			VISVESVARAYA	TECHNOLOGICAL UN	IVERSITY,	BELAGA	AVI						
			B.E. in Computer Science & E	0 01	0		achine L	.earnin	g)				
				f Teaching and Exam									
			Outcome Based Educati				em (CB	CS)					
	456750		(Effective	from the academic	year 2023	-24)							
I SEN	IESTER				Те	aching Hou	s /Week			Exan	ination		Т
SI. Cou No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Theory Lecture	Tuto rial	Prac tical / Dra win g	SDA	Dur atio n in hou rs	CIE Mar ks	SEE Mar ks	Total Marks	
					L	Т	Р	S					
1	PCC/BS C	BCS301	Mathematics for Computer Science	TD: Maths PSB: Maths	3	2	0		03	50	50	100	
2	IPCC	BCS302	Digital Design & Computer Organization	TD: CI PSB: CS	3	0	2		03	50	50	100	
3	IPCC	BCS303	Operating Systems	TD: CI PSB: CS	3	0	2		03	50	50	100	
4	PCC	BCS304	Data Structures and Applications	TD: CI PSB: CS	3	0	0		03	50	50	100	
5	PCCL	BCSL305	Data Structures Lab	TD: CI PSB: CS	0	0	2		03	50	50	100	
6	ESC	BXX306x	ESC/ETC/PLC	TD: CI PSB: CS	2	0	2		03	50	50	100	
7	UHV	BSCK307	Social Connect and Responsibility	Any Department	0	0	2		01	100		100	
8	AEC/	BXX358x	Ability Enhancement Course/Skill Enhancement	TD and PSB: Concerned department	If the course is a Theorem 1 0 0				01	50	50	100	
0	SEC	DVV220X	Course - III		lfac 0	ourse is a l	aboratory 2		02	50	50	100	
		BNSK359	National Service Scheme (NSS)	NSS coordinator	<u> </u>	- Ŭ							\dagger
9	MC	BPEK359	PDEK250 Physical Education (PE) (Sports and	Physical Education Director	0	0	2			100		100	
		BYOK359	Yoga	Yoga Teacher									
									Total	550	350	900	

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) (Note- Student should opt for the course which should not be similar to the course opted in 1 st Year)										
BCS306A	Object Oriented Programming with Java	BDS306C	Data Analytics with R							
BDS306B	Python Programming for Data Science	BCI306D								
	Ability E	nhancement Course – III								
BCS358A	Data Analytics with Excel	BCS358C	Project Management with Git							
BAI358B Ethics and Public Policy for AI BAI358D PHP Programming										

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 refered.

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.

			VARAYA TECHNO	DLOGICAL UNIVERS	SITY, BE	LAGA	/I						
			B.E. in Computer Science & Engin	eering(Artificial In	telligen	ice &	Machin	e Learni	ng)				
				aching and Examir									
			Outcome Based Education (,			ystem (0	CBCS)					
			(Effective from	m the academic ye	ar 2023	-24)							
IV SEN	MESTER			Teaching	-	Teaching	Hours /We	ok		Fyam	ination		T
		rse and se Code	Course Title	Department (TD) and Question Paper Setting Board (PSB)	The T Prav The t tica ory o / Lect ri Dra		Prac tical / Dra win	Self - Study	Dur atio n in hou rs	CIE Mar ks	SEE Mark S	Total Mar ks	C r d i t s
					L	т	Р	S					
1	PCC/BS C	BCS401	Analysis & Design of Algorithms	TD: CI PSB: CS	3	0	0		03	50	50	100	3
2	IPCC	BAI402	Artificial Intelligence	TD: CI PSB: CS	3	0	2		03	50	50	100	4
3	IPCC	BCS403	Database Management Systems	TD: CI PSB: CS	3	0	2		03	50	50	100	4
4	PCCL	BCSL404	Analysis & Design of Algorithms Lab	TD: CI PSB: CS	0	0	2		03	50	50	100	1
5	ESC	BXX405x	ESC/ETC/PLC	TD: CI /Maths PSB: CS	2	2	0		03	50	50	100	3
				TD and PSB:	lf th	If the course is Theory		leory	- 01				
6	AEC/	BXX456x	Ability Enhancement Course/Skill	Concerned	1	0	0		01	50	50	100	1
0	SEC	0774308	Enhancement Course- IV	department	lf t	he co	urse is a	lab	02	50	50	100	1
					0	0	2		02				
4	BSC	BBOK407	Biology For Engineers	TD / PSB: BT, CHE,	2	0	0		03	50	50	100	2
7	UHV	BUHK408	Universal human values course	Any Department	1	0	0		01	50	50	100	1
		BNSK459	National Service Scheme (NSS)	NSS coordinator									
9	MC	BPEK459	Physical Education (PE) (Sports and Athletics)	Physical Education Director	0	0	2			100		100	C
		BYOK459	Yoga	Yoga Teacher									
									Total	500	400	900	1

