ination		
		Course Title	Teaching epartment (TD and Question Paper Setting Board (PSB)	Theory Lecture	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks	Fotal Marks	Credits
			Δ	L	Т	Р	S					
PEC	BAG801x	Professional Elective (Online Courses)		3	0	0		03	50	50	100	3
OEC	BAG802x	Open Elective (Online Courses)		0	2	0		01	50	50	100	3
INT	BAG803	Internship (Industry/Research) (14 - 20 weeks)		0	0	12		03	100	100	200	10
									200	200	400	16
	PEC OEC	OEC BAG802x	PEC BAG801x Professional Elective (Online Courses)  OEC BAG802x Open Elective (Online Courses)  INT BAG803 Internship (Industry/Research) (14 - 20 weeks)	Course and Course Code  PEC BAG801x Professional Elective (Online Courses)  OEC BAG802x Open Elective (Online Courses)  INT BAG803 Internship (Industry/Research) (14 - 20 weeks)	Course and Course Code  Course Title  PEC BAG801x Professional Elective (Online Courses)  OEC BAG802x Open Elective (Online Courses)  INT BAG803 Internship (Industry/Research) (14 - 20 weeks)  OCC DEC DEC DEC DEC DEC DEC DEC DEC DEC D	Course and Course Code  Course Title  Course Title	Course Code  Course Title  PEC BAG801x Professional Elective (Online Courses)  OEC BAG802x Open Elective (Online Courses)  INT BAG803 Internship (Industry/Research) (14 - 20 weeks)  OCC BAG803 Internship (Industry/Research) (14 - 20 weeks)	Course Code  Course Title  Course Code  Course Code  Course Title  Cours	Course and Course Code   Course Title   Course Ti	Course and Course Code   Course Title   Superation   Course Title   Course Titl	Course and Course Code   Course Title   Course Title   Course Title   Course Code   Code	Course and Course Code   Course Title   Course Title   Course Title   Course Title   Course Code   Course Code   Course Title   Course Titl

Duefessional	L Clastina Commo	(Online courses)
Protessional	Liective Course	(Unline courses)

BAG801A	BAG801A Renewable Energy Engineering: Solar, Wind and Biomass Energy B		Novel Technologies For Food Processing And Shelf Life Extension				
	Systems						
BEE801B	Instrumentation and Process Control in Food Industry	BAG801D	Machine Learning For Soil And Crop Management				
	Open Flective Courses (Online Courses)						

	Open Elective Courses	(Online Courses)	)
			_

BAG802A	An Introduction to Artificial Intelligence	BAG802C	Machine Learning
BAG802B	Finite Element Method	BAG802D	Artificial Intelligence: Knowledge Representation And Reasoning

L: Lecture, T: Tutorial, P: Practical S= SDA: Skill Development Activity, CIE: Continuous Internal Evaluation, SEE: Semester End Evaluation. TD- Teaching Department, PSB: Paper Setting department, OEC: Open Elective Course, PEC: Professional Elective Course. PROJ: Project work, INT: Industry Internship / Research Internship / Rural Internship

# Note: VII and VIII semesters of IV years of the program

### **Swapping Facility**

- Institutions can swap VII and VIII Semester Scheme of Teaching and Examinations to accommodate **research internships/ industry internships/Rural Internship** after the VI semester.
- Credits earned for the courses of VII and VIII Semester Scheme of Teaching and Examinations shall be counted against the corresponding semesters whether VII or VIII semester is completed during the beginning of IV year or later part of IV year of the program.

#### **Elucidation:**

At the beginning of IV years of the program i.e., after VI semester, VII semester classwork and VIII semester Research Internship /Industrial Internship / Rural Internship shall be permitted to be operated simultaneously by the University so that students have ample opportunity for an internship. In other words, a good percentage of the class shall attend VII semester classwork and a similar percentage of others shall attend to Research Internship or Industrial Internship or Rural Internship.

Research/Industrial /Rural Internship shall be carried out at an Industry, NGO, MSME, Innovation center, Incubation center, Start-up, center of Excellence (CoE), Study Centre established in the parent institute and /or at reputed research organizations/institutes.

The mandatory Research internship /Industry internship / Rural Internship is for 14 to 20 weeks. The internship shall be considered as a head of passing and shall be considered for the award of a degree. Those, who do not take up/complete the internship shall be declared to fail and shall have to complete it during the subsequent University examination after satisfying the internship requirements.

**Research internship:** A research internship is intended to offer the flavor of current research going on in the research field. It helps students get familiarized with the field and imparts the skill required for carrying out research.

**Industry internship:** Is an extended period of work experience undertaken by students to supplement their degree for professional development. It also helps them learn to overcome unexpected obstacles and successfully navigate organizations, perspectives, and cultures. Dealing with contingencies helps students recognize, appreciate, and adapt to organizational realities by tempering their knowledge with practical constraints.

**Rural Internship:** Rural development internship is an initiative of Unnat Bharat Abhiyan Cell, RGIT in association with AICTE to involve students of all departments studying in different academic years for exploring various opportunities in techno-social fields, to connect and work with Rural India for their upliftment.

The faculty coordinator or mentor has to monitor the student's internship progress and interact with them to guide for the successful completion of the internship.

