R R Institute of Technology

1.3.2 Percentage of students undertaking project work/field work/ internships
(Data for academic year -2022-23)

Sl NO	Program	Name of the Course	Course Code	No of Students undertaking Project /Field Work/ Internship	Project/Internship 8th sem	Mini Project	Intern ship
1	CIVIL	Extensive Survey Report	18CVEP68	29	38	29	63
		Internship/Profession Practice	18CVI85	38			
		Project work Phase II	18CVP83	38			
		Summer Internship I	21INT49	63			
2	CSE	Computer Graphics Laboratory with Mini Project	18CSL67	63	56	63	139
		Internship/Profession Practice	18CSI85	56			
		Project work Phase II	18CSP83	56			
		Mini project Mobile Application Development	18CSMP68	63			
		Data base management System lab with Mini Project	18CSL58	63			
		Summer Internship I	21INT49	139			
3	ECE	Mini Project	18ECMP68	15	18	15	61
		Internship/Profession Practice	18ECI85	18			
		Project work Phase II	18ECP83	18			
		Summer Internship I	21INT49	61			
4	EEE	Mini Project	18EEMP68	10	15	10	34
		Internship/Profession Practice	18EET84	15			
		Project work Phase II	18EEP85	15			
		Summer Internship I	21EEI48	34			
5	ISE	File Structure with Mini Project	18ISL67	45	54	45	66
		Internship/Profession Practice	18CSI85	54			
		Project work Phase II	18CSP83	54			
		Mini project Mobile Application Development	18CSMP68	45			
		Data base management System lab with Mini Project	18CSL58	45			
		Summer Internship I	21INT36	66			
6	ME	Mini Project	18MEMP68	13	30	13	26
		Internship/Profession Practice	18MEI85	30			
		Project work Phase II	18MEP83	30			
		Summer Internship I	21INT49	26			
		Total: 775			211	175	388

PRINCIPAL
R.R. INSTITUTE OF TECHNOLOG
Chikkabanavara, Bangalore - 560 09

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
B.E. in Electronics and Communication Engineering (ECE)
Scheme of Teaching and Examinations 2021
Outcome-Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2021 - 22)

IV SEMESTER

Sl. No	Course and Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Theory Lecture L	Tutorial T	Practical/ Drawing P	Self -Study S	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
1	BSC **21EC41**	Maths for Communication Engineers	TD, PSB-Maths					03	50	50	100	3
2	IPCC 21EC42	Digital Signal Processing	TD: ECE PSB: ECE	3	0	2		03	50	50	100	4
3	IPCC 21EC43	Circuits & Controls	TD: ECE PSB: ECE	3	0	2		03	50	50	100	4
4	PCC 21EC44	Communication Theory	TD: ECE PSB: ECE	3	0	0	1	03	50	50	100	3
5	AEC 21BE45	Biology For Engineers	BT, CHE, PHY	2	0	0		02	50	50	100	2
6	PCC 21ECL46	Communication Laboratory I	TD: ECE PSB: ECE	0	0	2		03	50	50	100	1
7	HSMC 21KSK37/47	Samskrutika Kannada	HSMC	1	0	0		01	50	50	100	1
	HSMC 21KBK37/47	Balake Kannada										
		OR										
	HSMC 21CIP37/47	Constitution of India & Professional Ethics										
8	AEC 21EC48X	Ability Enhancement Course- IV	TD and PSB: Concerned department	If offered as theory Course				01	50	50	100	1
				1	0	0						
				If offered as lab. course				02				
				0	0	2						
9	UHV 21UH49	Universal Human Values	Any Department	1	0	0		01	50	50	100	1
10	INT 21INT49	Inter/Intra Institutional Internship	Evaluation By the appropriate authorities	Completed during the intervening period ofII and III semesters by students admitted to first year of BE./B.Tech and during the intervening period of III and IV semesters by Lateral entry students admitted to III semester.				3	100	--	100	2
			Total						550	450	1000	22

	Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs											
1	NCMC 21MATDIP41	Additional Mathematics - II	Maths	02	02	--	--	--	100	--	100	0

Note: BSC: Basic Science Course, IPCC: Integrated Professional Core Course, PCC: Professional Core Course, AEC –Ability Enhancement Courses, HSMC: Humanity and Social Science and Management Courses, UHV- Universal Human Value Courses.

L –Lecture, T – Tutorial, P- Practical/ Drawing, S – Self Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination.

21KSK37/47 Samskrutika Kannada is for students who speak, read and write Kannada and 21KBK37/47 Balake Kannada is for non-Kannada speaking, reading, and writing students.

Integrated Professional Core Course (IPCC): Refers to Professional Theory Core Course 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 practical part of IPCCshall be included in the SEE question paper.For more details the regulation governing the Degree of Bachelor of Engineering /Technology (BE/B.Tech.) 2021-22 may be referred.

Non – credit mandatory course (NCMC):
Additional Mathematics - II:
(1) Lateral entry Diploma holders admitted to III semester of B.E./B.Tech., shall attend the classes during the IV semester to complete all the

formalities of the course and appear for the Continuous Internal Evaluation (CIE). In case, any student fails to register for the said course/fails to secure the minimum 40 % of the prescribed CIE marks, he/she shall be deemed to have secured an F grade. In such a case, the student has to fulfill the course requirements during subsequent semester/s to earn the qualifying CIE marks. These courses are slated for CIE only and have no SEE.

(2) Additional Mathematics I and II shall not be considered for vertical progression as well as for the calculation of SGPA and CGPA, but completion of the courses shall be mandatory for the award of degree.

(3) Successful completion of the course Additional Mathematics II shall be indicated as satisfactory in the grade card. Non-completion of the courses Additional Mathematics II shall be indicated as Unsatisfactory.

Ability Enhancement Course - IV

21EC481	Embedded C Basics	21EC483	Octave / Scilab for Signals
21EC482	C++ Basics	21EC484	DAQ using LabVIEW

Internship of 04 weeks during the intervening period of IV and V semesters; 21INT68Innovation/ Entrepreneurship/ Societal based Internship.

(1) All the students shall have to undergo a mandatory internship of 04 weeks during the intervening period of IV and V semesters. The internship shall be slated for CIE only and will not have SEE. The letter grade earned through CIE shall be included in the VI semester grade card. The internship shall be considered as a head of passing and shall be considered for vertical progression and for the award of degree. Those, who do not take up / complete the internship shall be considered under F (fail) grade and shall have to complete during subsequently after satisfying the internship requirements.

(2) Innovation/ Entrepreneurship Internship shall be carried out at industry, State and Central Government /Non-government organizations (NGOs), micro, small and medium enterprise (MSME), Innovation centres or Incubation centres. Innovation need not be a single major breakthrough; it can also be a series of small or incremental changes. Innovation of any kind can also happen outside of the business world.

Entrepreneurship internships offers a chance to gain hands on experience in the world of entrepreneurship and helps to learn what it takes to run a small entrepreneurial business by performing intern duties with an established company. This experience can then be applied to future business endeavours. Start-ups and small companies are a preferred place to learn the business tack ticks for future entrepreneurs as learning how a small business operates will serve the intern well when he/she manages his/her own company. Entrepreneurship acts as a catalyst to open the minds to creativity and innovation. Entrepreneurship internship can be from several sectors, including technology, small and medium-sized, and the service sector.

(3) Societal or social internship.

Urbanization is increasing on a global scale; and yet, half the world's population still resides in rural areas and is devoid of many things that urban population enjoy. Rural internship is a work-based activity in which students will have a chance to solve/reduce the problems of the rural place for better living.

As proposed under the AICTE rural internship programme, activities under Societal or social internship, particularly in rural areas, shall be considered for 40 points under AICTE activity point programme.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

3rd to 8th Semester BE – Computer Science and Engineering

Scheme of Teaching and Examinations

Outcome Based Education (OBE) and Choice Based Credit System
(CBCS)
(Effective from the academic year 2018 – 19)

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Choice Based Credit System (CBCS) AND Outcome Based Education (OBE)
(Effective from the academic year 2018 – 19)

V SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P					
1	HSMC	18CS51	Management, Entrepreneurship for IT idustry	HSMC	2	2	--	03	40	60	100	3
2	PCC	18CS52	Computer Networks and Security	CS / IS	3	2	--	03	40	60	100	4
3	PCC	18CS53	Database Management System	CS / IS	3	2	--	03	40	60	100	4
4	PCC	18CS54	Automata theory and Computability	CS / IS	3	--	--	03	40	60	100	3
5	PCC	18CS55	Application Development using Python	CS / IS	3	--	--	03	40	60	100	3
6	PCC	18CS56	Unix Programming	CS / IS	3	--	--	03	40	60	100	3
7	PCC	18CSL57	Computer Network Laboratory	CS / IS	--	2	2	03	40	60	100	2
8	PCC	18CSL58	DBMS Laboratory with mini project	CS / IS	--	2	2	03	40	60	100	2
9	HSMC	18CIV59	Environmental Studies	Civil/ Environmental [Paper setting: Civil Engineering Board]	1	--	--	02	40	60	100	1
				TOTAL	18	10	04	26	360	540	900	25

Note: PCC: Professional Core, HSMC: Humanity and Social Science.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Choice Based Credit System (CBCS) AND Outcome Based Education (OBE)
(Effective from the academic year 2018 – 19)

VI SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	**T**	**P**					
1	PCC	18CS61	System Software and Compilers	CS / IS	3	2	--	03	40	60	100	4
2	PCC	18CS62	Computer Graphics and Visualization	CS / IS	3	2	--	03	40	60	100	4
3	PCC	18CS63	Web Technology and its applications	CS / IS	3	2	--	03	40	60	100	4
4	PEC	18CS64X	Professional Elective -1	CS / IS	3	--	--	03	40	60	100	3
5	OEC	18CS65X	Open Elective –A	CS / IS	3	--	--	03	40	60	100	3
6	PCC	18CSL66	System Software Laboratory	CS / IS	--	2	2	03	40	60	100	2
7	PCC	18CSL67	Computer Graphics Laboratory with mini project	CS / IS	--	2	2	03	40	60	100	2
8	MP	18CSMP68	Mobile Application Development	CS / IS	--	--	2	03	40	60	100	2
9	INT	--	Internship	(To be carried out during the intervening vacations of VI and VII semesters)	--	--	--	--	--	--	--	--
				TOTAL	15	10	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project, INT: Internship.

Professional Elective -1	
Course code under18XX64X	**Course Title**
18CS641	Data Mining and Data Warehousing
18CS642	Object Oriented Modelling and Design
18CS643	Cloud Computing and its Applications
18CS644	Advanced JAVA and J2EE
18CS645	System Modelling and Simulation
Open Elective –A (Not for CSE / ISE Programs)	
18CS651	Mobile Application Development
18CS652	Introduction to Data Structures and Algorithms
18CS653	Programming in JAVA
18CS654	Introduction to Operating System

Students can select any one of the open electives offered by any Department (Please refer to the list of open electives under 18CS65X).

Selection of an open elective is not allowed provided,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Adviser/Mentor.

Mini-project work: 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 senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the Mini-project work, shall be based on the evaluation of 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.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college. The CIE marks awarded for the Mini-project, shall be based on the evaluation of 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.

SEE for Mini-project:

(i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.

(ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.

Internship: All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not takeup/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Choice Based Credit System (CBCS) AND Outcome Based Education (OBE)
(Effective from the academic year 2018 – 19)

VII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture (L)	Tutorial (T)	Practical/ Drawing (P)	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
1	PCC	18CS71	Artificial Intelligence and Machine Learning	CS / IS	4	--	--	03	40	60	100	4
2	PCC	18CS72	Big Data Analytics	CS / IS	4	--	--	03	40	60	100	4
3	PEC	18CS73X	Professional Elective – 2	CS / IS	3	--	--	03	40	60	100	3
4	PEC	18CS74X	Professional Elective – 3	CS / IS	3	--	--	03	40	60	100	3
5	OEC	18CS75X	Open Elective –B	CS / IS	3	--	--	03	40	60	100	3
6	PCC	18CSL76	Artificial Intelligence and Machine Learning Laboratory	CS / IS	--	--	2	03	40	60	100	2
7	Project	18CSP77	Project Work Phase – 1	CS / IS	--	--	2	--	100	--	100	1
8	INT	--	Internship	(If not completed during the vacation of VI and VII semesters, it has to be carried out during the intervening vacations of VII and VIII semesters								
				TOTAL	17	--	04	18	340	360	700	20

Note: PCC: Professional core, PEC: Professional Elective, OEC: Open Elective, INT: Internship.

Professional Elective - 2	
Course code under 18CS73X	**Course Title**
18CS731	Software Architecture and Design Patterns
18CS732	High Performance Computing
18CS733	Advanced Computer Architecture
18CS734	User Interface Design

Professional Electives – 3	
Course code under 18CS74X	**Course Title**
18CS741	Digital Image Processing
18CS742	Network management
18CS743	Natural Language Processing
18CS744	Cryptography
18CS745	Robotic Process Automation Design & Development

Open Elective –B (Not for CSE / ISE Programs)	
18CS751	Introduction to Big Data Analytics
18CS752	Python Application Programming
18CS753	Introduction to Artificial Intelligence
18CS754	Introduction to Dot Net framework for Application Development

Students can select any one of the open electives offered by any Department (Please refer to the list of open electives under 18CS75X).
Selection of an open elective is not allowed provided,
- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.
Registration to electives shall be documented under the guidance of Programme Coordinator/ Adviser/Mentor.

