

# FEEDBACK ANALYSIS REPORT OF STAKEHOLDERS (2021-22)





#### CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology and Engineering Devang Patel Institute of Advance Technology and Research

Date: 09/07/2022

#### Feedback Analysis on Curriculum Design from Stakeholders (A.Y.: 2021-2022)

#### **Feedback from Students:**

The department has formal and informal mechanisms to obtain feedback from stakeholders through various committees, associations, organization, etc. The suggestions and feedbacks of stakeholders were discussed in BoS meeting and got approval in Board of studies, Academic council and made the approved changes in the syllabus.

- Students need tough practical list.
- In C Programming, Practice of questions that help in logic building and arrange coding contest among our class. There should be more practical session rather than having more theoretical session and real life application of that should be focused.
- Please add modern technology like NodeJs, Django, flask or Spring in syllabus.
- In Software Group Project, give more projects in all domain. Ex. Data analyst, UI/UX design etc.
- Data Structure and Algorithm should include coding along with algorithm. Practice and implementation of data structure should be made better.
- Computer Organization and Microprocessor should be divided in to 2 separate subject.

	Analy	sis of S	tudent Fo	eedback	on Curri	culum				
	Scale: 1-Exce Average = (	ellent; 2- (a*5)+(b %Resj	very Goo *4)+(c*3) ponse = (	od; 3-Go +(d*2)+( (100*Ave	od; 4-Av e*1))/tota rage)/5	erage; 5- Il respon	Poor ses			
Sr. No.	Criteria	1	2	3	4	5	Yes	No	Average	%Response
1	The Course objectives are clear and specific.	504	414	299	212	173			3.54	70.79
2	The Course workload is manageable throughout the course.	457	397	352	206	190			3.45	69.05
3	The Course is well organized and structured (e.g. content flow, inclusive of important matter. etc.)	504	383	347	206	162	N	IA	3.54	70.75
4	The Course is well structured to achieve the learning outcomes (e.g. No of lectures, tutorials, practical etc.)	511	389	341	197	164			3.55	71.06
5	The provision of learning resources in the library was adequate and appropriate.	476	409	346	196	175			3.51	70.17
6	Learning materials (Lesson Plans, Course Notes etc.) are relevant and useful.						1427	175	1.89	94.54
7	Are prerequisites still appropriate for this course?			NA			1345	257	1.84	91.98
8	Recommended reference books are relevant						1358	244	1.85	92.38





#### **Feedback from Academic Peers:**

- In Digital Electronics, implementation can be done on Online Platform and on circuit board also.
- In Java Programming, should add more real-life practical aspects.
- In Cloud Computing, more container topics can be added.
- In Artificial Intelligence, New Topics are to be added to the syllabus.

	Feedback	Analysis	of Acade	mic Peer			-	
	Scale: 1-Excellent; 2-v Average = ((a*5)+(b*4 %Resp	ery Goo 4)+(c*3)+ onse = (′	d; 3-Goo ·(d*2)+(e 100*Aver	d; 4-Ave *1))/total age)/5	rage; 5-F respons	Poor es		
Sr. No.	Criteria	1	2	3	4	5	Average	%Response
1	How do you rate the sequence of the Course?	39	38	5	0	0	4.414634	88.2926829
2	How do you rate the syllabus of the course ?	38	39	5	0	0	4.402439	88.0487805
3	How do you rate the sequence of the units in the course?	47	29	6	0	0	4.5	90
4	How do you rate the allocation of the credits to the courses?	35	41	6	0	0	4.353659	87.0731707
5	How do you rate the distribution of the contact hours among the course components (L-T-P)?	42	35	5	0	0	4.45122	89.0243902
6	How do you rate the offering of the electives in terms of their relevance to the specialization streams?	40	36	6	0	0	4.414634	88.2926829
7	How do you rate the electives offered in Relation to the Technological advancements?	44	32	6	0	0	4.463415	89.2682927
8	How do you rate the relevance of the Text Books and reference books by their international recognition to the Courses?	46	30	6	0	0	4.487805	89.7560976
9	How do you rate the courses aligned with industry requirements/needs ?	41	35	6	0	0	4.426829	88.5365854

#### Feedback from Employers and Industry Expert:

- May upgrade Technical Contents of Technical Subjects in relevance to Industry New Requirements.
- In Bloch chain Technology subject, More Block Chain Frameworks can be added.





	Feedback Analysi	is of Exar	niner fror	n Other Ir	stitute			
	Scale: 1-Excellent; 2-v Average = ((a*5)+(b*4 %Resp	ery Goo 4)+(c*3)+ onse = (1	d; 3-Goo (d*2)+(e' I00*Aver;	d; 4-Ave *1))/total age)/5	rage; 5-F respons	'oor es		
Sr. No.	Criteria	1	2	3	4	5	Average	%Response
1	How do you rate the sequence of the Course?	50	20	4	0	0	4.62	92.43
2	How do you rate the Syllabus/Content of the course?	31	38	5	0	0	4.35	87.03
3	How do you rate the relevance of the units in the syllabus relevant to the course?	47	25	2	0	0	4.61	92.16
4	How do you rate the sequence of the units in the course?	48	22	4	0	0	4.59	91.89
5	How do you rate the allocation of the credits to the courses?	43	26	5	0	0	4.51	90.27
6	How do you rate the distribution of the contact hours among the course components (L-T-P)?	42	27	5	0	0	4.50	90.00
7	How do you rate the offering of the electives in terms of their relevance to the specialization streams?	45	27	2	0	0	4.58	91.62
8	How do you rate the electives offered in Relation to the Technological advancements?	35	39	0	0	0	4.47	89.46
9	How do you rate the relevance of the Text Books and reference books by their international recognition to the Courses?	49	24	1	0	0	4.65	92.97
10	How do you rate the courses aligned with industry requirements/needs ?	54	20	0	0	0	4.73	94.59