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											
BDS456A	Scala	BDS456C	MERN									
BDS456B	MangoDB BCS456D Technical writing using LATEX											
	Engineering Science Course (ESC/ETC/PLC)											
BCS405A	5A Discrete Mathematical Structures BAI405C Optimization for Machine Learning											
BAI405B Metric Spaces BAI405D Algorithmic Game Theory												
Professional C	ore Course (IPCC): Refers to Professional Core Course Theory Integrate	d with practical	of the same course. Credit for IPCC can be 04 and its Teaching-									
Learning hours	s (L : T : P) can be considered as $(3:0:2)$ or $(2:2:2)$. The theory par	t of the IPCC sh	nall be evaluated both by CIE and SEE. The practical part shall be									
evaluated by o	only CIE (no SEE). However, questions from the practical part of IPCC	Shall be includ	ded 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 Servi	ice Scheme /Physical Education/Yoga: All students have to register	for any one o	of the courses namely National Service Scheme (NSS), Physical									
Education (PE)	(Sports and Athletics), and Yoga(YOG) with the concerned coordinator	of the course du	ring the first week of III semesters. Activities shall be carried out									
between III se	mester to the VI semester (for 4 semesters). Successful completion of	the registered c	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 courses is mandatory for the award of degree.

Scheme of Teaching and Examinations2022 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2023-24) **V SEMESTER Teaching Hours /Week** Examination Teaching Department (TD) Prac С and Question Paper u tical The Dur r Setting Board t ory 1 SI. Course and CIE SEE Total atio е ο SDA **Course Title** (PSB) Lect Dra **Course Code** No Mar Mark Mar d n in ri ure win it hou ks ks s а g rs s т S L Ρ Software Engineering & Project Management (This course must be pertaining to economics and TD: CI **HSMS** BCI501 3 0 0 03 50 50 100 3 1 management of the concerned degree program. PSB: CS The course syllabus should have both economics and management topics and the course title should bear the word Management.) TD: CI 100 4 IPCC BCI502 **Computer Networks** 2 3 0 2 03 50 50 PSB: CS TD: CI 4 100 PCC BCI503 Theory of Computation 3 2 0 03 50 50 3 PSB: CS TD: CI 100 1 0 2 PCCL BCIL504 Data Visualization Lab 0 03 50 50 4 PSB: CS TD: CI 100 3 PEC BCI515x Professional Elective Course 5 3 0 0 03 50 50 PSB: CS TD: CI 6 PROJ BCI586 Mini Project 0 0 4 03 100 100 2 PSB: CS TD: HSM 100 3 **Research Methodology and IPR** 2 AEC BRMK557 2 0 02 50 50 7 PSB : HSM 8 TD: HSM MC BESK508 **Environmental Studies** 2 0 0 02 50 50 100 2 PSB : HSM NSS coordinator BNSK559 National Service Scheme (NSS) Physical Education 0 9 MC BPEK559 Physical Education (PE) (Sports and Athletics) 0 0 2 100 100 Director Yoga Teacher **BYOK559** Yoga

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

B.E. in Computer Science & Engineering(Artificial Intelligence & Machine Learning)

			Total	500	300	800	22				
Professional Elective Course											
BCI515A	Computer Vision	BCI515C	Nonlinear Control Techniques								
BCI515B	Information Retrieval	BCI515D	Image and Video Processing								

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, SXX: Semester End Evaluation. K: The letter in the course code indicates common to al 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.

14.09.2023

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

B.E. in Computer Science & Engineering(Artificial Intelligence & Machine Learning)

Scheme of Teaching and Examinations2022

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

(Effective from the academic year 2023-24)