Project work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary project can be assigned to an individual student or to a group having not more than 4 students. In extraordinary cases, like the funded projects requiring students from different disciplines, the project student strength can be 5 or 6.
CIE procedure for Project Work Phase - 1:
(i) 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 phase -1, shall be based on the evaluation of the project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), 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.
(ii) 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 phase -1, shall be based on the evaluation of project work phase -1 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.
Internship: All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not takeup/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Choice Based Credit System (CBCS) AND Outcome Based Education (OBE)
(Effective from the academic year 2018 – 19)

VIII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					Theory Lecture	Tutorial	Practical/ Drawing					
					L	**T**	**P**					
1	PCC	18CS81	Internet of Things	CS / IS	3	--	--	03	40	60	100	3
2	PEC	18CS82X	Professional Elective – 4	CS / IS	3	--	--	03	40	60	100	3
3	Project	18CSP83	Project Work Phase – 2	CS / IS	--	--	2	03	40	60	100	8
4	Seminar	18CSS84	Technical Seminar	CS / IS	--	--	2	03	100	--	100	1
5	INT	18CSI85	Internship	(Completed during the intervening vacations of VI and VII semesters and /or VII and VIII semesters.)				03	40	60	100	3
				TOTAL	**06**	**--**	**04**	**15**	**260**	**240**	**500**	**18**

Note: PCC: Professional Core, PEC: Professional Elective, OEC: Open Elective, INT: Internship.

Professional Electives – 4	
Course code under 18CS82X	**Course Title**
18CS821	Mobile Computing
18CS822	Storage Area Networks
18CS823	NoSQL Database
18CS824	Multicore Architecture and Programming

Project Work CIE procedure for Project Work Phase - 2:
(i) 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 phase -2, shall be based on the evaluation of project work phase -2 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.
(ii) 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 phase -2, shall be based on the evaluation of project work phase -2 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 for Project Work Phase - 2:
 (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
(ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.
Internship: Those, who have not pursued /completed the internship shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI

Scheme of Teaching and Examination and Syllabus
B.E. CIVIL ENGINEERING
(Effective from Academic year 2018-19)

General Notes:

1. Question Paper Pattern for Theory Courses:
   - The question paper will have TEN questions, Each full question carries 20 marks, There will be two full questions (with a maximum of four subquestions) from each module.Each full question will have sub questions covering all the topicsunder a module.
   - Students will have to answer 5 full questions, selecting one fullquestion from each module.
2. The teaching learning process should be as per the Choice Based CreditSystem
3. All Civil Engineering Departments should have a "CIVIL ENGINEERINGMUSEUM" with collections like models,charts, material samples, fixtures and fittings etc. which assist effectiveteaching learning process.
4. The teaching learning process may be planned to develop capabilities,competencies and skills required for career development based on coursebeginning and course end surveys.
5. Course objectives, course outcomes and RBT levels given under eachcourse in the syllabus are indicative/suggestive. The facultycan set them appropriately according to their lesson/ course plan.
6. The course coordinators/teachers/instructors are informed to deliberatein the faculty meeting with module coordinator, program coordinatoralong with the stake holders to develop the respective lesson/ courseplans.
7. The department advisory board may make suitable changes to thecourse objectives, course outcomes according totheir finalized course plans.
8. The faculty should complement the teaching with case studies and fieldvisits wherever required.
9. At least one faculty development program to be conducted to complimentteaching learning process by the department in a year

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: CIVIL ENGINEERING

V SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination					Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks		
					L	T	P						
1	HSMC	18CV51	Construction Management & Entrepreneurship	Civil Engg.	2	2	--	03	40	60	100		3
2	PCC	18CV52	Analysis of Indeterminate Structures	Civil Engg.	3	2	--	03	40	60	100		4
3	PCC	18CV53	Design of RC Structural Elements	Civil Engg.	3	2	--	03	40	60	100		4
4	PCC	18CV54	Basic Geotechnical Engineering	Civil Engg.	3	--	--	03	40	60	100		3
5	PCC	18CV55	Municipal Wastewater Engineering	Civil Engg.	3	--	--	03	40	60	100		3
6	PCC	18CV56	Highway Engineering	Civil Engg.	3	--	--	03	40	60	100		3
7	PCC	18CVL57	Surveying Practice	Civil Engg.	--	2	2	03	40	60	100		2
8	PCC	18CVL58	Concrete and Highway Materials Laboratory	Civil Engg.	--	2	2	03	40	60	100		2
9	HSMC	18CIV59	Environmental Studies	Civil/Environmental [Paper setting Board: Civil Engineering]	1	--	--	02	40	60	100		1
				TOTAL	**18**	**10**	**04**	**26**	**360**	**540**	**900**		**25**

Note: PCC: Professional Core, HSMC: Humanity and Social Science.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: CIVIL ENGINEERING

VI SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P					
1	PCC	18CV61	Design of Steel Structural Elements	Civil Engg.	3	2	--	03	40	60	100	4
2	PCC	18CV62	Applied Geotechnical Engineering	Civil Engg.	3	2	--	03	40	60	100	4
3	PCC	18CV63	Hydrology and Irrigation Engineering	Civil Engg.	3	2	--	03	40	60	100	4
4	PEC	18CV64X	Professional Elective -1	Civil Engg.	3	--	--	03	40	60	100	3
5	OEC	18CV65X	Open Elective -A	Civil Engg.	3	--	--	03	40	60	100	3
6	PCC	18CVL66	Software Application Laboratory	Civil Engg.	--	2	2	03	40	60	100	2
7	PCC	18CVL67	Environmental Engineering Laboratory	Civil Engg.	--	2	2	03	40	60	100	2
8	EP	18CVEP68	Extensive Survey project	Civil Engg.	--	2	2	03	40	60	100	2
9	Internship	--	Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.								
				TOTAL	15	12	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

	Professional Elective -1
Course code under18CV64X	
18CV641	Matrix Method of Structural Analysis
18CV642	Solid Waste Management
18CV643	Alternate Building Materials
18CV644	Ground Improvement Techniques
18CV645	Railway, Harbours, Tunnelling & Airports

	Open Elective -A
Course code under18CV65X	
18CV651	Remote Sensing & GIS
18CV652	Traffic Engineering
18CV653	Occupational Health & Safety

	18CV654	Sustainability Concepts in Civil Engineering

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Internship: All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: CIVIL ENGINEERING

VII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination					Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks		
					L	T	P						
1	PCC	18CV71	Quality Surveying and Contract Management	Civil Engg.	3	--	--	03	40	60	100		3
2	PCC	18CV72	Design of RCC and Steel Structures	Civil Engg.	3	--	--	03	40	60	100		3
3	PEC	18CV73X	Professional Elective - 2	Civil Engg.	3	--	--	03	40	60	100		3
4	PEC	18CV74X	Professional Elective - 3	Civil Engg.	3	--	--	03	40	60	100		3
5	OEC	18CV75X	Open Elective -B	Civil Engg.	3	--	--	03	40	60	100		3
6	PCC	18CVL76	Computer Aided Detailing of Structures	Civil Engg.	--	2	2	03	40	60	100		2
7	PCC	18CVL77	Geotechnical Engineering Laboratory	Civil Engg.	--	2	2	03	40	60	100		2
8	Project	18CVP78	Project Work Phase - 1		--	--	2	--	100	--	100		1
9	Internship	--	Internship	(If not completed during the vacation of VI and VII semesters, it shall be carried out during the vacation of VII and VIII semesters)									
			TOTAL		**15**	**04**	**06**	**21**	**380**	**420**	**00**		**20**

Note: PCC: Professional core, PEC: Professional Elective.

Professional Elective - 2	
Course code under 18CV73X	**Course Title**
18CV731	Theory of Elasticity
18CV732	Air Pollution and Control
18CV733	Pavement Materials & Construction
18CV734	Ground Water Hydraulics
18CV735	Masonry Structures

Professional Electives - 3	
Course code under 18CV74X	**Course Title**
18CV741	Earthquake Engineering
18CV742	Design Concepts of Building Services
18CV743	Reinforced Earth Structures

18CV744	Design of Hydraulic Structures
18CV745	Urban Transport Planning

Open Elective -B	
Course code under 18CV75X	**Course Title**
18CV751	Finite Element Method
18CV752	Numerical Methods and Applications
18CV753	Environmental Protection and Management

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX75X).

Selection of an open elective shall not be allowed if,
- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Project work:
Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary project can be assigned to an individual student or to a group having not more than 4 students. In extraordinary cases, like the funded projects requiring students from different disciplines, the project student strength can be 5 or 6.

CIE procedure for Project Work Phase - 1:

(i) 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 phase -1, shall be based on the evaluation of the project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), 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.

(ii) 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 phase -1, shall be based on the evaluation of project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), 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.

Internship: All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: CIVIL ENGINEERING

VIII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P					
1	PCC	18CV81	Design of Pre-stressed Concrete	Civil Engg.	3	--	--	03	40	60	100	3
2	PEC	18CV82X	Professional Elective - 4	Civil Engg.	3	--	--	03	40	60	100	3
3	Project	18CVP83	Project Work Phase - 2	Civil Engg.	--	--	16	03	40	60	100	8
4	Seminar	18CVS84	Technical Seminar	Civil Engg.	--	--	2	03	100	--	100	1
5	Internship	18CVI85	Internship	Completed during the vacation/s of VI and VII semesters and /or VII and VIII semesters.)				03	40	60	100	3
				TOTAL	06	--	18	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Electives - 4	
Course code under 18CV82X	Course Title
18CV821	Bridge Engineering
18CV822	Prefabricated Structures
18CV823	Advanced Foundation Engineering
18CV824	Rehabilitation & Retrofitting
18CV825	Pavement Design

Project Work
CIE procedure for Project Work Phase - 2:
(i) 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 phase -2, shall be based on the evaluation of project work phase -2 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.
(ii) 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 phase -2, shall be based on the evaluation of project work phase -2 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 for Project Work Phase - 2:

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: B.E: Electronics & Communication Engineering

VI SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18EC61	Digital Communication		3	2	--	03	40	60	100	4
2	PCC	18EC62	Embedded Systems		3	2	--	03	40	60	100	4
3	PCC	18EC63	Microwave and Antennas		3	2	--	03	40	60	100	4
4	PEC	18XX64X	Professional Elective -1		3	--	--	03	40	60	100	3
5	OEC	18XX65X	Open Elective -A		3	--	--	03	40	60	100	3
6	PCC	18ECL66	Embedded Systems Laboratory		--	2	2	03	40	60	100	2
7	PCC	18ECL67	Communication Laboratory		--	2	2	03	40	60	100	2
8	MP	18ECMP68	Mini-project		--	--	2	03	40	60	100	2
9	Internship	--	Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.								
			TOTAL		15	10	6	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

Professional Elective -1

Course code under 18XX64X	Course Title
18EC641	Operating System
18EC642	Artificial Neural Networks
18EC643	Data Structures using C++
18EC644	Digital System Design Using Verilog
18EC645	Nanoelectronics
18EC646	Python Application Programming

Open Elective –A
(i) 18EC651 Signal Processing   (ii) 18EC652 Sensors & Signal Conditioning
Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).   Selection of an open elective shall not be allowed if,   • The candidate has studied the same course during the previous semesters of the programme.   • The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.   • A similar course, under any category, is prescribed in the higher semesters of the programme.   Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.
Mini-project work: 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 senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the Mini-project work shall be based on the evaluation of 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.   **(ii) Interdisciplinary:** Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college.   The CIE marks awarded for the Mini-project, shall be based on the evaluation of 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.   **SEE for Mini-project:**   **(i) Single discipline:** Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.   **(ii) Interdisciplinary:** Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.   **Internship:** All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.
AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: B.E: Electronics & Communication Engineering

VII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18EC71	Computer Networks		3	--	--	03	40	60	100	3
2	PCC	18EC72	VLSI Design		3	--	--	03	40	60	100	3
3	PEC	18XX73X	Professional Elective - 2		3	--	--	03	40	60	100	3
4	PEC	18XX74X	Professional Elective - 3		3	--	--	03	40	60	100	3
5	OEC	18XX75X	Open Elective -B		3	--	--	03	40	60	100	3
6	PCC	18ECL76	Computer Networks Lab		--	2	2	03	40	60	100	2
7	PCC	18ECL77	VLSI Laboratory		--	2	2	03	40	60	100	2
8	Project	18ECP78	Project Work Phase - 1		--	--	2	--	100	--	100	1
9	Internship	--	Internship	(If not completed during the vacation of VI and VII semesters, it shall be carried out during the vacation of VII and VIII semesters)								
				TOTAL	15	04	06	21	38	420	800	20

Note: PCC: Professional core, PEC: Professional Elective.