The students are permitted to carry out the internship anywhere in India or abroad. University shall not bear any expenses incurred in respect of the internship.

With the consent of the internal guide and Principal of the Institution, students shall be allowed to carry out the internship at their hometown (within or outside the state or abroad), provided favorable facilities are available for the internship and the student remains regularly in contact with the internal guide. University shall not bear any cost involved in carrying out the internship by students. However, students can receive any financial assistance extended by the organization.

Professional Elective /Open Elective Course: These are ONLINE courses suggested by the respective Board of Studies. Details of these courses shall be made available for students on the VTU web portal.

Please note: If any clarifications / suggestions please email to <a href="mailto:sbhvtuso@yahoo.com">sbhvtuso@yahoo.com</a>

## **B.E.** in the title of the program

# **Scheme of Teaching and Examinations-2022**

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2023-24)

				om the academic y		1-24)							
Schen	ie -B VII	and VIII semes	sters for the candidates who seek a two-semester intern	ship with project work		Cooching	Hours /Wee	alz	T	Fyon	ination		
Sl. No			Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Theory Lectur	Tutorial	Practical Drawing	V S S	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
1	IPCC	BXX701	To be completed in 5 <sup>th</sup> /6 <sup>th</sup> semester		3	0	2		03	50	50	100	4
2	IPCC	BXX702	To be completed in 5 <sup>th</sup> /6 <sup>th</sup> semester		3	0	2		03	50	50	100	4
3	PCC	BXX70	To be completed in the 6 <sup>th</sup> semester		4	0	0		03	50	50	100	3
4	PEC	BXX714	Professional Elective Course (MOOC Courses)		3	0	0		03	50	50	100	3
5	OEC	BXX755	Open Elective Courses (MOOC courses)		3	0	0		01	50	50	100	3
1	PEC	Bxx801x	<b>Professional Elective (MOOC Courses)</b>		3	0	0		03	50	50	100	3
2	OEC	Bxx802x	Open Elective (MOOC Courses)		3	0	0		01	50	50	100	3
3	PRO J	BXX883	Project - outcome of training		0	0	12		03	100	100	200	9
4	INT	Bxx804	Internship (Industry/Research) (02 semesters)		0	0	12	•	03	100	100	200	10
										200	200	400	42

# B.E. in the title of the program

## **Scheme of Teaching and Examinations2022**

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2023-24)

Schem	ne B-VI SEME	STER for the ca	andidates who seek a two-semester internship with pro	ject work /Start-up									
				Teaching Hours /Week		k	Examination			1	1		
SI. No	Course and Course Code		Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Theory	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	Т	Р	S					
1	IPCC	BXX601			3	0	2		03	50	50	100	4
2	PCC	BXX602			4	0	0		03	50	50	100	4
3	PEC	BXX613x	Professional Elective Course		3	0	0		03	50	50	100	3
4	OEC	BXX654x	Open Elective Course		3	0	0		03	50	50	100	3
5	PCCL	BXXL606	Lab component		0	0	2		03	50	50	100	1
6		/SDC BXX657x	Ability Enhancement Course/Skill Development Course V		If the co	course is offered as a Theory							
	AEC/SDC				1	0	0 0		01	50	50	100	1
	AEC/SDC				If course is of	ourse is offered as a practical			01	30	50	100	1
					0	0	2						
		BNSK658	National Service Scheme (NSS)	NSS coordinator									
7	MC	BPEK658	Physical Education (PE) (Sports and Athletics)	Physical Education Director	0	0	2			100		100	0
		BYOK658	Yoga	Yoga Teacher									
8	IKS	BIKS609	Indian Knowledge System		1	0	0		01	100	0	100	0
									Total	500	300	800	16

## B.E. in the title of the program

# **Scheme of Teaching and Examinations2022**

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2023-24)

Scheme BVII and VIII semesters for the candidateswho seek an internship with project work

	Course and Course Code		Teaching Department (TD) and Question Paper Setting		1	eaching	Hours /Wee	k	Examination				
SI. No				Teaching lepartment (TD and Question Paper Setting Board (PSB)	Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
				-		T	Р						
1	IPCC	BXX701	To be completed in 5 <sup>th</sup> /6 <sup>th</sup> semester		3	0	2		03	50	50	100	4
2	IPCC	BXX702	To be completed in 5 <sup>th</sup> /6 <sup>th</sup> semester		3	0	2		03	50	50	100	4
3	PCC	BXX703	To be completed in the 6th semester		4	0	0		03	50	50	100	3
4	PEC	BXX714x	Professional Elective Course (MOOC Courses)		3	0	0		03	50	50	100	3
5	OEC	BXX755x	Open Elective Courses (MOOC courses)		3	0	0		01	50	50	100	3
1	PEC	Bxx801x	Professional Elective (MOOC Courses)		3	0	0		03	50	50	100	3
2	OEC	Bxx802x	Open Elective (MOOC Courses)		3	0	0		01	50	50	100	3
3	PROJ	BXX883	Project - outcome of training		0	0	12		03	100	100	200	9
4	INT	Bxx804	Internship (Industry/Research) (02 semesters)		0	0	12		03	100	100	200	10
										550	550	1100	42