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SVCE BENGALURU
SRI VENKATESHWARA COLLEGE OF ENGINEERING
— Affiliated to VTU, Approved by AICTE, Recognised by UGC u/s 2(f) & 12(B)—

**SRI VENKATESHWARA COLLEGE OF ENGINEERING,
BANGALORE-562157**

Implementation of mandatory Internship Policy for Students

As per AICTE Internship Policy

[https://aicte-
india.org/sites/default/files/AICTE%20Internship
%20Policy.pdf](https://aicte-india.org/sites/default/files/AICTE%20Internship%20Policy.pdf)

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CHAPTER 1

INTERNSHIP & ITS IMPORTANCE

1.1 INTRODUCTION

The rise in global competition has prompted organizations to devise strategies to have a talented and innovative workforce to gain a competitive edge. Developing an internship policy is an impactful strategy for creating a future talent pool for the industry. The Internship program not only helps fresh pass-outs in gaining professional know-how but also benefits, corporate on fresh perspectives on business issues and even discovering future business leaders.

The interaction of Technical Institutions with the industries has been restricted to the level of faculty communications and 2 to 4 hour industrial visits by the students generally. The institutions are under a great stress to renew education offered by them, to be as close as possible to the industrial requirement and expectations. Competition in the job sector is rising exponentially and securing entry-level jobs is getting very difficult, as the students passing out from technical institutions lack the experience and skills required by industry. AICTE has initiated various activities for promoting industrial internship at the graduate level in technical institutes. The main aim of these initiatives is enhancement of the employability skills of the students passing out from Technical Institutions. AICTE has prepared a model curriculum with the help of prominent academicians of the country so that the country may produce competent employable graduates as per the needs of the industries. The model curriculum includes the internship for students of six months' duration at different stages of the programme.

Keeping this in view, AICTE has developed this Model Internship Guidelines for organizing Internship at degree and diploma level. These guidelines comprise of Steps for Establishing, Maintaining & Fostering Internships. AICTE's MoUs with various Ministries, Government/ Non-Government/ Private organizations to facilitate internship have also been included.

The internship experience will augment outcome based learning process and inculcate various attributes in a student in line with the graduate attributes defined by the NBA.

1.2 OBJECTIVES

Internships are educational and career development opportunities, providing practical experience in a field or discipline. They are structured, short-term, supervised placements often focused around particular tasks or projects with defined timescales. An internship may be compensated, non-compensated or some time may be paid. The internship has to be meaningful and mutually beneficial to the intern and the organization. It is important that the objectives and the activities of the internship program are clearly defined and understood. Following are the intended objectives of internship training:

- a. Will expose Technical students to the industrial environment, which cannot be simulated in the classroom and hence creating competent professionals for the industry.
- b. Provide possible opportunities to learn understand and sharpen the real time technical / managerial skills required at the job.
- c. Exposure to the current technological developments relevant to the subject area of training.
- d. Experience gained from the 'Industrial Internship' in classroom will be used in classroom discussions.
- e. Create conditions conducive to quest for knowledge and its applicability on the job.
- f. Learn to apply the Technical knowledge in real industrial situations.
- g. Gain experience in writing Technical reports/projects.
- h. Expose students to the engineer's responsibilities and ethics.
- i. Familiarize with various materials, processes, products and their applications along with relevant aspects of quality control.
- j. Promote academic, professional and/or personal development.
- k. Expose the students to future employers.
- l. Understand the social, economic and administrative considerations that influence the working environment of industrial organizations
- m. Understand the psychology of the workers and their habits, attitudes and approach to problem solving.

1.3 BENEFITS OF INTERNSHIP:

1.3.1 Benefits to the Industry

- a. Availability of ready to contribute candidates for employment.
- b. Year round source of highly motivated pre-professionals.
- c. Students bring new perspectives to problem solving.
- d. Visibility of the organization is increased on campus.
- e. Quality candidate's availability for temporary or seasonal positions and projects.
- f. Freedom for industrial staff to pursue more creative projects.
- g. Availability of flexible, cost-effective work force not requiring a long-term employer commitment.
- h. Proven, cost-effective way to recruit and evaluate potential employees.
- i. Enhancement of employer's image in the community by contributing to the educational enterprise.

1.3.2 Benefits to Students:

- a. An opportunity to get hired by the Industry/ organization.
- b. Practical experience in an organizational setting.
- c. Excellent opportunity to see how the theoretical aspects learned in classes are integrated into the practical world. On-floor experience provides much more professional experience which is often worth more than classroom teaching.
- d. Helps them decide if the industry and the profession is the best career option to pursue.
- e. Opportunity to learn new skills and supplement knowledge.
- f. Opportunity to practice communication and teamwork skills.
- g. Opportunity to learn strategies like time management, multi-tasking etc in an industrial setup.
- h. Opportunity to meet new people and learn networking skills.
- i. Makes a valuable addition to their resume.
- j. Enhances their candidacy for higher education.
- k. Creating network and social circle and developing relationships with industry people.
- l. Provides opportunity to evaluate the organization before committing to a full time position.

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1.3.3. Benefits to the Institute:

- a. Build industrial relations.
- b. Makes the placement process easier.
- c. Improve institutional credibility & branding.
- d. Helps in retention of the students.
- e. Curriculum revision can be made based on feedback from Industry/ students.
- f. Improvement in teaching learning process.