Professional Elective - 2

Course code under 18XX73X	Course Title
18EC731	Real Time Systems
18EC732	Satellite Communication
18EC733	Digital Image Processing
18EC734	DSP Algorithms & Architecture

Professional Elective – 3	
Course code under 18XX74X	**Course Title**
18EC741	IoT & Wireless Sensor Networks
18EC742	Automotive Electronics
18EC743	Multimedia Communication
18EC744	Cryptography
18EC745	Machine Learning with Python

Open Elective –B
(i) 18EC751 Communication Theory   (ii) 18EC752 Neural Networks
Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX75X). Selection of an open elective shall not be allowed if,   - The candidate has studied the same course during the previous semesters of the programme.   - The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.   - A similar course, under any category, is prescribed in the higher semesters of the programme.   Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.
Project work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinaryproject can be assigned to an individual student or to a group having not more than 4 students. In extraordinary cases, like the funded projects requiring students from different disciplines, the project student strength can be 5 or 6. **CIE procedure for Project Work Phase – 1:** **(i) 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 phase -1, shall be based on the evaluation of the project work phase -1 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. **(ii) 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 phase -1, shall be based on the evaluation of project work phase -1 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.
Internship: All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.
AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: B.E: Electronics & Communication Engineering

VIII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Duration in hours	Examination			Credits
					Theory Lecture	Tutorial	Practical/ Drawing		CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18EC81	Wireless and Cellular Communication		3	--	--	03	40	60	100	3
2	PEC	18XX82X	Professional Elective - 4		3	--	--	03	40	60	100	3
3	Project	18ECP83	Project Work Phase - 2		--	--	2	03	40	60	100	8
4	Seminar	18ECS84	Technical Seminar		--	--	2	03	100	--	100	1
5	Internship	18ECI85	Internship	Completed during the vacation/s of VI and VII semesters and /or VII and VIII semesters.)				03	40	60	100	3
			TOTAL		**06**	**--**	**04**	**15**	**260**	**240**	**500**	**18**

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Elective - 4

Course code under 18XX82X	Course Title
18EC821	Network Security
18EC822	Micro Electro Mechanical Systems
18EC823	Radar Engineering
18EC824	Optical Communication Networks
18EC825	Biomedical Signal Processing

Project Work

CIE procedure for Project Work Phase – 2:

(i) 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 phase –2, shall be based on the evaluation of project work phase –2 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.

(ii) 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 phase –2, shall be based on the evaluation of project work phase –2 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 for Project Work Phase – 2:

(i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.

(ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.

Internship: Those, who have not pursued /completed the internship, shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI

BE ELECTRICAL AND ELECTRONICS ENGINEERING
Scheme of Teaching and Examinations
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Approved by BOS held on 24/5/2019

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VI SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination					Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks		
					L	T	P						
1	PCC	18 EE61	Control Systems	EEE	3	2	--	03	40	60	100		4
2	PCC	18 EE62	Power System Analysis – 1	EEE	3	2	--	03	40	60	100		4
3	PCC	18 EE63	Digital Signal Processing	EEE	3	2	--	03	40	60	100		4
4	PEC	18 EE64X	Professional Elective -1	EEE	3	--	--	03	40	60	100		3
5	OEC	18 EE65X	Open Elective -A	EEE	3	--	--	03	40	60	100		3
6	PCC	18 EEL66	Control System Laboratory	EEE	--	2	2	03	40	60	100		2
7	PCC	18 EEL67	Digital Signal Processing Laboratory	EEE	--	2	2	03	40	60	100		2
8	MP	18 EEMP68	Mini-project		--	--	2	03	40	60	100		2
9	Internship	--	Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.									
			TOTAL		15	10	06	24	320	480	800		24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

Professional Elective -1	
Course code under18XX64X	Course Title
18 EE641	Introduction to Nuclear Power
18 EE642	Electrical Engineering Materials
18 EE643	Computer Aided Electrical Drawing
18 EE644	Embedded System
18 EE645	Object Oriented Programming using C++

Open Elective -A

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).

Selection of an open elective shall not be allowed if,

The candidate has studied the same course during the previous semesters of the programme.

The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.

A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Mini-project work:
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 senior faculty members of the Department, one of whom shall be the Guide.
The CIE marks awarded for the Mini-project work, shall be based on the evaluation of 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.
(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college.
The CIE marks awarded for the Mini-project, shall be based on the evaluation of 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.

SEE for Mini-project:
(i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.
(ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18 EE71	Power System Analysis – 2	EEE	2	2	--	03	40	60	100	3
2	PCC	18 EE72	Power System Protection	EEE	3	--	--	03	40	60	100	3
3	PEC	18 EE73X	Professional Elective - 2	EEE	3	--	--	03	40	60	100	3
4	PEC	18 EE74X	Professional Elective - 3	EEE	3	--	--	03	40	60	100	3
5	OEC	18 EE75X	Open Elective -B	EEE	3	--	--	03	40	60	100	3
6	PCC	18 EEL76	PSS laboratory	EEE	--	2	2	03	40	60	100	2
7	PCC	18 EEL77	Relay & HV lab	EEE	--	2	2	03	40	60	100	2
8	Project	18 EEP78	Project Work Phase - 1	EEE	--	--	2	--	100	--	100	1
9	Internship	--	Internship	(If not completed during the vacation of VI and VII semesters, it shall be carried out during the vacation of VII and VIII semesters)								
				TOTAL	**14**	**06**	**06**	**21**	**380**	**420**	**800**	**20**

Note: PCC: Professional core, PEC: Professional Elective.

Professional Elective - 2	
Course code under 18XX73X	**Course Title**
18EE731	Solar and Wind Energy
18EE732	Sensors and Transducers
18 EE733	Integrated of Distribution Generation.
18 EE734	Advanced Control Systems
18 EE735	Reactive Power Control in Electric Power Systems

Professional Electives - 3	
Course code under 18 EE74X	**Course Title**
18 EE741	Industrial Drives and Application
18 EE742	Utilization of Electrical Power
18 EE743	PLC and SCADA
18 EE744	Smart Grid
18 EE745	Artificial Neural Network With Applications to Power Systems

Open Elective -B

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX75X).

Selection of an open elective shall not be allowed if,

   The candidate has studied the same course during the previous semesters of the programme.

   The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.

   A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Project work:

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary project can be assigned to an individual student or to a group having not more than 4 students. In extraordinary cases, like the funded projects requiring students from different disciplines, the project student strength can be 5 or 6.

CIE procedure for Project Work Phase - 1:

(i) 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 phase -1, shall be based on the evaluation of the project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), 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.

(ii) 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 phase -1, shall be based on the evaluation of project work phase -1 Report(covering Literature Survey, Problem identification, Objectives and Methodology), 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.

Internship: All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VIII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	**T**	**P**					
1	PCC	18EE81	Power System Operation and Control	EEE	3	--	--	03	40	60	100	3
2	PEC	18EE82X	Professional Elective - 4	EEE	3	--	--	03	40	60	100	3
3	Project	18EEP83	Project Work Phase - 2		--	--	2	03	40	60	100	8
4	Seminar	18EES84	Technical Seminar		--	--	2	03	100	--	100	1
5	Internship	18EEI85	Internship	Completed during the vacation/s of VI and VII semesters and /or VII and VIII semesters.)				03	40	60	100	3
				TOTAL	**06**	**--**	**04**	**15**	**260**	**240**	**500**	**18**

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Electives - 4

Course code under 18XX82X	Course Title
18EE821	FACTs and HVDC Transmission
18EE822	Electrical Estimation and Costing
18EE823	Electric Vehicles Technologies
18EE824	Power System Planning
18EE825	Electrical Power Quality

Project Work

CIE procedure for Project Work Phase - 2:

(i) 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 phase -2, shall be based on the evaluation of project work phase -2 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.

(ii) 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 phase -2, shall be based on the evaluation of project work phase -2 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 for Project Work Phase - 2:

(i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.

ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: Those, who have not pursued /completed the internship, shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

3rd to 8th Semester BE – Information Science and Engineering

Scheme of Teaching and Examinations

Outcome Based Education (OBE) and Choice Based Credit System
(CBCS)
(Effective from the academic year 2018 – 19)

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

V SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	HSMC	18CS51	Management, Entrepreneurship for IT Industry	HSMC	2	2	--	03	40	60	100	3
2	PCC	18CS52	Computer Networks and Security	CS / IS	3	2	--	03	40	60	100	4
3	PCC	18CS53	Database Management System	CS / IS	3	2	--	03	40	60	100	4
4	PCC	18CS54	Automata theory and Computability	CS / IS	3	--	--	03	40	60	100	3
5	PCC	18CS55	Application Development using Python	CS / IS	3	--	--	03	40	60	100	3
6	PCC	18CS56	Unix Programming	CS / IS	3	--	--	03	40	60	100	3
7	PCC	18CSL57	Computer Network Laboratory	CS / IS	--	2	2	03	40	60	100	2
8	PCC	18CSL58	DBMS Laboratory with mini project	CS / IS	--	2	2	03	40	60	100	2
9	HSMC	18CIV59	Environmental Studies	Civil/ Environmental [Paper setting: Civil Engineering Board]	1	--	--	02	40	60	100	1
				TOTAL	**18**	**10**	**04**	**26**	**360**	**540**	**900**	**25**

Note: PCC: Professional Core, HSMC: Humanity and Social Science.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VI SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture L	Tutorial T	Practical/ Drawing P	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
1	PCC	18IS61	File Structures	CS / IS	3	2	--	03	40	60	100	4
2	PCC	18IS62	Software Testing	CS / IS	3	2	--	03	40	60	100	4
3	PCC	18CS63	Web Technology and its applications	CS / IS	3	2	--	03	40	60	100	4
4	PEC	18CS64X	Professional Elective -1	CS / IS	3	--	--	03	40	60	100	3
5	OEC	18CS65X	Open Elective –A	CS / IS	3	--	--	03	40	60	100	3
6	PCC	18ISL66	Software Testing Laboratory	CS / IS	--	2	2	03	40	60	100	2
7	PCC	18ISL67	File Structures Laboratory with mini project	CS / IS	--	2	2	03	40	60	100	2
8	MP	18CSMP68	Mobile Application Development	CS / IS	--	--	2	03	40	60	100	2
9	INT	--	Internship	(To be carried out during the intervening vacations of VI and VII semesters)				--	--	--	--	--
				TOTAL	15	10	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project, INT: Internship.

Professional Elective -1	
Course code under18XX64X	Course Title
18CS641	Data Mining and Data Warehousing
18CS642	Object Oriented Modelling and Design
18CS643	Cloud Computing and its Applications
18CS644	Advanced JAVA and J2EE
18IS645	Information Management System
Open Elective –A (Not for CSE / ISE Programs)	
18CS651	Mobile Application Development
18CS652	Introduction to Data Structures and Algorithms
18CS653	Programming in JAVA
18CS654	Introduction to Operating System

Students can select any one of the open electives offered by any Department(Please refer to the list of open electives under 18CS65X).
Selection of an open elective is not allowed provided,
- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.
Registration to electives shall be documented under the guidance of Programme Coordinator/ Adviser/Mentor.

Mini-project work: 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 senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the Mini-project work, shall be based on the evaluation of 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.
(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college. The CIE marks awarded for the Mini-project, shall be based on the evaluation of 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.
SEE for Mini-project:
(i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.
(ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.
Internship: All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not takeup/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18CS71	Artificial Intelligence and Machine Learning	CS / IS	4	--	--	03	40	60	100	4
2	PCC	18CS72	Big Data Analytics	CS / IS	4	--	--	03	40	60	100	4
3	PEC	18CS73X	Professional Elective – 2	CS / IS	3	--	--	03	40	60	100	3
4	PEC	18CS74X	Professional Elective – 3	CS / IS	3	--	--	03	40	60	100	3
5	OEC	18CS75X	Open Elective –B	CS / IS	3	--	--	03	40	60	100	3
6	PCC	18CSL76	Artificial Intelligence and Machine Learning Laboratory	CS / IS	--	--	2	03	40	60	100	2
7	Project	18CSP77	Project Work Phase – 1	CS / IS	--	--	2	--	100	--	100	1
8	INT	--	Internship	(If not completed during the vacation of VI and VII semesters, it has to be carried out during the intervening vacations of VII and VIII semesters								
			TOTAL		17	--	04	18	340	360	700	20

Note: PCC: Professional core, PEC: Professional Elective, OEC: Open Elective, INT: Internship.

Professional Elective - 2

Course code under 18CS73X	Course Title
18CS731	Software Architecture and Design Patterns
18CS732	High Performance Computing
18CS733	Advanced Computer Architectures
18CS734	User Interface Design

Professional Electives – 3

Course code under 18CS74X	Course Title
18CS741	Digital Image Processing
18CS742	Network management
18CS743	Natural Language Processing
18CS744	Cryptography
18CS745	Robotic Process Automation Design & Development

Open Elective –B (Not for CSE / ISE Programs)

18CS751	Introduction to Big Data Analytics
18CS752	Python Application Programming
18CS753	Introduction to Artificial Intelligence
18CS754	Introduction to Dot Net framework for Application Development

Students can select any one of the open electives offered by any Department (Please refer to the list of open electives under 18CS75X).
Selection of an open elective is not allowed provided,
- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.
Registration to electives shall be documented under the guidance of Programme Coordinator/ Adviser/Mentor.

Project work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary project can be assigned to an individual student or to a group having not more than 4 students. In extraordinary cases, like the funded projects requiring students from different disciplines, the project student strength can be 5 or 6.
CIE procedure for Project Work Phase - 1:
(i) 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 phase -1, shall be based on the evaluation of the project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), 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.
(ii) 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 phase -1, shall be based on the evaluation of project work phase -1 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.
Internship: All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not takeup/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VIII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					Theory Lecture	Tutorial	Practical/ Drawing					
					L	**T**	**P**					
1	PCC	18CS81	Internet of Things	CS / IS	3	--	--	03	40	60	100	3
2	PEC	18CS82X	Professional Elective – 4	CS / IS	3	--	--	03	40	60	100	3
3	Project	18CSP83	Project Work Phase – 2	CS / IS	--	--	2	03	40	60	100	8
4	Seminar	18CSS84	Technical Seminar	CS / IS	--	--	2	03	100	--	100	1
5	INT	18CSI85	Internship	(Completed during the intervening vacations of VI and VII semesters and /or VII and VIII semesters.)				03	40	60	100	3
				TOTAL	**06**	**--**	**04**	**15**	**260**	**240**	**500**	**18**

Note: PCC: Professional Core, PEC: Professional Elective, OEC: Open Elective, INT: Internship.