	Feedbacl	k Analysi	s of Indus	try Expe	ť			
	Scale: 1-Excellent; 2- Average = ((a*5)+(b %Res	very Go *4)+(c*3) ponse =	od; 3-Go )+(d*2)+( (100*Ave	od; 4-Av e*1))/tota rage)/5	erage; 5- al respon	Poor ses		
Sr. No.	Criteria	1	2	3	4	5	Average	%Response
1	How do you rate the sequence of the Course?	6	7	1	0	0	4.35714286	87.1428571
2	How do you rate the Syllabus/Content of the course?	10	3	1	0	0	4.64285714	92.8571429
3	How do you rate the relevance of the units in the syllabus relevant to the course?	7	5	2	0	0	4.35714286	87.1428571
4	How do you rate the sequence of the units in the course?	11	2	1	0	0	4.71428571	94.2857143
5	How do you rate the allocation of the credits to the courses?	7	4	3	0	0	4.28571429	85.7142857
6	How do you rate the distribution of the contact hours among the course components (L-T-P )?	8	4	2	0	0	4.42857143	88.5714286
7	How do you rate the offering of the electives in terms of their relevance to the specialization streams?	9	3	2	0	0	4.5	90
8	How do you rate the electives offered in Relation to the Technological advancements?	8	6	0	0	0	4.57142857	91.4285714
9	How do you rate the relevance of the Text Books and reference books by their international recognition to the Courses?	7	5	2	0	0	4.35714286	87.1428571
10	How do you rate the courses aligned with industry requirements/needs ?	12	2	0	0	0	4.85714286	97.1428571





#### Feedback from Alumni:

- More practical and real-world technologies should be taught.
- course work is very hectic in some last semester, which stops student to explore other things.
- Include subjects like distributed computing and parallel processing in the syllabus.
- Please add course of Cloud Computing which explore services of AWS and GCP.
  Few technical skills much
- Few technical skills, such as version control systems, API development, need to be incorporated as a core part of the curriculum.
- It should be more focus on cybersecurity related electives, workshops & courses and also try to bring companies for internship & placement in cybersecurity domain.
- Organize more programming/coding competitions during 1st and 2nd year of studies to encourage students to get their hands on programming.
- Content of new Subjects like Machine Learning, Deep Learning and Artificial Intelligence need to more detailed and according to recent trends of industry.
- Need more focus on deep exploration of core subjects like Operating systems, networking and database
- Increase lab hours for courses like Data Science and Analysis, Machine Learning

South

Principal Devang Patel Institute of Advance technology and Research Charotar University of Science and Technology





# FEEDBACK ACTION TAKEN REPORT OF STAKEHOLDERS (2021-22)





#### CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology and Engineering Devang Patel Institute of Advance Technology and Research

#### Date: 28/09/2022

#### Action Taken Report of Feedback on Curriculum Design from Stakeholders

#### (A. Y.: 2021-2022)

#### Action Taken :

- Suggestions are discussed in Board of Studies meeting (attached in Annexure I)
- Extra practical questions based on logical reasoning and real life application were added in the practical list of respective subjects as well as in Data Structure and Algorithms, practical list was linked with CodeChef online platform for practical implementation and practice. (Refer Annexure II)
- Tinkercad online platform will be introduced to the students for practice in Digital Electronics subject. (Refer Annexure III)
- In Blockchain Technology subject, frameworks such as Hyperledger, LogRocket were added in the practical list. (Refer Annexure IV)
- Many workshop and expert talks will be organized to teach latest technologies for interested students.
- Hackathons will be organized for all the interested students.

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# Annexure – I (7<sup>th</sup> BOS of CSE Department)

#### **CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY**

#### Faculty of Technology and Engineering (FTE)

#### Minutes – 7th Meeting of Board of studies (BoS)

#### **Computer Science & Engineering (CSE)**

#### Chandubhai S. Patel Institute of Technology (CSPIT)

&

#### Devang Patel Institute of Advance Technology and Research (DEPSTAR)

#### Date : 11th March, 2023, Saturday

#### Time :10:00 am

#### Venue : Meeting Room , DEPSTAR, CHARUSAT Campus (Hybrid Mode)

The 7<sup>th</sup> meeting of the Board of Computer Science & Engineering (CSE), Shri Chandubhai S.Patel Institute of Technology and Devang Patel Institute of Advance Technology and Research (DEPSTAR), FTE, Charotar University of Science & Technology (CHARUSAT) was held on 11th March, 2023, 10:00 am onwards at Meeting Room, DEPTSAR, CHARUSAT campus in hybrid mode.