AICTE GUIDELINES FOR ORGANIZING INTERNSHIP

The T&P cell will arrange internship for students in industries/organization after second, fourth and six/seventh semester(s) or as per AICTE/ affiliating University guidelines. Institutions may also device online system for arranging & managing internships. The general procedure for arranging internship is given below:

Step 1: Request Letter/ Email from the office of Training & Placement cell of the college should go to industry to allot various slots of 4-6 weeks during summer vacation as internship periods for the students. Students request letter/profile/ interest areas may be submitted to industries for their willingness for providing the training. (Sample attached)

Step 2: Industry will confirm the training slots and the number of seats allocated for internships via Confirmation Letter/ Email. In case the students arrange the training themselves the confirmation letter will be submitted by the students in the office of Training & Placement through concerned department. Based on the number of slots agreed to by the Industry, TPO will allocate the students to the Industry. In addition, the internship slots may be conveyed through Telephonic or Written Communication (by Fax, Email, etc.) by the TPO or other members of the T&P cell / Faculty members who are particularly looking after the Final/Summer Internship of the students.

Step 3: Students on joining Training at the concerned Industry / Organization, submit the Joining Report/ Letters / Email.

Step 4: Students undergo industrial training at the concerned Industry / Organization. In-between Faculty Member(s) evaluate(s) the performance of students once/twice by visiting the Industry/Organization and Evaluation Report of the students is submitted in department office/TPO with the consent of Industry persons/ Trainers. (Sample Attached)

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Step 5: Students will submit training report after completion of internship.

Step 6: Training Certificate to be obtained from industry.

Step 7: List of students who have completed their internship successfully will be issued by Training and Placement Cell.

2.4 GUIDELINES FOR THE STUDENTS:

Internship/ Placement are a student centric activity. Therefore, the major role is to be played by the students. TPOS may also include involvement of the student in the following activities:

- Design and Printing of Placement Brochure – Soft copy as well as Hard copy.
- Preparing list of potential recruiters and past recruiters.
- Placement Presentation at various organizations, if required.
- Coordinating activities related to Placement including companies HR team visit to institutes.

At the commencement of the session, the members of the student placement committee would be selected from the interested students, who submit applications to TPO to work on placement committee. Among the volunteers, one student would be nominated as “Student Coordinator” who would be assigned major responsibilities and would be accountable to TPO.

For allotment of internship slots all the students will be required to submit “student internship programme application” before the prescribed date (Format attached).

The offer given by the company is to be accepted irrespective of the Company / Job profile or job location or stipend offered.

A student who will voluntarily give in writing that He / She do not require placement assistance from the Institute would be exempted from participation in the Placement activities. This could be because of various reasons such as Joining family business, opting for higher education or competitive examination etc. Though organizations select individual students, but Recruitment is a team effort. Hence, all students while interacting with the recruitment teams should be careful and behave responsibly.

2.5 HEALTH, SAFETY AND WELFARE OF INTERNS:

AS per AICTE approval procedure, all institutions are required to ensure insurance of all the students and when any intern is undergoing training in a mine, the provisions of Chapter V of the Mines Act, 195, shall apply in relation to the health and safety of the train.

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AICTE'S MOUS WITH DIFFERENT ORGANIZATIONS TO FACILITATE INTERNSHIP PROGRAMME

In order to facilitate internships for the students, AICTE has been identifying organizations/Ministries both in India & abroad and signing MoUs. AICTE has signed many MoUs with Industries, Training institutions, Govt. bodies which are available on the AICTE website www.aicte-india.org. The institutions are requested to adequately publicize this information on their website so that students can apply for internship.

Some of the MoUs signed by AICTE are as follows

Sl. No.	Memorandum of Understanding	For more details please visit
1	AICTE's MoU with Intershala	https://www.aicte-india.org/downloads/letter_technical_inst_internshala.pdf
2	MoU with NETiit for internships in Taiwan.	https://www.aicte-india.org/downloads/mou_netit.pdf
3	AICTE's MoU with HireMee.	https://www.aicte-india.org/downloads/aicte_mou_HireMee12_9_17.PDF
4	AICTE's MoU with Indira Gandhi National Centre for the Arts	https://www.aicte-india.org/.../AICTE%20IGNCA_MoU.pdf
5	AICTE's MoU with Center for Creative Economy and Innovation (CCEI), Daegu, Republic of Korea.	https://www.aicte-india.org/.../AICTE-CCEI%20Daegu_MoU%20Document_Final.pdf
6	1.1 AICTE's MoU with International Institute of Waste Management (IIWM), Bangalore	https://www.aicte-india.org/sites/default/files/AICTE-IIWM%20MoU.compressed.pdf
7	AICTE's MoU with Engineering Council of India [ECI]	https://www.aicte-india.org/downloads/eci.pdf
8	AICTE's MoU with Fourth Ambit	https://www.aicte-india.org/sites/default/files/Fourth%20Ambit.PDF
9	AICTE's MoU with LinkedIn	https://www.aicte-india.org/downloads/LinkedIn%20MoU.PDF
10	AICTE's MoU with Telecom Sector Skill Council (TSSC)	https://www.aicte-india.org/downloads/mou_aicte_tssc_22_6_17.pdf
11	AICTE's MoU with scholars merit	https://www.aicte-india.org/sites/default/files/Scholarsmerit.PDF
12	AICTE's MoU with Studenting Era to facilitate AICTE approved academic institutions with services for their students & academic faculty	https://www.aicte-india.org/sites/default/files/Studenting%20Era.PDF
13	AICTE's MoU with Ministry of Micro, Small and Medium Enterprises (MSME)	https://www.aicte-india.org/sites/default/files/Signed_MoU_with_AICTE.compressed.pdf