Professional Electives – 4

Course code under 18CS82X	Course Title
18CS821	Mobile Computing
18CS822	Storage Area Networks
18CS823	NoSQL Database
18CS824	Multicore Architecture and Programming

Project Work CIE procedure for Project Work Phase - 2:
(i) 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 phase -2, shall be based on the evaluation of project work phase -2 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.
(ii) 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 phase -2, shall be based on the evaluation of project work phase -2 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 for Project Work Phase - 2:
 (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
(ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.
Internship: Those, who have not pursued /completed the internship shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI

MECHANICAL ENGINEERING
BE/B.Tech. Scheme of Teaching and Examinations
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VI SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18ME61	Finite Element Methods		3	2	--	03	40	60	100	4
2	PCC	18ME62	Design of Machine Elements II		3	2	--	03	40	60	100	4
3	PCC	18ME63	Heat Transfer		3	2	--	03	40	60	100	4
4	PEC	18ME64X	Professional Elective -1		3	--	--	03	40	60	100	3
5	OEC	18ME65X	Open Elective -A		3	--	--	03	40	60	100	3
6	PCC	18MEL66	Computer Aided Modelling and Analysis Lab		--	2	2	03	40	60	100	2
7	PCC	18MEL67	Heat Transfer Lab		--	2	2	03	40	60	100	2
8	MP	18MEMP68	Mini-project		--	--	2	03	40	60	100	2
9	Internship	--	Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.								
				TOTAL	15	10	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

Professional Elective -1

Course code under 18XX64X	Course Title	Course code under 18XX64X	Course Title
18ME641	**Non-Traditional Machining**	18ME644	**Vibrations and Noise Engineering**
18ME642	**Refrigeration and Air conditioning**	18ME645	**Composite Materials Technology**
18ME643	**Theory of Elasticity**	18ME646	**Entrepreneurship Development**

Open Elective -A

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Mini-project work:
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 senior faculty members of the Department, one of whom shall be the Guide.
The CIE marks awarded for the Mini-project work, shall be based on the evaluation of 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.
(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college. The CIE marks awarded for the Mini-project, shall be based on the evaluation of 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.

SEE for Mini-project:
(i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.
(ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.

Internship: All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
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VII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18ME71	Control Engineering		3	--	--	03	40	60	100	3
2	PCC	18ME72	Computer Aided Design and Manufacturing		3	--	--	03	40	60	100	3
3	PEC	18ME73X	Professional Elective - 2		3	--	--	03	40	60	100	3
4	PEC	18ME74X	Professional Elective - 3		3	--	--	03	40	60	100	3
5	OEC	18ME75X	Open Elective -B		3	--	--	03	40	60	100	3
6	PCC	18MEL76	Computer Integrated Manufacturing Lab		--	2	2	03	40	60	100	2
	PCC	18MEL77	Design Lab		--	2	2	03	40	60	100	2
7	Project	18MEP78	Project Work Phase - 1		--	--	2	--	100	--	100	1
8	Internship	--	Internship	(If not completed during the vacation of VI and VII semesters, it shall be carried out during the vacation of VII and VIII semesters)								
				TOTAL	15	04	06	18	340	360	700	20

Professional Elective - 2			
Course code under 18XX73X	**Course Title**	**Course code under 18XX73X**	**Course Title**
18ME731	**Design for Manufacture**	18ME734	**Total Quality Management**
18ME732	**Automation and Robotics**	18ME735	**Operations Research**
18ME733	**Computational Fluid Dynamics**		

Professional Electives - 3			
Course code under 18XX74X	**Course Title**	**Course code under 18XX74X**	**Course Title**
18ME741	**Additive Manufacturing**	18ME744	**Mechatronics**
18ME742	**Emerging Sustainable Building Cooling Technologies**	18ME745	**Project Management**
18ME743	**Theory of Plasticity**		

Open Elective -B

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX75X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the programme.
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CIE procedure for Project Work Phase - 1:

(i) 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 phase -1, shall be based on the evaluation of the project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), 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.

(ii) 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 phase -1, shall be based on the evaluation of project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), 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.

Internship: All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the Internship requirements.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VIII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18ME81	**Energy Engineering**		3	--	--	03	40	60	100	3
2	PEC	18ME82X	**Professional Elective - 4**		3	--	--	03	40	60	100	3
3	Project	18MEP83	**Project Work Phase - 2**		--	--	2	03	40	60	100	8
4	Seminar	18MES84	**Technical Seminar**		--	--	2	03	100	--	100	1
5	Internship	18XXI85	Internship	Completed during the vacation/s of VI and VII semesters and /or VII and VIII semesters.)				03	40	60	100	3
				TOTAL	06	--	04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Electives - 4			
Course code under 18XX82X	Course Title	Course code under 18XX82X	Course Title
18ME821	**CNC Machine Tools**	18ME824	**Automobile Engineering**
18ME822	**Tribology**	18ME825	**Tool Design**
18ME823	**Non-Destructive Testing and Evaluation**	18ME826	**Fracture Mechanics**

Project Work
CIE procedure for Project Work Phase - 2:
(i) 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 phase -2, shall be based on the evaluation of project work phase -2 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.
(ii) 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 phase -2, shall be based on the evaluation of project work phase -2 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 for Project Work Phase - 2:
(i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
(ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.
Internship: Those, who have not pursued /completed the internship, shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.
Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

Question paper pattern:
- The question paper will have ten full questions carrying equal marks.
- Each full question will be for 20 marks.
- There will be two full questions (with a maximum of four sub- questions) from each module.

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher	Edition and Year
Textbooks				
1	Advanced Engineering Mathematics	E. Kreyszig	John Wiley & Sons	10th Edition, 2016
2	Higher Engineering Mathematics	B. S. Grewal	Khanna Publishers	44th Edition, 2017
3	Engineering Mathematics	Srimanta Pal et al	Oxford University Press	3rd Edition, 2016
Reference Books				
1	Advanced Engineering Mathematics	C. Ray Wylie, Louis C. Barrett	McGraw-Hill Book Co	6th Edition, 1995
2	Introductory Methods of Numerical Analysis	S. S. Sastry	Prentice Hall of India	4th Edition 2010
3	Higher Engineering Mathematics	B.V. Ramana	McGraw-Hill	11th Edition,2010
4	A Text Book of Engineering Mathematics	N. P. Bali and Manish Goyal	Laxmi Publications	2014
5	Advanced Engineering Mathematics	Chandrika Prasad and Reena Garg	Khanna Publishing,	2018
Web links and Video Lectures:				

Web links and Video Lectures:
1. http://nptel.ac.in/courses.php?disciplineID=111
2. http://www.class-central.com/subject/math(MOOCs)
3. http://academicearth.org/
4. VTU EDUSAT PROGRAMME - 20

Department of Computer Science & Engineering

Academic Year 2022-23

DBMS Mini Project Details

Sl No	NAME	USN	DBMS Mini Project Title
1	ABHIRAM MURALI	1RI20CS001	Covid bed slot booking management system
2	ABHISHEK KUMAR	1RI20CS002	hostel management system
3	AKSHAY KUMAR	1RI20CS003	hostel management system
4	ANAGHA UNNI	1RI20CS006	online food delivery system
5	ANANYA E	1RI20CS008	Online shopping system
6	ANKIT DHALA SAMANTA	1RI20CS009	Unemployment database management system
7	ASHWATH REDDY S	1RI20CS010	online examination
8	AYAN KUMAR JANA	1RI20CS011	Bank Management System
9	BASANTA PAL	1RI20CS012	Project Mangement System
10	BHAGYAREKHA S	1RI20CS013	Event management system
11	BIRBAL	1RI20CS014	Gym management system
12	DEEPAK R	1RI20CS015	vehicle parking management system
13	HARSHITHA K	1RI20CS016	crime reporting management system
14	HARSHITHA M	1RI20CS017	Inventory control management system
15	HEMA G	1RI20CS018	crime reporting management system
16	HETHISHE B J	1RI20CS019	Tourism Management System
17	KISHAN C L	1RI20CS022	Hospital management system
18	LALLAN SHARMA	1RI20CS023	fitness tracker
19	LAXMI	1RI20CS024	Inventory control management system
20	MANJUNATH NAIK L	1RI20CS025	courier management system
21	MOHAMMED GHOUSE J	1RI20CS026	Hospital management system
22	MOHAMMED UMAR FAROOK	1RI20CS027	Railway booking management system
23	MOHITH G KALYAN	1RI20CS028	employee management system
24	M S SWAROOP	1RI20CS029	employee management system
25	MUSTHAFA	1RI20CS030	Online course registrataion
26	NAVEEN P L	1RI20CS032	Online course registration
27	NISANTA NATH	1RI20CS033	Bank Management System
28	NIYATHI A REDDY	1RI20CS034	Tourism Management System
29	PRAJAPATHI SIRISHA SHANKAR	1RI20CS035	online food ordering system

30	PRAVEEN KUMAR O	1RI20CS036	unemployment database management system
31	PREM KUMAR S R	1RI20CS037	Agroculture farm management system
32	PRIYANSHU PRAKHAR	1RI20CS038	Social Networking Site
33	R VINAY PATIL	1RI20CS039	Restaurant Management system
34	RITIKKUMAR C SHETTY	1RI20CS040	Implementation of IPL database management system
35	SALONI KUMARI	1RI20CS041	Insurance management
36	SANA AFREEN	1RI20CS042	college management system
37	SANJANA M DESOOR	1RI20CS043	Car rental management system
38	SAURABH JEE	1RI20CS044	Student Management System
39	SHARMILAA R	1RI20CS045	Restaurant Management system
40	SHRAVANI P	1RI20CS046	Pharmacy Management System
41	SINCHANA S	1RI20CS047	car rental management system
42	SITESH ROY	1RI20CS048	Project Management System
43	SNEHA L	1RI20CS049	Electricity Bill Generation System
44	SOUMYADEEP PATRA	1RI20CS050	Railway booking management system
45	SRUSHTI H K	1RI20CS051	Online shopping system
46	SUHAIL N	1RI20CS052	Vehicle Parking management system
47	SUNIL R	1RI20CS053	Implementation of IPL database management system
48	SURAJ M	1RI20CS054	online examination system
49	SURBHI	1RI20CS055	Travel and tourism Management System
50	TANMOY CHAKRABORTY	1RI20CS056	Student Management System
51	TEJASWINI R C	1RI20CS057	Pharmacy management system
52	TEJASWINI S	1RI20CS058	Electricity Bill Generation System
53	THARUN K	1RI20CS059	covid bed slot booking management system
54	VENKATESH DILIP GAROLE	1RI20CS060	courier management system
55	YUKTHA M	1RI20CS061	Insurance management
56	DIPU KUMAR SAH	1RI20CS062	Travel and tourism Management System
57	SUNIL KUMAR SHAH	1RI20CS063	Catering Mangement System
58	MANJIL DHUNGANA	1RI20CS064	Blood bank management system
59	DIP KUMAR SHAH	1RI20CS065	Social Networking Site
60	DHANANJAY SAH	1RI20CS066	Gym management system
61	KHUSHBU BHANDARI	1RI21CS400	Blood bank management system
62	SANDEEP BHATTARIA	1RI21CS401	Catering Management system
63	YASHAS N KUMAR	1RI21CS402	agroculture farm management system

Coordinator

Head of Department
Department of Computer Science & En
R.R. Institut of Technology
Hararack-va Main Road

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Department of Information Science & Engineering

Since 1993

Date: 28/04/2023
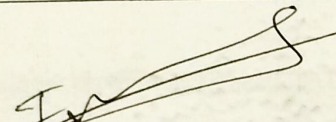
Project Demo
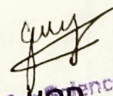
PROJECT BATCH LIST WITH TITLES AY-2022-23

Sl. No.	Batch	Guide Name	Student Name	Title of the Project
1.	B1	Dr. Erappa G	Aditi Sahu	Assistive Device for Deaf, Dumb and Blind using Raspberry Pi
2.			Raunak Raj	
3.			Rohit Vikram	
4.			Rupam Pal	
5.	B2	Prof. Nishchitha T S	Sujan D	Face Recognition Attendance System
6.			Subhash S	
7.			Lokesh Y	
8.			Sushil C	
9.	B3	Dr. Naveen M	Mohammed Qurram	Patient Database System Web Application
10.			Md Ajajur Rahman	
11.			Denwin Davis	
12.			Lalan Kumar	
13.	B4	Dr. Naveen M	Shashank S	Food Waste Management System for Mobile Application
14.			Kushal C	
15.			Dhanya M	
16.			Rakshitha H S	
17.	B5	Prof. Manjula R C	Akash Kumar	IoT Based Weather Monitoring and Twitter Notification
18.			Abhinav	
19.			Zunda Sigonda	
20.			Dippanita Dey	
21.	B6	Prof. Nishchitha T S	Vijay M	GSM based Self Monitoring System for Asthma Patient
22.			Likitha Varshini	
23.			Meghana M R	
24.			Chaitrashree	
25.	B7	Prof. Sowmya J	Nikee Mehta	Vehicle Monitoring and Accident Alert System.
26.			Rakesh Kumar Y	
27.			Birendra Kumar	
28.			Awashyak Poudel	
29.	B8	Prof. Sowmya J	Ashwin Poudel	Development of an Interpretable Maritime accident prediction system using Machine Learning.
30.			Bikram Gupta	
31.			Dinesh Dhanuk	
32.			Samir Singh	
33.	B9	Prof.	Varun K Reddy	Crop Prediction based on Characteristics of the Agriculture Environment using various
34.			Akash R M	