Following BOS members were remained present:

1.	Dr. Amit Thakkar	Chairman (CSE)	Head-CSE, CSPIT, FTE, CHARUSAT
2.	Prof. Deepak Garg	External Member	Dean, School of CSE, Bennett University
3.	Dr.Subramaniya Swamy	External Member	Professor(CSE),School of Computing,Sastra University
4.	Mr. Nikunj Patel	External Member	Tech Smith, Ghandhinagar
5.	Dr.Chirag Patel	Special Invitee	Head-CSE, DEPSTAR, FTE, CHARUSAT
6.	Dr.Nikita Bhatt	Special Invitee	Assistant Professor, CSE, FTE, CHARUSAT
7.	Mr. Parth Goel	Member	Assistant Professor,DEPSTAR,FTE,CHARUSAT
8.	Mr. Harshil Joshi	Member	Assistant Professor, CSE, DEPSTAR
9.	Mr. Nilesh Dubey	Member	Assistant Professor, CSE, DEPSTAR
10.	Mr. Hemang Thakar	Member	Assistant Professor, CSE, CSPIT
11.	Ms. Bela Shah	Member	Assistant Professor, CSE, CSPIT

12.	Mr.Saumya Shah	Member	Student, DEPSTAR, CHARUSAT (19DCS133)
13.	Ms.Naisargi	Member	Student, CSPIT, CHARUSAT (20CS100)
	Vadodariya		

Following Members could not remain present due to other engagements:

1.	Dr. Sanjay Chaudhari	External Member	Dean of Students and Associate,
			School of Engineering and Applied
			Science ,Ahmedabad University
2.	Mr. Maulik Bhanshali	External Member	CEO, Netweb Software PVT. LTD, Vadodara
3.	Dr. Y P Kosta	Member	Professor & Principal CSPIT
4	Mr. Amit Dubey	External Member	Alumni,DEPSTAR,CHARUSAT(17D CS011)

#### Initiation:

Dr. Amit Thakkar (Chairman-BOS) greeted all the invited members of the Board of Studies for the 7th BOS meeting for CSE. He briefed the overall activities carried out by the department during last year.

#### Items Proceedings & Resolutions: -

#### Item 07.01: Approval: Approval of Minutes of the 6th BOS Meeting

#### Proceedings 7.01 :

Minutes of 6th Meeting of BOS, Computer Science and Engineering, Faculty of Technology Chairman outlined the summary and the actions taken on the received suggestions of 6th Meeting of Board of Studies and invited further comments.

#### **Resolution 7.01:**

As no comments were received, the minutes of 6th BOS Meeting were confirmed. (Refer Annexure –1).

There are some suggestion in the teaching scheme for year 2022-23, so this is to be discussed in current BOS.

#### Item 7.02: For Discussion and Approval

To review and approve the Teaching & Examination schemes and detailed syllabus of 7th and 8th (Fourth Year) B. Tech for the CSE, applicable for 2021 (Admission) Batch. (Total 180 credits)

#### Proceedings 7.02:

• Syllabus passed without any revision.

#### **Resolutions 7.02:**

• Final Teaching Scheme attached in Annexure 2.

#### Item 7.03: For Discussion and Approval;

To review and approve the Teaching & Examination schemes and detailed syllabus of 3rd and 4th (Second Year) B. Tech for CSE, applicable for 2022 (Admission) Batch. (Total 180 credits)

#### Proceedings 7.03:

The tentative teaching scheme of 3rd and 4th semester for admission year 2022-23 was presented in the last BoS.Its detailed syllabus was discussed in this BoS. Below are the suggestions from the BoS members:

- Data Structures to be taught in 3rd Semester rather than 4th Semester in inclination to the industry needs. Change in Credit Allocation of Data Structures from 4 to 5 credits.Hence,to balance the credits,DBMS is moved to 4th Semester.
- Design and Analysis of Algorithms moved from 5th semester to 4th semester to maintain the dependency between DSA and DAA. Thus,to balance the credits,Machine Learning and Software Engineering is moved from 4th Semester to higher Semester.
- To fulfill the Dependency of Machine Learning ,Programming in Python is offered in the 4th Semester.
- Project-I introduced in Semester 3 to strengthen the project building capabilities of students.
- Software Group Project-I in 4th Semester renamed as Project-II.
- Data Communication and Networking is offered in 4th Semester as basics of networking need to be taught with minor modifications.
- Change of course codes from CS / CE TO CSE due to conflict of course code with faculty of Humanities from batch 2022-23 with minor modifications in course content.

#### **Resolutions 7.03:**

• Teaching Scheme for 1st year (AY 2023-24) is updated as per suggestions of experts (Refer Annexure 3).

#### Item 7.04: For Discussion and Approval;

 To review and approve the Teaching & Examination schemes and detailed syllabus of First Year B Tech CBCS courses applicable for 2023-24 (Admission) Batch 2023 (Total 180 credits) & To review Teaching Scheme – 1st and 2nd Semester ,Batch: 2023.

#### **Proceedings 7.04:**

• Foundation Courses will be offered as Audit courses with no credits allotted.

#### **Resolutions 7.04:**

• Teaching Scheme for 1st year (AY 2023-24) is updated as per suggestions of experts (Refer Annexure 4). Detailed course wise Syllabus will be provided in due course of time.