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8.2. GENERAL INTERNSHIPS GUIDELINES

- a. Internship is always more valuable compared to a college project as it enables the interns to understand how companies work, build new contacts, develop a network and most importantly work on real-life projects executed within the company. Institutes are advised to send students for internship at least twice during the complete program once after second year and once after third or in final year.
- b. Many interns seem to judge the company by the number of employees in the organization. Do use more meaningful criteria to judge the company for the internship such as the time and training that they are willing to devote for you, type of products, value addition and services offered by the company in relation to what you want to learn, technologies employed by the company with respect to what you want to master etc.
- c. An internship is a great opportunity to learn in industrial environment without being an employee of the company. Students are advised to set their goals prior to starting their internship and focus on completing them during the internship.
- d. If a student joins a very large organization to do an internship, he must use the opportunity to learn about the activities performed in the various departments by doing short stints in each of them. This experience will help provide him the big-picture in better understanding the career prospects in relation to his ambitions.
- e. Attitude and mindset play a great role in the learning process. Do tackle all tasks given with enthusiasm and positive attitude.
- f. Interns must avoid negativity and never ignore a chance offered to them to learn more about a concept, technology, industry or company.
- g. Interns must be inquisitive and try to gain maximum knowledge and exposure.
- h. Interns shall identify a good mentor within the company and take initiative to execute new projects where one can make a difference to the company.
- i. Interns should enjoy during the internship and leave with tangible accomplishments.
- j. The intern will maintain a regular internship schedule determined by the Intern and his/her Project Head.
- k. Interns shall view an internship as a bridge between college and the workplace. Do use for their full advantage while undergoing internship:

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The intern must demonstrate honesty, punctuality and a willingness to learn during the internship program.

The intern will obey the policies, rules and regulations of the Company and comply the Company's Business practices and procedures.

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FORM-A

STUDENT INTERNSHIP PROGRAM APPLICATION

Complete and submit to the TPO/ Internship Program Coordinator. Type or write clearly.

Student Name:			
Campus Address:		Phone:	
Home Address:		Phone:	
Student email address:			
Academic Concentration		Internship Semester: _____ Year.	
Overall GPA:			
Internship Preferences			
	Location	Core Area	Company/ Institution
Preference-1			
Preference-2			
Preference-3			
<p>Faculty mentor Signature: _____ Date _____.</p> <p>Signature confirms that the student has attended the internship orientation and has met all paperwork and process requirements to participate in the internship program, and has received approval from his/her Advisor.</p>			
<p>Student Signature: _____ Date _____.</p> <p>Signature confirms that the student agrees to the terms, conditions, and requirements of the Internship Program</p>			

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FORM-B

REQUEST LETTER FROM INSTITUTE TO INTERNSHIP PROVIDER

To,

.....
.....
.....

Subject: Request for 04/06 weeks Industrial Training of 4 years Degree Programme,

Dear Sir,

In view of the above, I request your good self to allow our following students for practical training in your esteemed organization. Kindly accord your permission and give at least one-week time for students to join training after confirmation.

I thank and acknowledge the help and the support extended to our students during their training programme.

S. No.	Name	USN	Year of study & semester	Discipline

If vacancies exist, kindly do plan for Campus/Off Campus Interview for_____ batch passing out students in above branches.

A line of confirmation will be highly appreciated.

With warm regards,

Yours sincerely,

Internship Coordinator Head of the Department Principal

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FORM-C

OBJECTIVES/ GUIDELINES/ AGREEMENT: INTERNSHIP SYNOPSIS

(THIS WILL BE PREPARED IN CONSULTATION WITH FACULTY MENTOR)

An internship is a unique learning experience that integrates studies with practical work. This agreement is written by the student in consultation with the faculty Mentor and Industrial supervisor. It shall serve to clarify the educational purpose of the internship and to ensure an understanding of the total learning experience among the principal parties involved.

Part I: Contact Information

Student

Name: _____ USN _____ Sem/ Year: _____

Campus Address: _____

City, State: _____

Phone: _____ Email: _____

Faculty Mentor

Name: _____ Phone: _____

Programme : _____ Email: _____

Industrial Supervisor

Name: _____ Title: _____

Company/Organization: _____

Internship Address: _____

City, State, Pin: _____

Phone: _____ Email: _____

Academic Credit Information

Internship Title: _____

Domain: _____ Credit Points: _____

Grading Option: YES/NO _____ Credit/Non-credit _____

Beginning Date: _____ Ending Date: _____

Hours per Week: _____ Internship is: _____ Paid _____ Unpaid _____ Stipend _____

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Part II: Agreement

This contract may be terminated or amended by student, faculty coordinator or work supervisor at any time upon written notice, which is received and agreed to by the other two parties.