35.		Emmanuel R	Chandan R	Feature Selection Techniques and Classifiers.
36.			Tejaswini P	
37.	B10	Prof. Emmanuel R	Sayak Das	Militant Intrusion Detection Robo System using Machine Learning
38.			Durga Prasad S	
39.			Sayad Paul	
40.			Alokendu Ghosh	
41.	B11	Prof. Manjula R C	Saugat Tiwari	Intelligence Video Surviellance through Cyber Security using Deep Learing.
42.			Rahul Lamichhane	
43.			Asheesh Krishna	
44.			Lekraj Thappa	
45.	B12	Dr. Naveen M	Javed Chowdhury	Weather Forcasting and Minimum Support Price Prediction for Crops
46.			Vyas Balakrishna	
47.			Babita Kurmi	
48.			Meghashree Roy	
49.	B13	Dr. Erappa G	Gaganashree.k	Smart Automation in Agriculture using IoT.
50.			Navya.k.R	
51.			Venkat rami reddy	
52.			Jathin.s.d	
53.	B14	Prof. Emmanuel R	Chintana	Air pollution monitoring system using Deep Learning
54.			Ayush Mishra	

Project Coordinator

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Department of Mechanical Engineering

List of II year students undergone Internship: 2022-23

SN	USN	NAME	PLACE	TITLE	DURATION
1	1RI20ME013	AGNIE SADOUD ABISSOLA	NANATOM Bangalore	Material Testing	11.10.2022 to 31.10.2022
2	1RI21ME001	ABHINAV ARYAL	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
3	1RI21ME002	ABIN BIJU	RRIT	HTML Coding	25.4.2022 to 14.5.2022
4	1RI21ME004	AMANTRAN BARH	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
5	1RI21ME005	A ANTO AKSHAY	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
6	1RI21ME008	VISHWA G	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
7	1RI21ME009	KALLOL ROY	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
8	1RI21ME010	KAUSHAL KUMAR SINGH	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
9	1RI21ME011	LALIT KUMAR SINGH	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
10	1RI21ME012	LOGESHWARAN P	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
11	1RI21ME013	MOHAMMED RAAFI H U	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
12	1RI21ME014	MOHAMMED MOONIS	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022
13	1RI21ME015	NIRAJ KUMAR	NANATOM Bangalore	Material Testing	11.10.2022 to 31.10.2022
14	1RI21ME016	NIRAJAN PRASAD YADAV	RRIT	Survey and study of Published literature, industrial safety and Learning MS word	25.4.2022 to 14.5.2022
15	1RI21ME020	RIDHIL KRISHNA P S	RRIT	HTML Coding	25.4.2022 to 14.5.2022
16	1RI21ME023	SHRISTEE YADAV	NANATOM Bangalore	Material Testing	11.10.2022 to 31.10.2022
17	1RI21ME024	WANPLIBOR PARIONG	NANATOM Bangalore	Material Testing	11.10.2022 to 31.10.2022
18	1RI22ME400	AKHIL KRISHNA	RRIT	Learning MS word, Excel and Power Point	25.4.2022 to 14.5.2022

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Department of Mechanical Engineering

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19	1RI22ME401	HEMANTH KUMAR J	Micromatic Bangalore	Customizing service-Based Business processes from Composite Web Services	24.5.2023 to 03.06.2023
20	1RI22ME402	JAGADEESH K	Micromatic Bangalore	Customizing service-Based Business processes from Composite Web Services	24.5.2023 to 03.06.2023
21	1RI22ME403	PRAJWAL H R	Micromatic Bangalore	Customizing service-Based Business processes from Composite Web Services	24.5.2023 to 03.06.2023
22	1RI22ME404	RAHUL T P	RRIT	Learning MS word, Excel and Power Point	24.5.2023 to 03.06.2023
23	1RI22ME405	SACHIN S M	RRIT	Survey and Study on TIG welding	24.5.2023 to
24	1RI22ME406	SIDDESH B R	Micromatic Bangalore	Customizing service-Based Business processes from Composite Web Services	24.5.2023 to 03.06.2023
25	1RI22ME407	SUHAS T V	Micromatic Bangalore	Customizing service-Based Business processes from Composite Web	24.5.2023 to 03.06.2023

HOD

HOD of Mechanical Engineering
R.R. Institute of Technology
hesaraghatta Main Road,
Ch Ikkabanavara, Bangalore - 90

PRINCIPAL

PRINCIPAL
R.R. INSTITUTE OF TECHNOLOGY
Hesaraghatta Main Road,
Chikkabanavara, Bangalore - 90

INTERNSHIP STUDENT LIST

Academic Year : 2022-23

Sl.No	USN	Student Name	Internship Allotted
1.	1RI21CS005	Abhi M	Dr. Manjunath R
2.	1RI21CS006	Abhi V	
3.	1RI21CS008	Abhishek R V	
4.	1RI21CS043	Gururaj R	
5.	1RI21CS121	Vandana R	
6.	1RI21CS095	S Shiny Juliet	
7.	1RI21CS054	Kruthi M L	
8.	1RI21CS126	Zayed M	
9.	1RI21CS064	Mohammed Suhail A M	
10.	1RI21CS124	Yeshwanth B	
11.	1RI21CS027	Basim S	
12.	1RI21CS073	Neeraj Kumar Singh	
13.	1RI21CS074	Neha Lama	
14.	1RI21CS048	Hema R	
15.	1RI21CS030	Binita Paul	
16.	1RI21CS114	Suhas V U	Dr. Niranjan C
17.	1RI21CS099	Sanmith R L	
18.	1RI21CS077	Pavan D C	
19.	1RI21CS072	Nandeesha	
20.	1RI21CS112	Sri Lakshmi M	
21.	1RI21CS083	Prathibha S	
22.	1RI21CS097	Sahana M R	
23.	1RI21CS076	Pallavi S	
24.	1RI21CS003	Abdul Khalid	Dr. Shivakumar Swamy
25.	1RI21CS060	Md Aashif Raza	
26.	1RI21CS091	Rohan Rathod	
27.	1RI21CS106	Siddhant Kumar Jha	
28.	1RI21CS007	Abhinav Singh	
29.	1RI21CS093	Rohit Raut	
30.	1RI21CS033	Debdeepta Samui	
31.	1RI21CS029	Bikash Sah	
32.	1RI21CS122	Veeksha S	

33.	1RI21CS115	Suma G M	
34.	1RI21CS059	Manoj Gowda N	
35.	1RI21CS125	Yogesh P	
36.	1RI21CS085	Puneeth T	
37.	1RI21CS103	Sharmila B	
38.	1RI21CS087	Rahul	
39.	1RI21CS047	Harshitha S L	Prof. Shruthi.S
40.	1RI21CS117	Susmita Midya	
41.	1RI21CS080	Prarthana Nath	
42.	1RI21CS079	Poulomi Bhattacharya	
43.	1RI21CS088	Rahul	
44.	1RI21CS001	Aarati	
45.	1RI21CS015	Aman Roushan	
46.	1RI21CS102	Shaily Raj	
47.	1RI21CS062	Mohamed Ramshad	
48.	1RI21CS092	Rohan S	Prof. Veena V
49.	1RI21CS028	Bharath G	
50.	1RI21CS042	Goutham S	
51.	1RI21CS094	Rohith K N	
52.	1RI21CS084	Promit Saha	
53.	1RI21CS110	Souvagya Maity	
54.	1RI21CS105	Shovan Maity	
55.	1RI21CS107	Sivam Mukherjee	
56.	1RI21CS120	Tejas V	
57.	1RI21CS058	Madhumitha D	
58.	1RI21CS055	Kruthika S H	
59.	1RI21CS049	Hemashree S	
60.	1RI21CS061	Misriya Ebrahim Mohasin	
61.	1RI21CS046	Harikrishnan M	
62.	1RI21CS111	Sreenandhana P S	
63.	1RI21CS069	Muhamed Aslam	Prof. Lakshmi Devi
64.	1RI21CS057	M N Shashank	
65.	1RI21CS067	Mohith H L	
66.	1RI21CS002	Aashish Kumar Yadav	
67.	1RI21CS013	Akshay Adiveppa Teli	
68.	1RI21CS004	Abdul Shamil	
69.	1RI21CS070	Muhammed Asheem P K	
70.	1RI21CS071	Muhammed Yasar	
71.	1RI21CS010	Absh Najeeb	

72.	1RI21CS113	Suhas S Telkar	Prof. Shobha Rani N R
73.	1RI21CS118	Swamy K B T	
74.	1RI21CS075	P S Chandrachooda	
75.	1RI21CS082	Pratheek Y	
76.	1RI21CS096	Sachin R Nair	
77.	1RI21CS109	Sooryajith S	
78.	1RI21CS116	Suman Samanta	
79.	1RI21CS123	Yeman Chaudhary	
80.	1RI21CS041	Gheewala Suchit Vishal	Prof. Revathi B
81.	1RI21CS014	Aman Kokher	
82.	1RI21CS019	Ankit Pattanayak	
83.	1RI21CS024	Arjun P Ramesh	
84.	1RI21CS017	Amrutha S	
85.	1RI21CS018	Anagha P S	
86.	1RI21CS068	Monisha B M	
87.	1RI21CS108	Sneha D Nayak	
88.	1RI21CS101	Sayyid Mohamed Hisham P H	
89.	1RI21CS090	Rinshad P R	
90.	1RI21CS051	Jiyad C	
91.	1RI21CS066	Mohammed Sanjidh Roshan	
92.	1RI21CS012	Aishwarya H M	Prof. Sowmya N
93.	1RI21CS035	Deepa S	
94.	1RI21CS040	Gayathri A V	
95.	1RI21CS032	Chikkanna Murthy Chola	
96.	1RI21CS078	Pavankumar	
97.	1RI21CS081	Prasanna Mohan Naik	
98.	1RI21CS100	Santhosh N	
99.	1RI21CS098	Sakil Rahaman Majumder	
100	1RI21CS104	Shibam Das	
101	1RI21CS009	Abhishek Singh	
102	1RI21CS016	Amir Hamja	
103	1RI21CS037	G Dinesh Kumar	Prof. Veena M S
104	1RI21CS026	B K Balaji	
105	1RI21CS056	Lingaraj Muradi	
106	1RI21CS031	Chandan S	
107	1RI21CS063	Mohammed Riyan	
108	1RI21CS022	Anurag M	
109	1RI21CS053	Joel T Sajeev	
110	1RI21CS020	Anshil Rihan V K	

111	1R121CS023	Apeksha N	
112	1R121CS038	G Shree Devi	
113	1R121CS039	Gagana P	
114	1R121CS034	Deepa N	
115	1R121CS044	Hafiz Haneefa	
116	1R121CS045	Halul Raj A	
117	1R121CS050	Jishin Suresh	
118	1R121CS011	Adinath Rajeevan	
119	1R121CS119	Syed Arshur Rehman	
120	1R121CS089	Rickson Prajwal Pereira	Prof. Preethi
121	1R121CS025	Ashitosh S Joshi	
122	1R121CS036	Devaraj S	
123	1R121CS065	Mohammed Zahid	
124	1R121CS086	Rafeek S	
125	1R121CS052	Jobin P Thomas	
126	1R121CS021	Anshwal P Anil	
127	1R122CS400	Balaji Gowda M R	
128	1R122CS401	Basavaraj Shankar Muttagi	
129	1R122CS402	Dheeraj Harshith P	
130	1R122CS403	Kiran Kumar	
131	1R122CS404	Lakshmesh Gowda M S	Prof. Asha V
132	1R122CS405	Lakshmi H S	
133	1R122CS406	Mohan R	
134	1R122CS407	Nandini C	
135	1R122CS408	Nithish T L	
136	1R122CS409	Shradha Virendra Patil	
137	1R122CS410	Siddharth Sanjay Revankar	
138	1R122CS411	Ujwal H.N	
139	1R121CS127	Sagar Kumar Patel	

Coordinator

HOD

Sub Code: 21INT49

Date 20-8-22

Internship Guide allotment
for the Academic year 2022-2023

S.No	Usn No	Name	Scheme	Guide	Sign of the guide
1	1RI21EE002	ANUSHA G R	2021	SUNANDA C V	
2	1RI21EE003	BHARATH KUMAR G	2021		
3	1RI21EE004	CHANDRA PRAKASH REDDY Y A	2021		
4	1RI21EE005	DARSHAN	2021	SOWMYA G J	for,
5	1RI21EE006	DEVRAJ RANA	2021		
6	1RI21EE007	JAYANTH H M	2021	PRADEESHA.J	
7	1RI21EE008	MANISH SHRESTHA	2021	JHANSI. K	
8	1RI21EE009	MANOJ GOWDA K J	2021		
9	1RI21EE010	NANDANA GANESH	2021		
10	1RI21EE011	NATRAJ	2021	MADHAVI D	
11	1RI21EE012	PANDEY AMAN MAHENDRA PRASAD	2021		
12	1RI21EE013	PHULESHWAR YADAV	2021		
13	1RI21EE014	PRAJWAL BHANDARI N	2021	GOWTHAM. G	
14	1RI21EE015	PRAJWAL C G	2021		
15	1RI21EE016	S ANAND	2021		
16	1RI21EE017	SHIRSHA PAL	2021	ANUSHA D Y	
17	1RI21EE018	SNEHA P M	2021		
18	1RI21EE019	SUBHASH CHANDRA K B	2021		
19	1RI21EE020	THARUN K	2021	VYSHNAV.B	
20	1RI21EE021	ULLAS M S	2021		
21	1RI21EE022	VANDANA A	2021		
22	1RI21EE023	VARSHITHA B S	2021	PRADEESHA. J	
23	1RI21EE024	VASANTH KUMAR G	2021		

Co-ordinator

HOD 23/08/2022

HOD OF ELECTRICAL & ELECTRONICS ENGINEERING
R R Institute of Technology
Hesaraghatta Main Road,
Chikkabanavara, Bengaluru - 560090

Principal 20/8/22

PRINCIPAL
R.R. INSTITUTE OF TECHNOLOGY
Chikkabanavara, Bangalore - 560 090.