#### Item 7.05: For Discussion and Approval;

To review and approve the Teaching & Examination schemes and syllabus of Second Year of B. Tech CSE (AI-ML), applicable for 2022-23 (Admission) Batch. (Total 180 credits)

#### Proceedings 7.05:

• CHARUSAT is currently in the process of signing an MOU with industry to improve teaching and learning in the field of Artificial Intelligence & Machine Learning. As part of this partnership, both CHARUSAT and industry partners will collaborate to develop coursework for second-year B. Tech CSE (AI & ML) students.

Based on Input received from industry experts, following new courses were discussed with BoS members for their approval:

- Introduction to AI
- Data Analysis using Python
- Probabilistic Modeling and reasoning with python
- R Programming for Data Science and analytics
- The tentative teaching scheme of 3rd and 4th semester for admission year 2022-23 was presented in the last BoS. Detailed syllabus for the same was discussed.Below are the suggestions from BoS members:
- Based on the current Industry Trend,BoS Members have suggested offering Data Structures in the 3rd Semester and DBMS in the 4th Semester.
- Course code of CSE AIML should be given as AIMLXXX.

#### **Resolutions 7.05:**

• Based on approval from members, the Final Teaching Scheme is attached in Annexure 5.

#### Item 7.06: For Discussion and Approval ;

To review Innovations in Pedagogy

#### **Proceedings 7.06:**

• Experts endorsed our good practices under "innovation in pedagogy" like using online platforms like Codechef, Hacker rank ,Leet code for increasing problem solving capabilities of Students.

#### **Resolution 7.06:**

• Report of Innovation in pedagogy is attached in Annexure 6.

#### Item 7.07: For Discussion and Approval;

Approval of Certification courses

#### **Proceedings 7.07:**

• Members have appreciated student enrollment in courses like Red Hat Linux Administrator ,SAP Code Unnati Program,AWS,CCNA,which we offer as a part of the academy on campus in Instructor Led Mode.

#### **Resolution 7.07:**

• List of Students is attached with Annexure 7.1 and Annexure 7.2.

#### Item 7.08: For Discussion and Approval;

• To discuss the pedagogical interventions incorporated in the syllabi of courses, and strategy to align the teaching - learning processes to outcome based education.

#### Proceedings 7.08:

- As per guidelines of NAAC,NBA,it's inevitable for institutions to move towards Outcome Based Education.In inclination to guidelines,Outcome based Education Syllabus were designed at preliminary level. In OBE, methodology of defining first competency of course and deducing practical outcomes and unit outcomes was discussed.
- In continuation with implementation of OBE for NBA & NAAC, attainment of Program Outcomes (POs)and Program Specific Outcomes (PSOs) for all courses of B. Tech (CSE) programmes were performed based on internal and external evaluation. Based on attainment level, the Department has finalized various corrective actions.
- Experts appreciated our good practice of creating course syllabus in accordance with industrial expertise.

#### **Resolution 7.08:**

- Experts analyzed sample OBE syllabus and accordingly more courses may be designed on the same front.(Refer Annexure 8)
- Sample OBE Sheet, Attainment of POs & PSOs and Action taken plan for academic year 2021-2022 are attached as Annexure 9.1, Annexure 9.2, Annexure 9.3.

#### Item 7.09: For Discussion

Evaluating the Quality of Question Paper

#### Proceedings 7.09:

• Showcasing of new software developed for pre analysis of Question Paper, to check if question papers adheres to proper weightage of units and blooms taxonomy.

#### **Resolution 7.09:**

• Members analyzed question paper format and appreciated our usage of pre analysis software to generate reports on the quality of question papers.(Refer Annexure 10)

#### Item 07.10 Discussion:

Discussion and action taken on the academic,Non Academic feedback of the stakeholders including students,academic peers and parents.

#### Proceeding No. 07.10:

• The details of feedback of the stakeholders were presented. The actions taken based on the feedback received were also discussed.

#### **Resolution No. 07.10:**

• Board noted feedback of the stakeholders and actions taken. (Refer Annexure 11)

#### **Item 7.11: For Discussion**

Analysis and discussion on the odd semester (1st,3rd,5th and 7th semester) results of the students and steps taken for the remedial actions.

#### Item 7. 11 : Proceedings

• Odd semester examination results of the Academic year 2022-23 and steps taken for the remedial actions were discussed.

#### **Resolution 7.11:**

• Members appreciated result analysis in the context of Bloom's taxonomy. Members appreciated the proactive approach of conduction of remedial sessions on the basis of

unit test exam to reduce backlog in the end semester examination. (Refer Annexure 12)

#### Item 7.12: For Discussion

To review a panel of examiners for summer and summer examinations (AY 2022-23).

#### Item 7.12: Proceeding:

• The chairman informed about the existing panel of examiners and newly added examiners to the panel. He invited suggestions regarding any changes or additions in the panel.

#### Item 7.12: Resolution

• Board noted and approved the proposed Panel of Examiners.

#### Item 7.13: For Discussion

• Analysis of campus placement(s) and discussion of related pre placement activities to enhance them further.(Refer Annexure 13)

#### Item 7.13: Proceeding:

The chairman discussed the campus placement and higher studies activities such as Course Brush-up tests,Aptitude Sessions,Career Awareness sessions,Internship seminars,Leetcode competitions.

#### Item 7.13: :Resolution

• Members noted the summary of placement and higher study records. (Refer Annexure 14)

#### Item 7.14: For Discussion

To review research activities, project fundings, and consultancy works.