Student _____

Date _____

Faculty Mentor _____

Date _____

Industry Supervisor _____

Date _____

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FORM-D

RELIEVING LETTER OF STUDENT

To

.....

.....

Subject: Relieving letter of student and Industry.

Dear Sir,

Kindly refer your letter/e-mail dated..... on the above cited subject. As permitted by your good self the following students will undergo Industrial Internship in your esteemed organization under your sole guidance & directions:

Sl .No.	Name of Students	Roll No.	Branch

This training being an essential part of the curriculum, the following guidelines have been prescribed in the curriculum for the training. You are therefore, requested to please issue following guidelines to the concerned manager/Industrial Supervisor.

Internship schedule may be prepared and a copy of the same may be sent to us.

Each student is required to prepare Internship diary and report.

Kindly check the Internship diary of the student daily.

Issue instruction regarding working hours during training and maintenance of the attendance record.

You are requested to evaluate the student's performance on the basis of grading i.e. Excellent, Very Good, Satisfactory and Non Satisfactory on the below mentioned factors. The performance report may please be forwarded to the undersigned on completion of training in sealed envelope.

Sl. No.	Name of Students	Evaluation Ranking
	Attendance and general behaviour	
	Relation with workers and supervisors	
	Initiative and efforts in learning	
	Knowledge and skills improvement	
	Contribution to the organization	

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Your efforts in this regard will positively enhance knowledge and practical skills of the students, your cooperation will be highly appreciated and we shall feel obliged.

The students will abide by the rules and regulation of the organization and will maintain a proper discipline with keen interest during their Internship. The students will report to you on dated.....along with a copy of this letter.

Yours sincerely,

Training & Placement Officer

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FORM-E

SUPERVISOR EVALUATION OF INTERN

Student Name: _____ Date: _____

Work Supervisor: _____ Title: _____

Company/Organization: _____

Internship Address: _____

Dates of Internship: From _____ To _____

Please evaluate your intern by indicating the frequency with which you observed the following behaviors:

Parameters	Needs improvement	Satisfactory	Good	Excellent
Behaviors				
Performs in a dependable manner				
Cooperates with co-workers and supervisors				
Shows interest in work				
Learns quickly				
Shows initiative				
Produces high quality work				
Accepts responsibility				
Accepts criticism				
Demonstrates organizational skills				
Uses technical knowledge and expertise				
Shows good judgment				
Demonstrates creativity/originality				
Analyzes problems effectively				
Is self-reliant				
Communicates well				
Writes effectively				
Has a professional attitude				
Gives a professional appearance				
Is punctual				
Uses time effectively				
Overall performance of student intern (circle one):				

(Needs improvement/ _____ Satisfactory/ _____ Good
 _____ Excellent)

Additional comments, if any:

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Signature of Industry supervisor _____ HR Manager _____

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FORM-F

STUDENT FEEDBACK OF INTERNSHIP

(TO BE FILLED BY STUDENTS AFTER INTERNSHIP COMPLETION)

Student Name: _____ Date: _____

Industrial Supervisor: _____ Title: _____

Supervisor Email: _____ Internship is: _____ Paid _____ Unpaid _____ Stipend _____

Company/Organization: _____

Internship Address: _____

Faculty Coordinator: _____ Department: _____

Dates of Internship: From _____ To _____

Please fill out the above in full detail

Give a brief description of your internship work (title and tasks for which you were responsible):

Was your internship experience related to your major area of study?

_____ Yes, to a large degree _____ Yes, to a slight degree

_____ No, not related at all indicate the degree to which you agree or disagree with the

following statements.

This experience has:	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Given me the opportunity to explore a career field					
Allowed me to apply classroom theory to practice					
Helped me develop my decision-making and problem-solving skills					
Expanded my knowledge about the work world prior to permanent employment					
Helped me develop my written and oral communication skills					
Provided a chance to use leadership skills (influence others, develop ideas with others, stimulate decision-making and action)					
Expanded my sensitivity to the ethical implications of					

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the work involved					
Made it possible for me to be more confident in new situations					
Given me a chance to improve my interpersonal skills					
Helped me learn to handle responsibility and use my time wisely					
Helped me discover new aspects of myself that I didn't know existed before					
Helped me develop new interests and abilities					
Helped me clarify my career goals					
Provided me with contacts which may lead to future employment					
Allowed me to acquire information and/ or use equipment not available at my Institute					

In the Institute internship program, faculty members are expected to be mentors for students. Do you feel that your faculty coordinator served such a function? Why or why not?

How well were you able to accomplish the initial goals, tasks and new skills that were set down in your learning contract? In what ways were you able to take a new direction or expand beyond your contract?

Why were some goals not accomplished adequately?

In what areas did you most develop and improve?

What has been the most significant accomplishment or satisfying moment of your internship?

What did you dislike about the internship?

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Considering your overall experience, how would you rate this internship? (Circle one).

(Satisfactory/ Good/ Excellent)

Give suggestions as to how your internship experience could have been improved. (Could you have handled added responsibility?

Would you have liked more discussions with your professor concerning your internship?

Was closer supervision needed? Was more of an orientation required?)