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Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

Since 1993

Department of Electrical and Electronics Engineering

Sub Code: 21INT49

Date 12-5-2023

Internship Guide allotment
for the Academic year 2022-2023

S.No	Usn No	Name	Scheme	Guide	Sign of the guide
1	1RI22EE400	ARVIND KS	2021	SUNANDA C V	fon Jud
2	1RI22EE401	DEVIKA M	2021		
3	1RI22EE402	GIRISH R K	2021	JHANSI. K	
4	1RI22EE403	PAVAN B G	2021		
5	1RI22EE404	RAKESH M	2021	MADHAVI D	
6	1RI22EE405	SAGAR D	2021		
7	1RI22EE406	SONU SABU	2021	ANUSHA D Y	
8	1RI22EE407	SUBHAJIT PATRA	2021		
9	1RI22EE408	THARUN KUMAR R	2021	PRADEESHA. J	
10	1RI22EE409	VEERESH MUTTAPPA DANDIN	2021		
11	1RI22EE410	VIVEKANANDA K KALE	2021	GOWTHAM. G	

12/5/23
Co-ordinator

HOD
D OF ELECTRICAL & ELECTRONICS ENGINEER
R R Institute of Technology
Hesaraghatta Main Road
Chikkabanavara, Bengaluru - 560090

Principal
PRINCIPAL
R.R. INSTITUTE OF TECHNOL
Hesaraghatta Main Road,
Chikkabanavara, Bangalore -

Date 01-08-2022

Internship Guide allotment

for the Academic year 2022-2023

S.No	Name	Scheme	Guide	Sign of the guide
1	BHOLA CHAUDHARY	2018	Sunanda C V	
2	BHOOMIKA R	2018		
3	DHANUSH S	2018	Jhansi K	
4	DHEERAJ K	2018		
5	HUSSEIN ALI JUSSEIN MURSAL	2018	Anusha D Y	
6	RAUSHAN KUMAR SHRIVASTAVA	2018		
7	RUPESH KUMAR SAH	2018	Sowmya G J	
8	SHANKAR KUMAR YADAV	2018		
9	SNEHA JOESPHIN	2018	Vyshnav B	
10	SUHAIB M M	2018		
11	THEJASWINI B	2018	Madhavi D	
12	UJJAL SARKAR	2018		
13	AFSAI	2018	G.Gowtham	
14	FIRDOUSH	2018		
15	IMRAN ALAM	2018	Pradeesha J	

Co-ordinator

HOD 01/08/2022

Principal 1/8/22

CamScanner

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Department Electrical & Electronics Engineering

Academic Year :2022-2023

SEM: VI Sem

Subcode:18EEMP68

Sub: Mini project

Date: 30.06.2023

		Group 1		
1.	1RI20EE006	DEVPUKAR CHAUDARY	1. Prof Sunanda C V	9.30 am –9.45 am
2.	1RI20EE403	VINAYAK MISHRA	2.Prof Gowtham G	
3.	1RI20EE005	ABHINASH KUMAR		
Group 2				
4.	1RI20EE004	VIDYA S PRASAD	1. Prof. Madhavi Dasari	9.45 am –10.00 am
5.	1RI21EE400	GAGANA S		
6.	1RI21EE401	NANDINI T S	2. Prof Jhansi K	
7.	1RI20EE001	DIVYA S		
Group 3				
8.	1RI20EE003	NAVEEN G	1. Prof Pradeesha J	10.00 am –10.15 am
9.	1RI21EE402	VADDE PAVAN	2. Prof Anusha D Y	
10.	1RI20EE007	DARSHAN GOWDA		

Co-ordinator
(Madhavi Dasari)

HOD, EEE
HOD OF ELECTRICAL & ELECTRONICS ENGINEERING
R R Institute of Technology
Hesaraghatta Main Road,
Chikkabanavara, Bengaluru - 560090

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Since 1993

Department of Electrical & Electronics Engineering

Project Batches for AY: 2022-23

Sub:Project Phase-1   SubCode:18EEP78   SEM:VII

Batch No	NAME OF STUDENT	USN	Guides	TITLE OF THE PROJECT
	Dheeraj K	1RI19EE004	Mrs.Sunanda C V Mr.Gowtham G	Active Wireless Charging of Intransit Electric Bus
	Dhanush S	1RI19EE003		
	Bhoomika R	1RI19EE002		
1	Thejaswini B	1RI19EE011		
	Rupesh kumar sah	1RI19EE007	Mrs.Jhansi K Mrs.Anusha D Y	An Automated Radio Controlled Vehicular Movement System through Hand Guesture
	Shankar kumar yadav	1RI19EE008		
	Sneha Joesphin	1RI19EE009		
2	Afsal A	1RI20EE400		
	Raushan Kumar Shrivastava	1RI19EE006	Mrs.Madhavi D Mrs.Pradeesha J	Microcontroller based Commercial Power Saver
	Bhola Chaudhary	1R19EE001		
	Firdoush Ansary	1R20EE402		
3	Imran Alam	1RI18EE008		
	Hussein Ali Hussein Mursal	1RI19EE005	Mrs.Soumya G J Mr. Vyshvnav B	Agriculture Robot
	Suhaib H M	1RI19EE010		
4	Ujjal Sarkar	1RI19EE012		

Project Coordinator

HOD OF ELECTRICAL & ELECTRONICS ENGINEERING
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Chikkabanavara, Bengaluru – 560090

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Department of Electronics & Communication Engineering

Date: 09-05-2023

MINI PROJECT GROUP OF SIXTH SEMESTER FOR THE ACADEMIC YEAR 2022-23

Sl.No	Name of student	Group	Project Guide	Titles of Mini Project
1	ANISA ZAHOOR	Group 1	Dr. RASMI.A	IoT based food spoilage detection system with ESP8266
2	CHITHRA A M			
3	PURROLLA NAVEEN KUMAR	Group 2	Prof: MOHAN KUMAR	voice assistant robotics for Hotel management system
4	PYDALA ANJALI			
5	KAMBALA HARI PRIYA			
6	ABHISHEK M	Group 3	Prof: SHYAMALA	Attendance monitor using IOT
7	MANOHAR JOSHINANDIBEVUR			
8	NIKETAN			
9	SINCHANA R	Group 4	Prof: CHITHARANJAN DAS	Smart vacuum cleaner robot using ARDUINO
10	SAHANA ITHLI			
11	SAVALAM NAVEENA			
12	BHIMAVARAM VINOD	Group 5	Prof: RAGHUNANDAN	Gas leakage with auto ventilation &smart management system using IoT
13	PAPASANI VENKATA HEMANTH REDDY			
14	RAHUL P H			
15	HARSHITH.G			

Signature of coordinator

Signature of HOD

MINI PROJECT LIST

VI   SEMESTER   AY (2022-23)

GROUP NUMBER	USN	NAME	TEAM LEADER	GUIDE	PROJECT TITLE
G 1	1RI20ME009	Rudra Dineshbhai Patel	Sanjay D	Dr.Chennabasavaraj	Fabrication of auger earth drilling machine
	1RI21ME401	Rakesh M			
	1RI21ME402	Sanjay D			
G 2	1RI20ME004	Mahesh kumar mahato	Mahesh Kumar Mahato	Dr. Amarnath.G	Design and modeling of auger earth drilling machine
	1RI20ME005	Midhun T S			
	1RI21ME404	Sukanto Biswas			
G 3	1RI20ME008	Rohan LG	Shreyank V Patil	Mr.Srinivas K.R	Cost estimation of the parts and their material identification
	1RI21ME403	Shreyank V Patil			
	1RI17ME350	Subhadeep Sinha			
G 4	1RI21ME400	Abhishe kumar Thakur	Abhishe kumar Thakur	Mr.Lohith.J.K	Study of the model in the field of application and future scope.
	1RI20ME010	Tarif ansari			
	1RI20ME002	Aidarab Debbarma			
	1RI20ME011	Varshith M			

Project Coordinator

(Dr. Amarnath. G)

HOD-Mechanical

HOD of Mechanical Engineering
R.R. Institute of Technology
Hesaraghatta Main Road,
Ch ikkabanavara, Bangalore - 90

Principal 4/7/23

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Department of Electronics & Communication Engineering
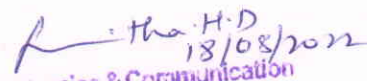
ALLOTMENT OF GUIDES FOR INTERNSHIP FOR THE AY 2022-2023

Semester: VII   **Date : 11/08/2022**

SL NO	USN	NAMES	GUIDES
1	1RI19EC001	ABHISHEK N M	Dr Sunitha H.D.
2	1RI19EC002	DEEP SHIKHA GUPTA	Dr Sunitha H.D.
3	1RI19EC003	DEEPANJAN NATH	Mr Mallesha B.Y.
4	1RI19EC004	DIGANTA HALDER	Mr Mallesha B.Y.
5	1RI19EC006	JUBIN SINHA	Mrs Parimala Gandhi G.
6	1RI19EC007	KAVYA H S	Mrs Parimala Gandhi G.
7	1RI19EC008	MANNURU PENCHALA NARASIMHA	Mrs AnshuDeepak
8	1RI19EC010	NELAPATI SUMANTH	Mrs AnshuDeepak
9	1RI19EC011	POOJA C	Mrs AnshuDeepak
10	1RI19EC012	PRIYADARSHINI M S	Mr Mohan Kumar
11	1RI19EC013	RENUKA C	Mr Mohan Kumar
12	1RI19EC014	SAI KIRAN G	Mr Mohan Kumar
13	1RI19EC015	SHUBHASHREE B	Mr Chitranjan Das
14	1RI19EC016	SRAMANA BHATTACHARYA	Mr Chitranjan Das
15	1RI19EC019	VARSHITHA K R	Mr Chitranjan Das
16	1RI19EC020	VISHNU K V	Mrs Shyamala Bhatt
17	1RI20EC400	SAJAL KANHAIYA JAGTAP	Mrs Shyamala Bhatt
18	1RI20EC401	SHIKHA KUMARI	Mrs Shyamala Bhatt

FACULTY INCHARGE   **HOD**   **PRINCIPAL**

HOD of Electronics & Communication
R.R. Institute of Technology
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Chaikkabanavara, Bangalore- 90.

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Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

Department of Mechanical Engineering

Final Year Project Batch List AY-2022-23

Sl.NO	Group	USN	Name of the Students
1	Group-1	1RI19ME006	HASIBURAHMAN ANSARI
2		1RI19ME014	PRASHANT MISHRA
3		1RI19ME005	HARSHIND T
4		1RI19ME006	ABISHEK KUMAR SAH
5	Group-2	1RI20ME400	IMAM SAHB
6		1RI20ME403	PRASHANT DAS
7	Group-3	1RI18ME005	ARPIT SINGH
8		1RI19ME016	VISHAL KUMAR
9		1RI18ME009	IZAZ KUFI
10		1RI18ME016	MINHAZUL ISLAM
11	Group-4	1RI17ME002	ABILASH MOHAN
12		1RI18ME006	ASWIN K JAYADAS
13		1RI19ME003	ALBI K MATHEWS
14		1RI18ME002	AKASH KP
15	Group-5	1RI20ME401	NAVEEN KB
16		1RI20ME402	NIKHIL BG
17		1RI20ME404	REVATHI VT
18		1RI20ME406	THILAK G
19	Group-6	1RI19ME015	RANJAN LR
20		1RI20ME405	SHIVAM
21		1RI19ME013	PRAJWAL GL
22		1RI20ME407	YASHWANTH KM
23	Group-7	1RI19ME002	AJAY HARI
24		1RI19ME011	MIDHUN ABRAHAM
25		1RI19ME012	NIHMAN P
26		1RI19ME009	K ATHUL
27	Group-8	1RI19ME004	GANESH PUN
28		1RI18ME011	JAY SHRESTHA
29		1RI19ME010	MD OWAIS ANSARI
30		1RI19ME008	ISHTIYAQUE AHMED KHAN

PRINCIPAL

R.R. INSTITUTE OF TECHNOLOGY

Chikkabanavara, Bangalore - 560 090.

HOD-ME

HOD of Mechanical Engineering

R.R. Institute of Technology

Kesaraghatta Main Road,

Ch Ikkabanavara, Bangalore - 90.

Certificate by Aqmenz Automation Private Ltd

Aqmenz Automation Private Limited

CIN: U74999KA2018PTC117612

INDOSKILL
FOR SKILL INDIA

CERTIFICATE
OF COMPLETION

THIS CERTIFICATE IS PROUDLY PRESENT TO

Apeksh A R

1RI21IS006

Has successfully completed Internship on **"Python Programming & Application Projects"** at Aqmenz Automation Pvt. Ltd. from 11.10.2022 to 31.10.2022.