#### Item 7.14: Proceeding:

- On-going Faculty and Student research projects, start-up projects, seed grant were shown to members.
- MoU with Infopercept Consulting Pvt.Ltd and draft MOU of Bharat Block Chain Network were also discussed

#### Item 7.14: Resolution

• Members appreciated the research environment created and the industry-Academia partnership developed (Refer Annexure 14)

#### Additional Suggestions from experts:

The meeting ended with a vote of thanks by Chairman, Dr.Amit Thakkar and other BoS members.

AR-1444

Dr. Amit Thakkar, Chairman - BoS (CSE), Faculty of Technology Date: 11/03/2023

#### Annexure 11 Question Paper Pre-Analysis

Item 7.09: Evaluating the Quality of Question Paper



# CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Question Paper Pre Analysis Report CSPIT BTECH(CS) 6 Internal\_Exam\_ML\_2023



#### 1) Unitwise Marks Distribution Chart



2) CO-wise Marks Distribution Chart



3) Blooms Level-wise Marks Distribution Chart



#### 4) Unit and BLT-wise Marks Distribution Chart according to syllabus



5) Mapping with syllabus Unitwise hours Distribution Chart



### Paper Weightage vs Syllabus weightage



Department of Computer Science and Engineering CSPIT, DEPSTAR

#### Annexure-11

#### Subject: Action Plan from various feedback received Reference Department: CSE Department ction plan from Feedback received from employers

#### **1.** Action plan from Feedback received from employers.

#	Suggestion	Action Plan
1	Provide industrial related topics in web development course	Offered new subject Full stack development in semester 5 <sup>th</sup> Semester
2	Allow students to explore other technology	Given choice to select elective subjects from 1 <sup>st</sup> year onwards. ((Annexure II)

#### 2. Action plan from Feedback received from Teachers (End semester course feedback)

#	Suggestion	Action Plan
1	Students should get core subject knowledge (Digital Electronics) in their First Year	Offered a subject in 2 <sup>nd</sup> Semester (proposed)
2	Network Administration can be added as a part of Unit/Linux File System	Network Administration can be added as a part of Unit/Linux File System
3	Some modules of RHCSA are added as part of practical	Some modules of RHCSA are added as part of practical

#### 3. Action plan from Feedback received from Parents.

#	Suggestion	Action Plan
1	Parents have queries related to Curriculum books.	Parents have queries related to Curriculum books.
2	Parents had question how they can evaluate their ward's attendance and result?	Parents had question how they can evaluate their ward's attendance and result?
3	Parents had suggestion that student shouldn't be overburden by giving writing assignment rather than that they should be given assignment focusing on skill development.	Parents had suggestion that student shouldn't be overburden by giving writing assignment rather than that they should be given assignment focusing on skill development.
4	Discussed with parents regarding the assignment given to students. It has discussed that there are two type of courses one is theoretical and other is practical based. So, course containing only theory have written assignment and writing practice is necessary for student as it can be helpful for them in future for clearing competitive exams. Also discuss about the adaptation of competitive platform like hacker rank, code chef in various courses to provide the practical exposure.	Discussed with parents regarding the assignment given to students. It has discussed that there are two type of courses one is theoretical and other is practical based. So, course containing only theory have written assignment and writing practice is necessary for student as it can be helpful for them in future for clearing competitive exams. Also discuss about the adaptation of competitive platform like hacker rank, code chef in various courses to provide the practical exposure.

# (Annexure I)

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY CHANDUBHAI S. PATEL INSTITUTE OF TECHNOLOGY

Date : 12/05/2022

: 1

Semester

#### BACHELOR OF TECHNOLOGY

#### Syllabus Details

Effective Year 2022-23

Program	: BTECH(CS)
Total Subjects	: 7
Total Regular Subjects	: 6
Total Elective Subjects	: 1

Group Name : Regular

			Те	achin	g Schem	e	Examination Scheme						
Course	Course Title		С	REDIT		TOTAL	Т	н	P	R	Р	RJ	
oode		тн	PR	PRJ	TOTAL	HOURS	Internal	External	Internal	External	Internal	۲J Externa - - -	TOTAL
MA143	ENGINEERING MATHEMATICS-I	4.00			4.00	4.00	0/30	28/70	-	-	-	-	100
ØÉ143	COMPUTER CONCEPTS & PROGRAMMING	3.00	2.00		5.00	7.00	0/30	28/70	0/50	20/50	-		200
ALEE 145	BASICS OF ELECTRONICS & ELECTRICAL ENGINEERING	3.00	1.00		4.00	5.00	0/30	28/70	0/25	10/25	-	-	150
1T144	ICT WORKSHOP		1.00		1.00	2.00	-		0/25	10/25		-	50
PY142	ENGINEERING PHYSICS-I		2.00		2.00	2.00	-	-	0/50	20/50	-	·	100
FS101A	FOUNDATION COURSE ON MATHEMATICS AND PHYSICS		2.00		2.00	2.00	-		0/50	20/50	-	-	100
0					18.00	22.00							700