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FORM-G

PROFORMA FOR EVALUTION OF INTERNSHIP BY THE DEPARTMENT

1. Name of Student_____ Mob. No._____
2. USN._____
3. Branch/Semester_____ Period of Training_____
4. Address of Training Providing Company:_____
5. Type of Work_____
6. Date of Evaluation_____
 - a. Attendance: _ (Satisfactory/ Good/ Excellent)
 - b. Practical Work: __ (Satisfactory/ Good/ Excellent)
 - c. Faculty's Evaluation: _ (Satisfactory/ Good/ Excellent)
 - d. Evaluation of Industry: ____ (Satisfactory/ Good/ Excellent)

Overall grade: (Satisfactory/ Good/ Excellent)

Marks to be awarded by			Overall Grade
Punctuality Grade (Satisfactory/ Good/ Excellent)	Maintenance of Daily Diary Grade (Satisfactory/ Good/ Excellent)	Skill Test Grade (Satisfactory/ Good/ Excellent)	

Signature of Faculty Mentor Signature of Internship Coordinator

HoD

With date and stamp

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***Photocopy of the attendance record duly attested by the training in-charge should be attached with the evaluation Proforma.**

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FORM-H ATTENDANCE SHEET

Name & Address of Organization

Name of Student	
USN	
Title of Internship/Task performed:	
Date of Commencement of Training:	
Date of Completion of Training:	

Initials of the student

Day	Hours Worked	Details of Work Completed
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

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21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
	Total Hours Worked:	Title(s) of Project(s) worked on:

Note:

1. Attendance Sheet should remain affixed in Daily Training Diary. **Do not remove or tear it off.**
2. Student should sign/initial in the attendance column. Do not mark 'P'
3. Holidays should be marked in **Red Ink** in attendance column. Absent should be marked as 'A' **in Red Ink.**

Signature of Company internship supervisor with company stamp/ seal

(Name _____)

Contact No.

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

III SEMESTER												
Sl. No	Course and Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits
				Theory Lecture	Tutorial	Practical/ Drawing	Self-Study	Duration in hours	CIE Marks	SEE Marks	Total Marks	
				L	T	P	S					
1	BSC 21MAT31	Transform Calculus, Fourier Series and Numerical Techniques	Maths	3	0	0		03	50	50	100	3
2	IPCC 21CS32	Data Structures and Applications	Any CS Board Department	3	0	2		03	50	50	100	4
3	IPCC 21CS33	Analog and Digital Electronics		3	0	2		03	50	50	100	4
4	PCC 21CS34	Computer Organization and Architecture		3	0	0		03	50	50	100	3
5	PCC 21CSL35	Object Oriented Programming with JAVA Laboratory		0	0	2		03	50	50	100	1
6	UHV 21UH36	Social Connect and Responsibility	Any Department	0	0	2		01	50	50	100	1
7	HSMC 21KSK37/47	Samskrutika Kannada	TD and PSB: HSMC	1	0	0		01	50	50	100	1
	HSMC 21KSK37/47	Balake Kannada										
	OR											
	HSMC 21CIP37/47	Constitution of India and Professional Ethics										
8	AEC 21CS38X/21 CSL38X	Ability Enhancement Course - III	TD: Concerned department PSB: Concerned Board	If offered as Theory Course				01	50	50	100	1
				1	0	0						
				If offered as lab. course				02				
				0	0	2						
Total								400	400	800	18	
9	Scheduled activities for III to VIII semesters	NMDC 21NS83	National Service Scheme (NSS)	NSS	All students have to register for any one of the course namely National Service Scheme, Physical Education (PE)(Sports and Athletics) and Yoga with the concerned coordinator of the course during the first week of III semester. The activities shall be carried out from (for 5 semesters) between III semester to VIII semester. SEE in the above courses shall be conducted during VIII semester examinations and the accumulated CIE marks shall be added to the SEE marks. Successful completion of the registered course is mandatory for the award of the degree. The events shall be appropriately scheduled by the colleges and the same shall be reflected in the colander prepared for the NSS, PE and Yoga activities.							
		NMDC 21PE83	Physical Education (PE)(Sports and Athletics)	PE								
		NMDC 21YO83	Yoga	Yoga								
Course prescribed to lateral entry Diploma holders admitted to III semester B.E./B.Tech programs												
1	NCMC 21MATDIP31	Additional Mathematics - I	Maths	02	02	--	--	---	100	---	100	0
<p>Note:BSC: Basic Science Course, IPCC: Integrated Professional Core Course, PCC: Professional Core Course, INT –Internship, HSMC: Humanity and Social Science & Management Courses, AEC–Ability Enhancement Courses. UHV: Universal Human Value Course. L –Lecture, T – Tutorial, P- Practical/ Drawing, S – Self Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination.TD-Teaching Department, PSB: Paper Setting department 21KSK37/47Samskrutika Kannada is for students who speak, read and write Kannada and 21KSK37/47Balake Kannada is for non-Kannada speaking, reading, and writing students. Integrated Professional Core Course (IPCC): Refers to Professional Theory Core Course Integrated with Practical's of the same course. Credit for IPCC can be 04 and its Teaching–Learning hours (L : T : P) can be considered as (3 : 0 : 2) or (2 : 2 : 2). The theory part of the IPCC shall be evaluated both by CIE and SEE. The practical part shall be evaluated by only CIE (no SEE). However, questions from the practical part of IPCC shall be included in the SEE question paper. For more details, the regulation governing the Degree of Bachelor of Engineering /Technology (BE/B.Tech.) 2021-22 may be referred.</p>												

21INT49 Inter/Intra Institutional Internship: All the students admitted to engineering programs under the lateral entry category shall have to undergo a mandatory 21INT49 Inter/Intra Institutional Internship of 03 weeks during the intervening period of III and IV 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 IV 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 declared fail and shall have to complete during subsequently after satisfying the internship requirements. The faculty coordinator or mentor shall monitor the students' internship progress and interact with them for the successful completion of the internship.