CERTIFICATE ISSUE NO: IN /   11588   / FY2022

Mr Mohammed Azhar Hussain
Chief Technology Officer (CTO),
AQMENZ Automation Pvt. Ltd.,
Bengaluru - 560032

www.indoskill.in

Mr Mohan V S
Chief Executive Officer (CEO),
AQMENZ Automation Pvt. Ltd.,
Bengaluru - 560032

Certificate by ParvaM ConsulTech Private Ltd

PARVAM

Certificate of Internship

Date : 05/12/2022

To Whomsoever It May Concern

This is to certify that Mr Balram gowda B K of RR Institution of Technology, has successfully completed his internship program of 3 weeks with **ParvaM ConsulTech Pvt. Ltd.** By contributing towards the Skill development of **"Basics of Python".**

During the tenure of internship from **10/10/2022** to **29/10/2022**, we found him resourceful with quick learning capabilities making significant contribution towards the Tasks & activities assigned.

We wish him all the very best for a bright future.

Mohith Santhosh,
Project Manager,
ParvaM ConsulTech Pvt. Ltd.

Note: This is a digitally generated certificate and the seal is not required.

TechnoFly Solutions

Technofly
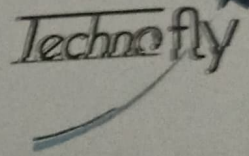
Internship Certificate

This is to certify that **CHAITHANYA · B · N** a student of

BB INSTITUTE OF TECHNOLOGY has completed **3** months/weeks of Internship

From **11|10|2022** To **31|10|2022** in **ARTIFICIAL INTELLIGENCE** Domain.

We wish you all the best in your future endeavors.

Date : **31|10|2022**

For TechnoFly Solutions

Technofly Solutions, Vijayanagar, Bangalore - 40.
Mob: 9663478586, 9741150002 | www.technofly.in

Certificate

OF COMPLETION

Presented To

DILLI RAM SHAHU

for successfully completing a one month internship in **Ethical Hacking & Cyber Crime Investigation (EHCCI)** with Slytherin EduTech Pvt. Ltd. During National Cyber Security Awareness Month From October 10th to Nov 10th 2022. Slytherin Wishes for your bright Future in Cyber Security.

Mr. Laxmi Narayan Sahu
Founder & Director - Slytherin Edutech Pvt. Ltd.

Verification

MANIPUR TRIBAL DEVELOPMENT CORPORATION LTD.
(A Government of Manipur Undertaking)
Lamphelpat, Imphal - 795004, Manipur (India)
Regd. no. 1776 of 1979

OHSAS - 18001 : 2007

No. 03/EE-II/ MTDC-INT/2022

Date: 3rd Sept. 2022

TO WHOM IT MAY CONCERN

Thus is to certify that Ms/Mr **MM Azaz Ahamad**, student of Raja Raddy Institute of Technology, Chikkabanavara Bamgalore – 560090, has successfully completed a summer internship in MTDC Limited for II semester Bachelor Engineering in Civil Engineering of RR Institute of Technology in the field of foundation for building construction in the academic year 2021-22 from 11 to 30 Oct,2022 under the guidance of Executive Engineer-II, MTDC LTD.

During the period of her/his internship program with us, she/he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We wish her/ him every success in her/ his life and career.

For, MTDC Ltd.

Md Salauddin Khan
EE-II, MTDC
Executive Engineer-II
M.T.D.C. Ltd., Imphal

Regd. H.O. Lamphelpat, Imphal - 795004, Manipur (India)
Tel : 0385 - 2410090, Email : manitdcltd@gmail.com
Website : www.mtdcltd.org

Project Asia Pvt. Ltd.

Ward No.-4, Imadole, Mahalaxmi Municipality,
Lalitpur, Nepal

Certificate of Internship

Date: - 29/10/2022

To Whom So Ever It May Concern,

This letter is to certify that **Mr. SANTOSH KUMAR MAHATO**, student of **RRIT (RR Institute of Technology, Bangalore)** has successfully completed his Civil Internship program with **Project Asia Pvt. Ltd.** The internship tenure was for 21 days starting from **10th October 2022** to **31st October 2022.**

During the span, we found him punctual and hardworking person. The Feedback and evaluation proved that he learned keenly.

This Internship program was for BE CIVIL Students from **project Asia Private Limited Ward No.-4 Imadole, Mahalaxmi municipality, Lalitpur, Nepal.**

We wish him a very bright future ahead.

Shivshowbhy 31st at.2022

Shiv Shambhu Prasad Yadav
Site engineer at project Asia

Ward no.-4 Imadole, Mahalaxmi   +9779806882805   projectasia@gmail.com
Muncipality, Lalitpur, Nepal   +9779845376850   www.paltnepal.com

BARAHATHWA KHADYA UDHYOG

Barahathwa-5, Sarlahi,Nepal

Phone:9817871750

PAN-605522727

letter Ref no: 79/80/33

November 02,2022

Nepal

Internship Completion Letter

This is to certify that Mr. Rahul Kumar Sing son of Mr.Laxman Singh Khushawaha ,a Student of RR Institute of technology (Bachelor of Civil Engineering) II semester under visvesvaraya Technological University (VTU) with USN-1RI21CV036 has successfully completed 03 week Internship entitled "Inter/Intra Institutional Internship (21INT29)" (from 10-Oct-2022 to 31-oct-2022) at our company.

During the period of his internship programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

Authorized Signature

Proprietor :-Bimala kumari Devi Kushawaha

Phone:9844392550

राजपुर नगरपालिका

Rajpur Municipality

नगर कार्यपालिकाको कार्यालय

Office of The Municipal Executive

राजपुर रौतहट

Rajpur Rautahat

मधेश प्रदेश, नेपाल

Madhesh Province, Nepal

E-mail : ito.rajpurmunrautahat@gmail.com
ito@rajpurautahat.gov.np
www.rajpurmunrautahat.gov.np

पत्र संख्या :- २०७९/०८०

चलानी नं.:- ९३८

Date:- 03-Nov.-2022

TO WHOM IT MAY CONCERN

This is to certify that Mr. Mohammad Fazrullah, student of R.R. Institute of Technology, Bangalore, has successfully completed a summer internship in the field of site supervision from 13-Oct.-2022 to 03-Nov.-2022 under guidance of Er. Mohammad Shah Faishal.

During the period of is internship program with us, he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We wish him very success in his life and career.

नि. प्रमुख प्रशासकीय अधिकृत

Project Asia Pvt. Ltd.

Ward No.-4, Imadole, Mahalaxmi Municipality,
Lalitpur, Nepal

Certificate of Internship

Date: - 29/10/2022

To Whom So Ever It May Concern,

This letter is to certify that **Mr. Raju Kumar Yadav**, student of RRIT (RR Institute of Technology, Bangalore) has successfully completed his Civil Internship program with **Project Asia Pvt. Ltd.** The internship tenure was for **21 days** starting from **10th October 2022 to 31st October 2022.**

During the span, we found him punctual and hardworking person. The Feedback and evaluation proved that he learned keenly.

This Internship program was for BE CIVIL Students from **Project Asia Private Limited Ward No.-4 Imadole, Mahalaxmi Municipality, Lalitpur, Nepal.**

We wish him a very bright future ahead.

ShivShambhu 31st oct 2022

ShivShambhu Prasad Yadav
Site Engineer at Project Asia

Ward no.-4 Imadole, Mahalaxmi   +9779806882805   projectasia@gmail.com
Municipality, Lalitpur, Nepal +9779845376850   www.paltnepal.com

EVEREST COMPUTER INSTITUTE

R.R.M CAMPUS ROAD , MURLI CHOWK ,JANAKPUR-04

INTERNSHIP CERTIFICATE OF COMPLETION

This is certify that **Mr.Chandan sah** having USN 1RI21CV010 student of R.R institute of technology has satisfactory completes internship program of MS-Word at Everest Computer institute.

During this period 11 oct to 30 oct he has actively engaged himself in routine ms-word. His general behavior , attitude and performance in connection with any job assigned to him were found to be satisfactory

We wish him every success in his academic & professional life .

Project manager

Project Asia pvt. Ltd.

Ward No.-4, Imadole, Mahalaxmi Municipality, Lalitpur, Nepal

Certificate of Internship

Date: - 29/10/2022

To Whom So Ever It May Concern,

This letter is to certify that **mr. HAROON RASHID SAH**, student of **RRIT (RR Institute of Technology , Bangalore)** has successfully completed his Civil Internship program with **Project Asia Pvt. Ltd.** The internship tenure was for **21days** starting from **10th October 2022** to **31st October 2022.**

During the span, we found him punctual and hardworking person. The Feedback and evaluation proved that he learned keenly.

This Internship program was for **BE CIVIL** Students from **project Asia Private Limited Ward no.:-4 Imadole, Mahalaxmi municipality, Lalitpur, Nepal.**

We wish him a very bright future ahead.

Shivshambhu 31st oct.2022

Shiv Shambhu Prasad Yadav
Site engineer at project Asia

Ward no.-4 Imadole,mahalaxmi   +9779806882805   projectAsia@gmail.com
Municipality, lalitpur, nepal   +9779845376850   www.paltnepal.com

REGIONAL COMPUTER INSTITUTE

Regd. No. 18/2066/061/062

REGIONAL COMPUTER INSTITUTE
TULSIPUR, DANG

R. C. I.
2061
TULSIPUR, DANG

TULSIPUR, DANG
Estd. 2061

CERTIFICATE
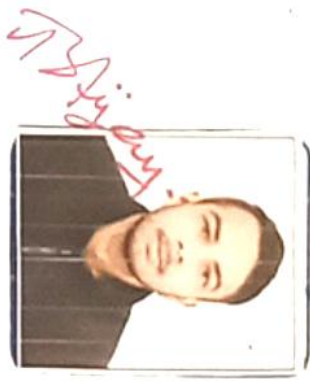
This is to certify that Mr./Mrs./ Miss...... YOGESH ADHIKARI.............

Date of birth.....04-09-2002.......son/Daughter of Mr. .....SHANTA RAJ ADHIKARI....

Of........ GHORAI ..................V.D.C./ Municipality ward No. ....04........

Of............. DANG ....district has successfully completed the course

On............. OFFICE PACKAGE......................at this institute from

.... 13-10-2022...................to...06-11-2022.............

We wish his/her success in every steps of life Grade :-   Secured Grade :-

A :- More than 80%   [A]
B :- 60% to 70%
C :- 50% 59%
D :- Less then 50%

..........07-11-2022...........   ....

Date :-   Instructor   Managing Director
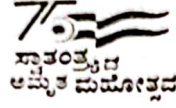
KARNATAKA POWER TRANSMISSION CORPORATION LIMITED

Corporate Identification Number (C.I.N): U40109KA1999SGC025521

Human Resource Development Centre, Whitefield road, Hoody, Bengaluru-560048.

Telephone No. : 080-28540666

Website: https://kptcl.karnataka.gov.in

Email Address: admnhrdckptcl@gmail.com

No: KPTCL/HRDC/B-75/35590/2022-23 | L607

Date 14 NOV 2022

To,
The Principal,
R.R Institute of Technology,
Chikkabanavara,
Bangalore.

Sir,

Sub: Completion of Internship training on "Study of 400/220kV Substation" in KPTCL" – Reg.

Ref: 1. Approval Letter No: KPTCL/ HRDC/ B-75/ 35590/ 22-23/1376-78 Dated: 11.10.2022.
2. Form "A" Certificate Dated: 09.11.2022.

Vide letter cited under ref (1), approval was accorded to **Anusha G R, USN No: 1RI21EE002** pursuing B.E. in Electrical and Electronics Engineering at R.R Institute of Technology, Chikkabanavara, Bangalore to do Internship training on **"Study of 400/220kV Substation"** under the guidance of **Smt Kavitha M Havaldar,** Assistant Executive Engineer(Ele), 400/220 kV Receiving Station, KPTCL, Nelamangala, Bangalore

Smt Kavitha M Havaldar, Assistant Executive Engineer(Ele), 400/220 kV Receiving Station, KPTCL, Nelamangala, Bangalore has certified (vide ref-2) that the student has successfully completed the Internship training from 12.10.2022 to 30.10.2022.

Yours faithfully,

Administrator,
HRDC, KPTCL 14/11/22

Issue No. 1424

Regd. No. 14-2341-070-071
119100-070-071

CTEVT
1989

Dynamic Education Complex Morang Pvt. Ltd.

(प्राविधिक शिक्षा तथा व्यावसायिक तालीम परिषद, सानोठिमी, भक्तपुरबाट सम्बन्धन प्राप्त)

(Affiliated to the Council for Technical Education and Vocational Training, Sanothimi, Bhaktapur)

DYNAMIC
EDUCATION COMPLEX

A CTEVT Affiliated Institute

प्रमाण-पत्र
CERTIFICATE

जिल्ला .....मोरङ..... गा.वि.स./नु.पा./उ.मा.न.पा./मा.न.पा. वडा नं. ....०७.... बस्ने ...मधुकर लाल श्रेष्ठ... का छोरा/छोरी श्री/श्रीमती/सुश्री ...मनिष श्रेष्ठ... ले.वि.स. २०७९-०६-२६ देखि वि.स. २०७९-०७-१५ सम्म सञ्चालित ...अफिस प्याकेज... (.२१. घण्टा) को तालीम सफलता पूर्वक सम्पन्न गरेको प्रमाणित गरिन्छ ।

This is to certify that Mr/Ms...Manish Shrestha....... son/daughter of Mr...Madhukar Lal Shrestha... a resident of ....Morang................. district ...Biratnagar-7............ VDC/ Municipality / (Sub) Metropolitan city has successfully completed ....Office Package........................... (..21...hours) conducted from 2022-10-12 to 2022-11-01.....