#### Group Name : HS Elective

100		Teaching Scheme				Examination Scheme							
Course	Course Title		С	REDIT		TOTAL	Т	н	F	R	PI	RJ	
Code	/	тн	PR	PRJ	TOTAL	HOURS	Internal	External	Internal	External	Internal	Externa	TOTAL
HS101.02 A	COMMUNICATIVE ENGLISH		2.00		2.00	2.00	-	-	0/30	28/70		-	100
F													

Total Credit for Regular Subjects		18.00	
Total Credit for Elective Subjects	:	2.00	
Total Credit	1	20.00	

#### Examination Grade Range & Value

FF		From Marks	To Marks
	0.00	0	44
DD	4.00	45	49
CD	5.00	50	54
CC	6.00	55	59
BC	7.00	60	65
BB	8.00	66	72
AB	9.00	73	79
AA	10.00	80	100

# CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

Date : 30/04/2022

CHANDUBHAI S. PATEL INSTITUTE OF TECHNOLOGY

#### BACHELOR OF TECHNOLOGY

#### Syllabus Details

#### Effective Year 2022-23

Program	: BTECH	(CS)		Semester : 3	
Total Subjects	: 7				
<b>Total Regular Subjects</b>	: 5				
<b>Total Elective Subjects</b>	: 2	i she and	in the second second		
Total Credit for Regular Subjects		20.00			

Total Credit for Regular Subjects	:	20.00	And States	The second s	
Total Credit for Elective Subjects	:	2.00			
Total Credit	:	22.00		and the second second	

#### Examination Grade Range & Value

Grade	Grade Points	From Marks	To Marks
ĘF	0.00	0	44
DD	4.00	45	49
CD	5.00	50	54
CC	6.00	55	59
BC	7.00	60	65
BB	8.00	66	72
AB	9.00	73	79
AA	10.00	80	100

Annuw

Annexure V





# **Faculty of Technology and Engineering**

### Department of Computer Science & Engineering

24/12/2022 Date:

Academic Year	:	2022-23	Semester	:	3
Course code	:	CE251	Course	:	Java Programming
			name		

Following students are informed to attend the Remedial Classes. However other students who want to clear concepts may attend the session.

Sr.No.	Student Id	Student Name	Student	Marks of	Marks of	SGPA
			Signature	Assessment 1	Assessment 2	
1	21CS025	JAIMIN MANISHBHAI MAKADIA	J.M.M.	7	17	5.5

Signature of Faculty

Signature of Course Coordinator





# **Faculty of Technology and Engineering**

#### Department of Computer Science & Engineering

Date: 17/01 /2023

#### **Internal Result Analysis**

Academic Year	:	2022-23	Semester	:	3
Course code	:	CE251	Course name	:	Java Programming

Exam type	:	External	Exam Date	:	21/11/2022	Exam Marks	:	70
Exam Mode	:	Offline	Exam Pattern	:	Descriptive			

#### 1. Absent Student List:

Sr.No.	Student Id	Reason	Remarks, if any
1	NÁ	NA	NA

#### Action Taken: NA

#### 2. <u>Student List having FF result:</u>

Sr.No.	Student Id	Grade	Remarks, if any
1	21CS025	FF	Did not clear University exam

#### **Action Taken:**

Remedial class for the student was conducted to solve his doubts. Previous years' question papers were given to him for his practice. With his he cleared his backlog and got CD grade in the Java Programming- course.

Name and Sign of Course Coordinator

**Reviewed By:** Dr. Amit Thakkar Head of Department, CSE, CSPIT, CHARUSAT

		Schedule for 6th Sem Department of Compute Placement 2023-24 ( 20	Pre-Placement Activities er Science and Engineering 0CS batch) - 2024 passout		
Sr no	Training /Session Required for	Tentative Date	Time	Venue	Faculty Involved
1	Placement awareness session by Faculty members with the students	23-12-2022	10:00 to 11:00	507	Dr. Amit Thakkar, Sanket Suthar
2	Identify placement interested Students and Higher Studies interested Students	6 Dec to 11 Dec 2022	1 week	Online Mode	Dharmendrasinh Rathod
3	Circulation and Collection of Signed copy of Placement policy	29 January to 5 February(1 week)	1 week	Online Mode	Dharmendrasinh Rathod
4	Apptitude Session series	5 February to 30 April	Every Saturday(2 hours)	Offline	Dharmendrasinh Rathod
5	Resume Building Session	17th February	3:30 to 4:30	Classroom 507	Kirti Makawana, Abhishek Patel
6	Placement eligibility test (By CDPC/Department)				
7	Analytical (+) English writing /Essay Writing	5th March	-		
8	Programming Test/Program writing	Every Sunday	12:10 to 2:10	Online	Hemang Thakar
9	Technical Interview	26th March	9:00 to 11:10		Industry Expert
10	HR Interview	2 April	12:10 to 2:10		MBA Department

11	Group Discussion	Every 15 days on Friday	3:30 to 4:30		
12	Interaction with alumni/Placed Students	End of 6th Semester and starting of 7th semester	9:00 to 11:10		
13	Monitor the progress of Placement activities	-	-		Dharmendrasinh Rathod
14	Attend meetings organized by CDPC	-	-		
15	Interaction with potential recruiters	-	-		Abhishek Patel
16	Brush of session for Core Subjects				All Faculties
	Additional Activities Needs to be				
	Additional Activities Needs to be carried out	Purpose	Will Conduct by	Remarks	
1	Brush up session for Core Subjects	Purpose To improve fundamentals	Will Conduct by Faculty members	Remarks	
1	Brush up session for Core Subjects Group Discussion	PurposeTo improve fundamentalsTo improve Communication skills	Will Conduct by         Faculty members         Akshita Kadam	Remarks	
1 2 3	Additional Activities Needs to be carried out         Brush up session for Core Subjects         Group Discussion         Technical Interview	PurposeTo improve fundamentalsTo improve Communication skillsTo increase confidence among students	Will Conduct by         Faculty members         Akshita Kadam         Industry Person	Remarks	





# **Faculty of Technology and Engineering**

**Department of Computer Science and Engineering** 

Event Name: MoU with "Infopercept Consulting Pvt. Ltd."