Non-credit mandatory courses (NMC):

(A) Additional Mathematics I and II:

(1) These courses are prescribed for III and IV semesters respectively to lateral entry Diploma holders admitted to III semester of B.E./B.Tech., programs. They shall attend the classes during the respective semesters 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 has 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 courses Additional Mathematics I and II shall be indicated as satisfactory in the grade card. Non-completion of the courses Additional Mathematics I and II shall be indicated as Unsatisfactory.

(B) National Service Scheme/Physical Education (Sport and Athletics)/ Yoga:

(1) Securing 40 % or more in CIE, 35 % or more marks in SEE and 40 % or more in the sum total of CIE + SEE leads to successful completion of the registered course.

(2) In case, students fail to secure 35 % marks in SEE, they have to appear for SEE during the subsequent examinations conducted by the University.

(3) In case, any student fails to register for NSS, PE or Yoga/fails to secure the minimum 40 % of the prescribed CIE marks, he/she shall be deemed to have not completed the requirements of the course. In such a case, the student has to fulfill the course requirements during subsequent semester/s to earn the qualifying CIE marks.

(4) Successful completion of the course shall be indicated as satisfactory in the grade card. Non-completion of the course shall be indicated as Unsatisfactory.

(5) These courses 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.

Ability Enhancement Course - III

21CSL381	Mastering Office	21CS383	
21CS382	Programming IN c++	21CS384	

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IV SEMESTER												
Sl. No	Course and Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits
				Theory Lecture	Tutorial	Practical/ Drawing	Self-Study	Duration in hours	CIE Marks	SEE Marks	Total Marks	
				L	T	P	S					
1	BSC 21CS41	Mathematical Foundations for Computing	Maths	2	2	0		03	50	50	100	3
2	IPCC 21CS42	Design and Analysis of Algorithms	Any CS Board Department	3	0	2		03	50	50	100	4
3	IPCC 21CS43	Microcontroller and Embedded SystemS		3	0	2		03	50	50	100	4
4	PCC 21CS44	Operating SystemS		2	2	0		03	50	50	100	3
5	AEC 21BE45	Biology For Engineers	BT, CHE, PHY	2	0	0		02	50	50	100	2
6	PCC 21CSL46	Python Programming Laboratory	Any CS Board Department	0	0	2		03	50	50	100	1
7	HSMC 21KSK37/47	Sanskrutika Kannada	HSMC	1	0	0		01	50	50	100	1
	HSMC 21KKB37/47	Balake Kannada										
	OR											
	HSMC 21CIP37/47	Constitution of India & Professional Ethics										
8	AEC 21CS48X/21C SL48X	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	UniversalHumanValues	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 of II 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
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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 Sanskrutika Kannada is for students who speak, read and write Kannada and 21KKB37/47 Balake Kannada is for non-Kannada speaking, reading, and writing students.

Integrated Professional Core Course (IPCC): Refers to Professional Theory Core Course Integrated with Practical's 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 IPCC shall 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 fulfil the course requirements during subsequent semester/s to earn the qualifying CIE marks. These courses are slated for CIE only and has 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

21CSL481	Web Programming	21CSL483	R Programming
21CS482	Unix Shell Programming	21CS484	

Internship of 04 weeks during the intervening period of IV and V semesters; 21INT68 Innovation/ 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 centers or Incubation centers. 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.

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V SEMESTER													
Sl. No	Course and Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits	
				Theory Lecture	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks	Total Marks		
				L	T	P	S						
1	BSC 21CS51	Automata Theory and compiler Design	Any CS Board Department	3	0	0		03	50	50	100	3	
2	IPCC 21CS52	Computer Networks		3	0	2		03	50	50	100	4	
3	PCC 21CS53	Database Management Systems		3	0	0		03	50	50	100	3	
4	PCC 21CS54	Artificial Intelligence and Machine Learning		3	0	0		03	50	50	100	3	
5	PCC 21CSL55	Database Management Systems Laboratory with Mini Project		0	0	2		03	50	50	100	1	
6	AEC 21XX56	Research Methodology & Intellectual Property Rights	TD: Any Department PSB: As identified by university	2	0	0		02	50	50	100	2	
7	HSMC 21CIV57	Environmental Studies	TD: Civil/ Environmental /Chemistry/ Biotech. PSB: Civil Engg	1	0	0		1	50	50	100	1	
8	AEC 21CS58X/21 CS58LX	Ability Enhancement Course-V	Concerned Board	If offered as Theory courses				01	50	50	100	1	
				1	0	0							
				If offered as lab. courses				02					
				0	0	2							
Total									400	400	800	18	
Ability Enhancement Course - IV													
21CSL581	Angular JS and Node JS			21CS583									
21CS582	C# and .Net Framework			21CS584									
<p>Note: BSC: Basic Science Course, PCC: Professional Core Course, IPCC: Integrated Professional Core Course, AEC –Ability Enhancement Course INT – Internship, HSMC: Humanity and Social Science & Management Courses. L –Lecture, T – Tutorial, P- Practical/ Drawing, S – Self Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination.</p> <p>Integrated Professional Core Course (IPCC): refers to Professional Theory Core Course Integrated with Practical 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). Theory part of the IPCC shall be evaluated both by CIE and SEE. The practical part shall be evaluated by CIE only and there shall be no SEE. For more details the regulation governing the Degree of Bachelor of Engineering /Technology (BE/B.Tech.) 2021-22 may be referred.</p>													