				Teaching		Teac	hing Ho	urs /Weel	k		Exam	ination		
SI. No		urse and Irse Code	Course Title	Department (and Questio Paper Settin Board (PSE	n The Ig ory		T u t o ri al T	Prac tical / Dra win g P	SDA S	Dur atio n in hou rs	CIE Mar ks	SEE Mark S	Total Mark S	C r d it s
1	IPCC	BCI601	Microcontrollers & Embedded Systems	TD: CI/EC PSB: CS/EC	2	(0	2		03	50	50	100	4
2	PCC	BCI602	Machine Learning -I	TD: CI PSB: CS	4	(0	0		03	50	50	100	4
3	PEC	BCI613x	Professional Elective Course	TD: CI PSB: CS	3	(0	0		03	50	50	100	3
4	OEC	BCI654x	Open Elective Course	TD: CI PSB: CS	3	(0	0		03	50	50	100	3
5	PROJ	BCI685	Project Phase I	TD: CI PSB: CS	0	(0	4		03	100		100	2
6	PCCL	BCIL606	Machine Learning lab	TD: CI PSB: CS	0	(0	2		03	50	50	100	1
7				TD and PSB: Concerned department		ne course is offered as a Theory		Theory						
	AEC/SD	BCI657x	Ability Enhancement Course/Skill Development Course V		L 1	(0	0		0.1		- 0	100	
	Ċ					If course is offered as a practical			01	50	50	100	1	
					0	(0	2						
		BNSK658	National Service Scheme (NSS)	NSS coordina	itor									
8	MC	BPEK658	Physical Education (PE) (Sports and Athletics)	Physical Educa Director	ation 0	(0	2			100		100	0
		BYOK658	Yoga	Yoga Teach	er									
				· · · · ·						Total	500	300	800	18
				fessional Electiv										
BCI613					BCI613C			in Techno						
BCI613	00	Cloud Computi	11g	Open Elective Co	3CI613D	III	ne seri	es Analys	515					

BCI654A	Introduction to Data Structures	BCI654C	Mobile Application Development
BCI654B	Fundamentals of Operating Systems	BCI654D	Introduction to AI
	Ability Enhance	ment Course / Skill Enhancemen	nt Course-V
BCI657A	Explainable Al	BCI657C	Generative AI
BCI657B	PyTorch	BCI657D	Devops
		•	an Value Course, MC : Mandatory Course (Non-credit), AEC : Abili
Enhanceme	ent Course, SEC: Skill Enhancement Course, L: Lecture, T: Tut	torial, P : Practical S= SDA : S	Skill Development Activity, CIE : Continuous Internal Evaluation, SE
Semester E	nd Evaluation. K : The letter in the course code indicates cor	mmon to al the stream of e	engineering. PROJ: Project /Mini Project. PEC: Professional Elective
Course. PRC	OJ : Project Phase -I, OEC : Open Elective Course		
Professiona	al Core Course (IPCC): Refers to Professional Core Course The	eory Integrated with praction	cals of the same course. Credit for IPCC can be 04 and its Teaching
Learning ho	purs (L : T : P) can be considered as $(3:0:2)$ or $(2:2:2)$.	The theory part of the IPCC	C shall be evaluated both by CIE and SEE. The practical part shall b
•			cluded in the SEE question paper. For more details, the regulation
	he Degree of Bachelor of Engineering /Technology (B.E./B.Te	•	
0		•	a of the courses namely National Service Scheme (NSS) Physic
			e of the courses namely National Service Scheme (NSS), Physic
-			during the first week of III semesters. Activities shall be carried o
			d course and requisite CIE score is mandatory for the award of the
degree. The	e events shall be appropriately scheduled by the colleges a	nd the same shall be reflect	cted in the calendar prepared for the NSS, PE, and Yoga activitie
These cours	ses shall not be considered for vertical progression as well a	as for the calculation of SG	GPA and CGPA, but completion of the course is mandatory for the
award of de	egree.		
Professiona	al Elective Courses (PEC): A professional elective (PEC) cours	e is intended to enhance t	he depth and breadth of educational experience in the Engineerir
and Techno	blogy curriculum. Multidisciplinary courses that are added s	upplement the latest trend	d and advanced technology in the selected stream of engineerin
Each group	will provide an option to select one course. The minimum nu	umber of students' strength	hs for offering professional electives is 10. However, this condition
0 1	applicable to cases where the admission to the program is le	•	
Open Electi	ive Courses:		
Students be	elonging to a particular stream of Engineering and Technolog	y are not entitled to the op	en electives offered by their parent Department. However, they ca
opt for an e	elective offered by other Departments, provided they satisfy	the prerequisite condition i	f any. Registration to open electives shall be documented under the
			gth for offering Open Elective Course is 10. However, this condition
0	applicable to class where the admission to the program is le		
shall not he		55 GIULT 10.	

define the problem statement for the project work.