Date of issue: 2022-11-02

_____
(Course Coordinator)

_____
Director / Principal

AVODHA

Education for a Job

Certificate of Completion

This is to certify that

Mr./Ms. Mohammed Zahid having Registration Number 1182759752

has successfully completed skill training in Digital Marketing

Certificate is issued on 12/11/2022.

AVODHA EDUTECH PRIVATE LIMITED

Abel Simon
Chief Compliance Officer
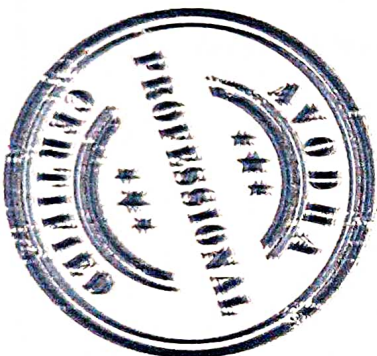
Shiny L George
Chief Academic Faculty

INTERNSHIP CERTIFICTE

Aqmenz Automation Private Limited

CIN: U74999KA2018PTC117612

CERTIFICATE
OF COMPLETION

THIS CERTIFICATE IS PROUDLY PRESENT TO

Anurag M

1RI21CS022

Has successfully completed Internship on **"Python Programming & Application Projects"** at **Aqmenz Automation Pvt. Ltd.** from 11.10.2022 to 31.10.2022

CERTIFICATE ISSUE NO: IN / **11768** / FY2022

www.indoskill.in

INDOSKILL
FOR SKILL INDIA

Mr Mohan V S
Chief Executive Officer (CEO),
AQMENZ Automation Pvt. Ltd.,
Bengaluru - 560032

Mr Mohammed Azhar Hussain
Chief Technology Officer (CTO),
AQMENZ Automation Pvt. Ltd.,
Bengaluru - 560032

CSC

CERTIFICATE

OF COMPLETION

IBM
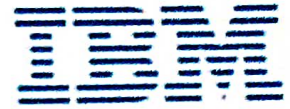
THIS CERTIFICATE IS PRESENTED TO

RAHUL

Certificate no. SN091146-48C

Has successfully completed Cyber security program from digial India through CSC, IBM at Oct-19-22

Reg no. IR121CS087

Digital India
Power To Empower
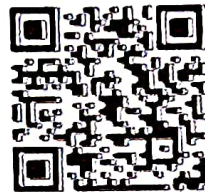
CIN : C8545674621NV72

Reg no.1R121CS087

CERTIFICATE OF
COMPLETION

this certificate presented to

Rahul

Has successfully completed Internship program on "CYBER SECURITY AND ETHICAL HACKING " at Jha Classes Pvt. Ltd. from 14.10.2022 to 20.10.2022.

P.S

PRADEEP SINGLE
Executive Director
Jha classes PVT. LTD.
Mumbai 946623
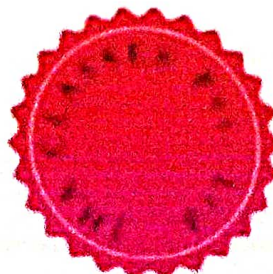
SohibAli

SOHIB ALI
General Manager &
Technology Officer
Jha Classes PVT. LTD.
Mumbai 946623

VERIFIED

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFIED THAT

Poulomi Bhattacharya

Has successfully completed **"Python Programming Language"** Internship course on Microsoft corporation through eXD.

Microsoft

P.S

Pradeep Sehgel

Seniour director technical department

Satya Nadella signature

Satya Nadella

CEO

MICROSOFTCORPORATION

eXD Verified certificate

issued Nov-01-2022

Certificate ID

a6100745-Ghkyt-JH0091
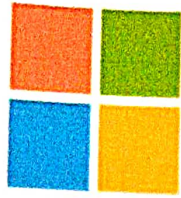
Microsoft

Certificate ID   a01815-28Bcxdf-JH0091
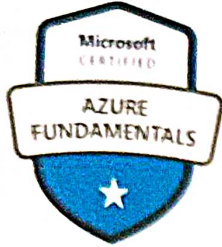
CERTIFICATE

VANDANA R

Python Programming Language

VERIFIED

issued on Nov-20-2022

Microsoft certifiied

Microsoft
CERTIFIED
AZURE
FUNDAMENTALS

JHA CLASSES

IBM

VERIFIED

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFIED THAT

VANDANA R

Has successfully completed **Python programming language** course on Microsoft corporation through eXD

Microsoft

R.S
Pradeep Sehgel
Seniour director technical department

Satya Nadella
CEO
MICROSOFTCORPORATION

eXD Verified certificate
issued Nov-01-2022

Certificate ID
a01815-28Bcxdf-JH0091
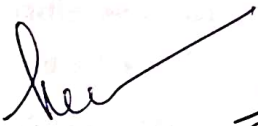
RR INSTITUTE OF TECHNOLOGY

Chikkabanvara, Bangalore-560090

DEPARTMENT OF CIVIL ENGINEERING
CERTIFICATE

This is to certify that, the project work entitled "EXTENSIVE SURVEY PROJECT (18CVEP68)" submitted by **GAGAN DINESH (1RI19CV009)** in fulfillment of the requirements for the award of the Bachelor in Civil Engineering, VTU Belagavi, during the academic year 2022-2023 is a bonafide carried by him under our supervision and guidance.

Signature of Camp Officer

Dr. Jagadeesha Kumar B G

Prof. Girish G

Signature of HOD

Dr. kumar R Rao
HOD Civil Engg.
R.R. INST. OF TECHNOLOGY
Chikkabanavara, Bangalore - 560 090

Signature of Principal

Dr. Mahendra K V

PRINCIPAL
R.R. INSTITUTE OF TECHNOLOGY
Chikkabanavara, Bangalore - 560 090.

Signature of External Examiners

1. _____

2. _____
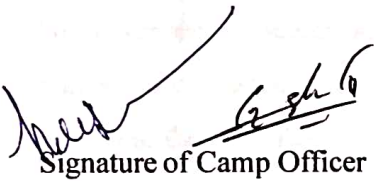
RR INSTITUTE OF TECHNOLOGY

Chikkabanvara, Bangalore-560090

DEPARTMENT OF CIVIL ENGINEERING
CERTIFICATE

This is to certify that, the project work entitled "EXTENSIVE SURVEY PROJECT (18CVEP68)" submitted by **AMAN KUMAR PAJIYAR (1RI20CV001)** in fulfillment of the requirements for the award of the Bachelor in Civil Engineering, VTU Belagavi, during the academic year 2022-2023 is a bonafide carried by him under our supervision and guidance.

Signature of Camp Officer

Dr. Jagadeesha Kumar B G

Prof. Girish G

Signature of HOD

Dr. Kumar R Rao

Signature of Principal

Dr. Mahendra K V

PRINCIPAL
R.R. INSTITUTE OF TECHNOLOGY
Chikkabanavara, Bangalore - 560 090.

Signature of External Examiners

1. _____

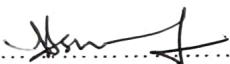2. _____

R R INSTITUTE OF TECHNOLOGY
CHIKKABANAVARA, BENGALURU – 560090

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the mini project entitled "Brick Breaker" as a part of 18CSL67 laboratory, is a bonafide work carried out by **SUNIL KUMAR SAH** bearing **USN: 1RI20CS063** bearing in partial fulfilment for the award of degree in Bachelor of Engineering in Computer Science Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2022-23. It is certified that all the corrections/suggestions indicated for internal assessment have been incorporated in the report submitted in the department Library. This mini project report has been approved as it satisfies the academic requirements in respect of mini project report prescribed for award of said degree.

Signature of Internal Guide   Signature of HOD   Signature of Principal

[Dr. Shivakumar Swamy N]   **[Dr. Manjunath R]**   **[Dr. Mahendra K V]**

Professor   Prof. and Head   Principal

Dept. of CSE, RRIT   Dept. of CSE, RRIT   RRIT, Bangalore

Name of the Examiners   **Signature with Date**

1. Jdwahar Jonathan /-   1. 12/07/23

2. Menanthh R   2.

R R INSTITUTE OF TECHNOLOGY

CHIKKABANAVARA, BENGALURU – 560090

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the mini project entitled **"SORTING VISUALIZER"** as a part of 18CSL67 laboratory, is a bonafide work carried out by **ANKIT DHALA SAMANTA** bearing **USN:1RI20CS009** and **ANANYA E** bearing **USN:1RI20CS008** in partial fulfillment for the award of degree in Bachelor of Engineering in Computer Science Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2022-23. It is certified that all the corrections/suggestions indicated for internal assessment have been incorporated in the report submitted in the department Library. This mini project report has been approved as it satisfies the academic requirements in respect of mini project report prescribed for award of said degree.

Signature of Internal Guide   Signature of HOD   Signature of Principal

Dr. Shivakumar Swamy N   **Dr. Manjunath R**   **Dr. Mahendra K V**

Professor   Professor and Head   Principal

Dept. of CSE, RRIT   Dept. of CSE, RRIT   RRIT, Bangalore

Name of the Examiners   **Signature with Date**

1. Dr. NSKeneauy   1.

2. Lonesh HD   2. 14/9/23

R R Institute of Technology

Affiliated to VTU Belgaum and Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka,
Accredited by NAAC with 'B+'
Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

Department of Mechanical Engineering

CERTIFICATE

Certified that the Internship work entitled **"STEEL PLANT IN PRODUCTION MANAGEMENT"** carried out by **HASIBURAHMAN ANSARI (USN: 1RI19ME006)**, a bonafide student of R R Institute of Technology in partial fulfillment for the award of Bachelor of Engineering in **Mechanical Engineering** of the Visveswaraya Technological University, Belagavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

Signature of Guide	**Signature of HOD**	**Signature of Principal**
(Mr. Srinivas K R)	(Dr. Channabasavaraj S)	(Dr. Mahendra K V)
Assistant Professor,	Head of Department,	Principal of RRIT,
Dept. of ME, RRIT	Dept. of RRIT	Bangalore

HOD of Mechanical Engineering
R.R. Institute of Technology
Hesaraghatta Main Road
Chikkabanavara, Bangalore - 90

R.R INSTITUTE OF TECHNOLOGY
Chikkabanavara, Bangalore - 560 090

External Viva

Name of the Examiners

Signature with date

1. Dr. Channabasavaraj

2. Yogendra Kumar. S

ASHOK STEEL INDUSTRIES PVT. LTD.

Works: Jeetpursimara Sub-Metropolitan, Jeetpur, (Bara) Nepal
Phone: 977-53-520125 / 520041, Fax no. 00977-53-520155, Email: aslsteeljpr@ntc.net.np
Head Office: Bagmati Chamber, Milan Marg, Teku, Kathmandu, Nepal
PAN No.: 300020137

Date: 24th sep, 2022

To Whom It May Concern

This is to certify that we have conducted industrial internship program to Mr. Hasibu Rahman Ansari S/o Mr. Jafir Ahmed Ansari, student of B.E. (Mechanical Engineer) 7th sem. of RR Institute of Technology, Bengaluru has successfully completed internship in our organization under the guidance of Mr. Shahbaj Sheikh-Quality Manager (B.tech, Mechanical). for a period commencing from 26th Aug,2022 to 24th Sep,2022.

During the period of internship we found him hardworking and sincere.

We wish him all success for his future endeavours.

Thanking you

Mr. Shahbaj Sheikh

AN ISO 9001:2015 CERTIFIED COMPANY

R R Institute of Technology

Affiliated to VTU Belgaum and Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka,
Accredited by NAAC with 'B+'& NBA
Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

Department of Civil Engineering

CERTIFICATE

Certified that the Internship entitled **"SEWAGE WATER TREATMENT AND SUPPLY"** carried out by **Mr. ARJUN N SHAJI (USN: 1RI16CV350)**, a bonafide student of R R Institute of Technology in partial fulfillment for the award of Bachelor of Engineering / Bachelor of Technology in **Civil Engineering** of the Visveswaraiah Technological University, Belgavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship prescribed for the said Degree.

Signature of Guide	Signature of HOD	Signature of Principal
Mrs.Gunasheela p	Dr. Kumar R Rao	Dr. Mahendra K V
RRIT, Bangalore	RRIT, Bangalore	RRIT, Bangalore

R.R. INSTITUTE OF TECHNOLOGY
Chikkabanavara, Bangalore - 560 090.

Signature of Internship Coordinator

Prof. Priyadarshini H P

RRIT, Bangalore

External Viva
Name of the Examiners   **Signature with date**

1. Prof. Sunil SK

2. Dr. Kiran. B   24/5/23.

R R Institute of Technology

Affiliated to VTU Belgaum and Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka,
Accredited by NAAC with 'B+'& NBA
Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

Department of Civil Engineering

CERTIFICATE

Certified that the Internship entitled **"Construction of Retaining Wall"** carried out by **MR. ASHWIN B C (USN: 1RI18CV004)**, a bonafide student of R R Institute of Technology in partial fulfillment for the award of Bachelor of Engineering / Bachelor of Technology in **Civil Engineering** of the Visveswaraya Technological University, Belagavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship prescribed for the said Degree.

Signature of Guide

Abhishek M
RRIT, Bangalore

Signature of HOD

Dr. Kumar R Rao
RRIT, Bangalore

Signature of Principal

Dr.Mahendra K V
RRIT, Bangalore

Signature of Internship Coordinator

Prof. Priyadarshini H P

RRIT, Bangalore

External Viva

Name of the Examiners

1. Prof. Sou.2St
2. Dr. Kiran B

Signature with date