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VI SEMESTER

Sl. No	Course and Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination			Credits	
				Theory Lecture	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks		Total Marks
				L	T	P	S					
1	HSMC 21CS61	Software Engineering & Project Management	Any CS Board Department	2	2	0		03	50	50	100	3
2	IPCC 21CS62	Fullstack Development		3	0	2		03	50	50	100	4
3	PCC 21CS63	Computer Graphics and Fundamentals of Image Processing		3	0	0		03	50	50	100	3
4	PEC 21XX64x	Professional Elective Course-I		3	0	0		03	50	50	100	3
5	OEC 21XX65x	Open Elective Course-I	Concerned Department	3	0	0		03	50	50	100	3
6	PCC 21CSL66	Computer Graphics and Image Processing Laboratory	Any CS Board Department	0	0	2		03	50	50	100	1
7	MP 21CSMP67	Mini Project		Two contact hours /week for interaction between the faculty and students.				--	100	--	100	2
8	INT 21INT68	Innovation/Entrepreneurship /Societal Internship	Completed during the intervening period of IV and V semesters.				--	100	--	100	3	
Total								500	300	800	22	

Professional Elective - I

21CS641	Agile Technology	21CS643	Advanced Computer Architecture
21CS642	Advanced JAVA Programming	21CS644	Data science and Visualization

Open Electives – I offered by the Department to other Department students

21CS651	Introduction to Data Structures	21CS653	Introduction to Cyber Security
21CS652	Introduction to Database Management Systems	21CS654	Programming in JAVA

Note: HSMC: Humanity and Social Science & Management Courses, IPCC: Integrated Professional Core Course, PCC: Professional Core Course, PEC: Professional Elective Courses, OEC–Open Elective Course, MP –Mini Project, INT –Internship.

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

Integrated Professional Core Course (IPCC): Refers to Professional Theory Core Course Integrated with Practical 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 CIE only and there shall be no SEE. For more details, the regulation governing the Degree of Bachelor of Engineering /Technology (BE/B.Tech) 2021-22 may be referred.

Professional Elective Courses (PEC):

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

Open Elective Courses:

Students belonging to a particular stream of Engineering and Technology are not entitled for the open electives offered by their parent Department. However, they can opt an elective offered by other Departments, provided they satisfy the prerequisite condition if any. Registration to open electives shall be documented under the guidance of the Program Coordinator/ Advisor/Mentor.

Selection of an open elective shall **not be allowed** if,

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

In case, any college is desirous of offering a course (not included in the Open Elective List of the University) from streams such as Law, Business (MBA), Medicine, Arts, Commerce, etc., can seek permission, at least one month before the commencement of the semester, from the University by submitting a copy of the syllabus along with the details of expertise available to teach the same in the college.

The minimum students' strength for offering open electives is 10. However, this conditional shall not be applicable to cases where the admission to the programme is less than 10.

Mini-project work: Mini Project is a laboratory-oriented course which will provide a platform to students to enhance their practical knowledge and skills by the development of small systems/applications.

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini- project can be assigned to an individual student or to a group having not more than 4 students.

CIE procedure for Mini-project:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two faculty members of the Department, one of them being the Guide. The CIE marks awarded for the Mini-project work shall be based on the evaluation of project report, project presentation skill, and question and answer session in the ratio of 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group-wise at the college level with the participation of all the guides of the project. The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill, and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

No SEE component for Mini-Project.

VII semester Classwork and Research Internship /Industry Internship (21INT82)

Swapping Facility

Institutions can swap VII and VIII Semester Scheme of Teaching and Examinations to accommodate research internship/ industry internship after the VI semester.

(2) Credits earned for the courses of VII and VIII Semester Scheme of Teaching and Examinations shall be counted against the corresponding semesters whether VII or VIII semester is completed during the beginning of IV year or later part of IV year of the program.

Elucidation:

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

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

The mandatory Research internship /Industry internship is for 24 weeks. The 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 the subsequent University examination after satisfying the internship requirements.

INT21INT82Research Internship/ Industry Internship/Rural Internship

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

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

Rural internship:A long-term goal, as proposed under the AICTE rural internship programme, shall be counted as rural internship activity.

The student can take up Interdisciplinary Research Internship or Industry Internship.