#### **Detail about the event:**

MoU was signed with Infopercept Consulting Pvt.Ltd on 9th December 2022 in presence of Dr. YP Costa (Principal, CSPIT), Dr. Amit Thakkar, (Head, CSE, CSPIT) Asst.Prof. Bela Shah, Asst.Prof. Martin Parmar with Infopercept Consulting Pvt.Ltd. MoU is signed to provide research opportunities to students and faculties, internships and training to students as well as training to teachers.

The students from Dept. of Computer and Computer Science Engineering of Chandubhai S. Patel Institute of Technology (CSPIT) visited Infopercept Consulting Pvt. Ltd on 31st December, 2022 situated at Ahmedabad.

Since we continue to depend more and more on technology in our daily lives, cyber security is recognised as a crucial component of our current digital environment. Because cyber-attacks are growing more common, complex, and expensive, it is up to us all to make sure we are taking the appropriate precautions to safeguard our organizations and ourselves.

Infopercept's vision and core values revolve around making organizations more aware and secure through the core values of Honesty, Transparency and Knowledge, so as to enable them to make better informed decisions about their Security Practices & goals. With our synergistic vision to combine technical expertise and professional experience we aim to further establish our place as a one stop shop for our clients and partners' cyber security and accreditation needs.

The company showcased their various security solutions, such as network security, cloud security, and endpoint protection along with having the opportunity to observe the company's security operations center (SOC) and learn about how they monitor and respond to cyber threats.



MoU with Infopercept Consulting Pvt.Ltd





Student Team at Infopercept Consulting Pvt.Ltd





# Annexure – II (Screenshot of Codechef Student and Faculty Account)







Compete(/contests?itm\_medium=navmenu&itm\_campaign=allcontests)

🔸 Over 3500 questions to practice! 🔶



Discuss(https://discuss.codech

Practice Now

(https://www.codechef.com)

<u>arncp)</u>

Have you solved a problem today? (https://www.codechef.com/practice?itm\_medium=top-strip&itm\_campaign=practice) Н

Practice(/practice?itm\_medium=navmenu&itm\_campaign=practice)

<u>Home (/)</u> » Parth Shah		
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Username:	2* cust_20dce117	(https://discuss.codeshaf.com/t/dis
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Institution:	Charotar University of Science and Technology	* *
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Team Invites:	Click here (/teams/invites) to check team invites. o (/teams/invites)	
Discuss Profile:	https://discuss.codechef.com/u/cust_20dce117 (https://discuss.codechef.com/u/cust_20dce117)	<u>47408</u> (/ratings/all)
CodeChef Pro Plan:	No Active Plan. <u>View Details (/pro?itm_medium=profile-plan&amp;itm_campaign=CC_Pro)</u>	Global Rank <u>43342</u> <u>(/ratings/all?filterBy=Country%3DIndia)</u>
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Badge



CodeChef Rating Distribution

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Div 4

1

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1000-1099 1100-1199



700-1799 800-1899

Div 2

600-1699

2100-2199

2200-2299 2300-2399 2400-2499 2500-2599 2600-2699 2700-2799 2700-2899 2800-2999

Div 1

1900-1999 2000-2099

#### **Problems Solved**

Fully Solved (93)



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#### **Recent Activity**

Time	Problem	Result	Lang	Solution
0	<u>MAX_DIFF</u> <u>(/LP1TO2</u>		PYTH 3	View (/vi ewsoluti on/7724 4249)
Ø	<u>CHFRICH</u> (/LP1TO2	<b>~</b> (100)	PYTH 3	View (/vi ewsoluti on/7723 5352)
0	<u>FLOW010</u> <u>(/LP0TO1</u>	*	PYTH 3	View (/vi ewsoluti on/7723 4610)
0	<u>FLOW013</u> <u>(/LP0TO1</u>	4	PYTH 3	View (/vi ewsoluti on/7723 0446)
0	<u>LUCKFOUR</u> (/LP0TO1	<b>~</b> (100)	PYTH 3	View (/vi ewsoluti on/7723 0213)
0	<u>FLOW004</u> <u>(/LP0TO1</u>	4	PYTH 3	View (/vi ewsoluti on/7723 0186)
0	<u>HS08TEST</u> <u>(/LP0TO1</u>	¥	PYTH 3	View (/vi ewsoluti on/7723 0135)
Ø	<u>HS08TEST</u> <u>(/LP0TO1</u>	×	PYTH 3	View (/vi ewsoluti on/7722 9834)
Ø	<u>HS08TEST</u> <u>(/LP0TO1</u>	×	PYTH 3	View (/vi ewsoluti on/7722 9710)
Ø	<u>CHOPRT</u> <u>(/LP0TO1</u>	4	PYTH 3	View (/vi ewsoluti on/7722 9281)
0	<u>FLOW001</u> <u>(/LP0TO1</u>	4	PYTH 3	View (/vi ewsoluti on/7722 8884)
0	<u>FLOW007</u> <u>(/LP0TO1</u>	~	РҮТН 3	View (/vi ewsoluti on/7722 8771)
		1 of 8		Next