				A TECHNOLOGICA									
			B.E. in Computer Science &	Engineering(Arti	ficial Intellig	ence &	Machin	e Learn	ing)				
			Scheme	of Teaching and	Examination	s2022							
			Outcome Based Educa	ation (OBE) and Cl	noice Based (Credit S	System (CBCS)					
			(Effectiv	ve from the acade	emic year 202	23-24)							
/IISEN	IESTER (Sw	vappable VII and \	(III SEMESTER)										
				Teachin		Teaching	g Hours /We	ek		Exam	ination	г	_
SI. No		ourse and urse Code	Course Title		(TD) ion The ing ory SB) Lect ure	T u t o ri al	Prac tical / Dra win g	SDA	Dur atio n in hou rs	CIE Mar ks	SEE Mark s	Total Mark s	C r d it s
					L	т	Р	S					3
1	IPCC	BCI701	Natural Language Processing	TD: CI PSB: CS	3	0	2		03	50	50	100	4
2	IPCC	BCI702	Machine Learning -II	TD: CI PSB: CS	3	0	2		03	50	50	100	4
3	PCC	BCI703	Information & Network Security	TD: CI PSB: CS	4	0	0		03	50	50	100	4
4	PEC	BCI714x	Professional Elective Course	TD: CI PSB: CS	3	0	0		03	50	50	100	3
5	OEC	BCI755x	Open Elective Course	TD: CI PSB: CS	3	0	0		01	50	50	100	3
6	PROJ	BCI786	Major Project Phase-II	TD: CI PSB: CS	0	0	12		03	100	100	200	6
										400	300	700	24
		·	·	Professional Elect	ive Course		·	·	·	·	·	·	<u> </u>
BCI714		AI of Things			BCI714C		Engineering						
BCI714	ŀΒ	High Performa	nce Computing		BCI714D	Big Da	ata Analytic	s					
BCI755A Introduction to DBMS				Open Elective	Course BCI755C	Softw	are Enginee	ring					
BCI755B Introduction to Algorithms			BCI755D		luction to N	-	arning						
PCC:	Professio	onal Core Cou	Irse, PCCL : Professional Core Course labo	oratory, PEC : Profes	sional Elective	e Cours	e, OEC : (Dpen Ele	ctive Cou				
	-		, ,,		-		SLET ETTU		л. то- т	eaching I	Jepartine	п, гэр.	rape
settii	ig depart	tment, DEC : (Open Elective Course, PEC : Professional El	lective Course. PR	J: Project WO	ſĸ							

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.

			VISVESVARAYA TEC	HNOLOGICAL U	NIVERSIT	Y, BELA	AGAVI						
			B.E. in Computer Science & Engir	neering(Artificia	l Intellige	ence &	Machin	e Learn	ing)				
			Scheme of Te	aching and Exa	mination	s2022							
			Outcome Based Education (OBE) and Choic	e Based C	redit S	System (CBCS)					
			(Effective fro	m the academic	year 202	3-24)							
VIII SE	MESTER (S	wappable VII and	VIII SEMESTER)		-								
				Teaching		Teaching	Hours /We	ek		Exam	ination	1	_
SI. No		urse and urse Code	Course Title	Department (TD) and Question Paper Setting Board (PSB)	The ory Lect ure	u t o ri al	Prac tical / Dra win g	SDA	Dur atio n in hou rs	CIE Mar ks	SEE Mark s	Total Mark s	C r d it s
					L	т	Р	S					
1	PEC	BCI801x	Professional Elective (Online Courses) Only through NPTEL	TD: CI PSB: CS	3	0	0		03	50	50	100	3
2	OEC	BCI802x	Open Elective (Online Courses) Only through NPTEL	TD: CI PSB: CS	3	0	0		01	50	50	100	3
3	INT	BCI803	Internship (Industry/Research) (14 - 20 weeks)		0	0	12		03	100	100	200	10
										200	200	400	16
			Professional	Elective Course (C	nline cours	ses)							
BCI80	1A	BOS will publis	sh courses based on the availability	BCI8									
BCI80	1B			BCI8	-								
BCI802	2 4	POS will public	Sh courses based on the availability	ective Courses (Onlin BCI8									
BC1802		BOS will publis		BCI8									
		Tutorial. P : P	ractical S= SDA : Skill Development Activity, CI			uation.	SEE: Ser	nester E	nd Evalu	ation. TD	- Teachin	g Depart	ment.
	-		nent, OEC : Open Elective Course, PEC : Profess									• •	
	Internsh		- ,					,		· · · · · · · · · · · · · · · · · · ·	,		
		•	rs of Wypars of the program										
note	. vii and	viii semester	rs 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

14.09.2023

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.
- Note: For BCI801x and BCI802x courses BOS will announce list of courses in 6th, 7th & 8th Sem. Students can register in any of the semester to earn the credits in 8th Sem.

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 sbhvtuso@yahoo.com