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

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

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Swappable VII and VIII SEMESTER**VII SEMESTER**

Sl. No	Course and Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination			Credits	
				Theory Lecture	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks		Total Marks
				L	T	P	S					
1	PCC 21CS71	Big Data Analytics	Any CS Board Department	3	0	0		3	50	50	100	3
2	PCC 21CS72	Cloud Computing		2	0	0		3	50	50	100	2
3	PEC 21XX73X	Professional elective Course-II		3	0	0		3	50	50	100	3
4	PEC 21XX74X	Professional elective Course-III		3	0	0		3	50	50	100	3
5	OEC 21XX75X	Open elective Course-II	Concerned Department	3	0	0		3	50	50	100	3
6	Project 21CSP76	Project work		Two contact hours /week for interaction between the faculty and students.				3	100	100	200	10
Total								350	350	700	24	

VIII SEMESTER

Sl. No	Course and Course Code	Course Title	Teaching Department	Teaching Hours /Week				Examination			Credits		
				Theory Lecture	Tutorial	Practical/ Drawing	Self -Study	Duration in hours	CIE Marks	SEE Marks		Total Marks	
				L	T	P	S						
1	Seminar 21CS81	Technical Seminar		One contact hour /week for interaction between the faculty and students.				--	100	--	100	01	
2	INT 21INT82	Research Internship/ Industry Internship		Two contact hours /week for interaction between the faculty and students.				03 (Batch wise)	100	100	200	15	
3	NCMC	21NS83	National Service Scheme (NSS)	NSS	Completed during the intervening period of III semester toVIII semester.				--	50	50	100	0
		21PE83	Physical Education (PE) (Sports and Athletics)	PE									
		21YO83	Yoga	Yoga									
Total								250	150	400	16		

Professional Elective - II

21CS731	Object oriented Modelling and Design	21CS734	Blockchain Technology
21CS732	Digital Image Processing	21CS735	Internet of Things
21CS733	Cryptography and Network Security		

Professional Elective - III

21CS741	Software Architecture and Design Patterns	21CS744	Robotic Process Automation Design and Development
21CS742	Multiagent Systems	21CS745	NoSQL Data Base
21CS743	Deep Learning		

Open Electives - II offered by the Department to other Department students

21CS751	Programming in Python	21CS754	Introduction to Data Science
21CS752	Introduction to AI and ML	21CS755	
21CS753	Introduction to Big Data		

Note: PCC: Professional Core Course, PEC: Professional Elective Courses, OEC–Open Elective Course, AEC –Ability Enhancement Courses.
L–Lecture, T – Tutorial, P- Practical / Drawing, S – Self Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination.

Note: VII and VIII semesters of IV year of the programme

(1) Institutions can swap VII and VIII Semester Scheme of Teaching and Examinations to accommodate research internship/ industry internship after the VI semester.

(2) Credits earned for the courses of VII and VIII Semester Scheme of Teaching and Examinations shall be counted against the corresponding semesters whether VII or VIII semester is completed during the beginning of IV year or later part of IV year of the programme.

PROJECT WORK (21XXP76): The objective of the Project work is

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

CIE procedure for Project Work:

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

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

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

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

TECHNICAL SEMINAR (21XXS81): The objective of the seminar is to inculcate self-learning, present the seminar topic confidently, enhance communication skill, involve in group discussion for exchange of ideas. Each student, under the guidance of a Faculty, shall choose, preferably, a recent topic of his/her interest relevant to the programme of Specialization.

- (i) Carry out literature survey, systematically organize the content.
- (ii) Prepare the report with own sentences, avoiding a cut and paste act.
- (iii) Type the matter to acquaint with the use of Micro-soft equation and drawing tools or any such facilities.
- (iv) Present the seminar topic orally and/or through PowerPoint slides.
- (v) Answer the queries and involve in debate/discussion.
- (vi) Submit a typed report with a list of references.

The participants shall take part in the discussion to foster a friendly and stimulating environment in which the students are motivated to reach high standards and become self-confident.

Evaluation Procedure:

The CIE marks for the seminar shall be awarded (based on the relevance of the topic, presentation skill, participation in the question and answer session, and quality of report) by the committee constituted for the purpose by the Head of the Department. The committee shall consist of three teachers from the department with the senior-most acting as the Chairman.

Marks distribution for CIE of the course:

Seminar Report:50 marks

Presentation skill:25 marks

Question and Answer: 25 marks. ■ No SEE component for Technical Seminar

Non – credit mandatory courses (NCMC):

National Service Scheme/Physical Education (Sport and Athletics)/ Yoga:

(1) Securing 40 % or more in CIE,35 % or more marks in SEE and 40 % or more in the sum total of CIE + SEE leads to successful completion of the registered course.

(2) In case, students fail to secure 35 % marks in SEE, they has to appear for SEE during the subsequent examinations conducted by the University.

(3) In case, any student fails to register for NSS, PE or Yoga/fails to secure the minimum 40 % of the prescribed CIE marks, he/she shall be deemed to have not completed the requirements of the course. In such a case, the student has to fulfill the course requirements during subsequently to earn the qualifying CIE marks subject to the maximum programme period.

(4) Successful completion of the course shall be indicated as satisfactory in the grade card. Non-completion of the course shall be indicated as Unsatisfactory.

(5) These courses 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.