>=3000





# Annexure – III (Digital Electronics Syllabus)

## **CE252: DIGITAL ELECTRONICS**

#### **Credits and Hours:**

Teaching Scheme	Theory	Practical	Tutorial	Total	Credit
Hours/week	3	2	0	5	4
Marks	100	50	0	150	

#### **Pre-requisite courses:**

Basic Electronics

#### **Outline of the Course:**

Sr.	Title of the unit	Minimum number
No.		of hours
1.	Number Systems	5
2.	Boolean Algebra and Logic Gates	5
3.	Simplification of Boolean Functions	б
4.	Combinational Logic	5
5.	Combinational Logic With MSI AND LSI	5
6.	Sequential Logic	10
7.	Registers, Counters and the Memory Unit	5
8.	Processor Logic Design	4
	Total hours (Theory) :	45
	Total hours (Lab) :	30
	Total hours :	75

#### **Detailed Syllabus:**

1.	Number Systems	05 Hours	10%
	Digital computer and digital systems, Binary Number, Number base		
	conversion Octal and Hexadecimal Number, Complements, Binary		
	Codes, Binary Storage and register, Binary Logic,		
	Integrated Circuit		
2.	Boolean Algebra and Logic Gates	05 Hours	10%
	Basic Definition, Axiomatic Definition of Boolean Algebra, Minterm		
	And Maxterms, Basic Theorem and Properties of BooleanAlgebra,		
	Logic Operations, Digital Logic Gates, IC digital Logic		
	Families		

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3.	Simplification of Boolean Functions	06 Hours	12%
	Two-Three Variable K-map, Four- Five Variable K-map, Product		
	of sum Simplification, NAND or NOR implementation, Don't Care		
	condition 3.4 Tabulation method		
4.	Combinational Logic	05 Hours	12%
	Introduction, Design Procedure, Hazards, Adder, subtractor, Code		
	Conversion, Universal Gate, exclusive OR & equivalence functions		
5.	Combinational Logic With MSI and LSI	05 Hours	12%
	Introduction, Binary Parallel Adder, Decimal Adder, Magnitude		
	Comparator, Decoder, Multiplexer, ROM, PLA, PAL		
6.	Sequential Logic	10 Hours	22%
	Introduction, RS, JK, D, T Flip-Flops, Triggering of Flip-Flops, Flip-		
	Flop Excitation Tables, Analysis of Clocked Sequential Circuits,		
	State Reduction and Assignment Design Procedure, Design of		
	Counters, Design with State Equations		
7.	Registers, Counters and the Memory unit	05 Hours	12%
	Introduction, Registers, Shift Registers, Ripple Counters,		
	Synchronous Counters, Timing Sequences, Memory Unit, Johnson		
	counter		
8.	Processor Logic Design	04 Hours	10%
	Processor Organization, Arithmetic Logic Unit, Design of ALU,		
	Status Register, Design of Shifter, Processor Unit		

### Course Outcome (COs):

At the end of the course, the students will be able to

CO1	Understand, convert and examine the structure of various number systems and its application in digital design.
CO2	Simplification of Boolean function and its conversion in different forms.
CO3	Understand, analyse and design various combinational circuits.
CO4	Compare different flip-flop characteristics and design of Flip-Flop with gates. With FF Design, understand and analyse various sequential circuits.
CO5	Explain the basic requirements of ALU design and its variation.

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#### **Course Articulation Matrix:**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	1	-	-	-	-	-	-	-	-	-	-	1	-
CO2	3	1	-	-	-	-	-	-	-	-	-	-	1	-
CO3	3	1	-	-	1	-	-	-	-	-	-	-	1	-
CO4	2	2	-	-	1	-	-	-	-	-	-	-	1	-
CO5	2	-	-	-	1	-	-	-	-	-	-	-	1	-

Enter correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

If there is no correlation, put "-"

#### **Recommended Study Material:**

- Text book:
  - 1. Digital Logic and Computer Design By M Morris Mano, PHI- Publication 2002.
  - **2.** Digital Principles and Applications By Malvino & Leach, Seventh Edition, McGraw-Hill Education.

#### Reference book:

- 1. Digital Design M. Morris Mano and Michael D. Ciletti, Pearson Education.
- Online Platform use for Practical:

1. Tinkercad

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# Annexure – IV (Blockchain Subject Practical List)

### CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

#### FACULTY OF TECHNOLOGY & ENGINEERING

#### DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH

Subject: CE471/CS473 Blockchain Technology

Semester: 7<sup>th</sup> [BTECH CE/CSE]

Academic year: July 2021-22

## Practical List

Sr No.		Practical Aim
1	Install a	bitcoin wallet. Generate and secure your private key. Perform following tasks:
	a.	Create Account/Import Account
	b	Add ether into account
	<b>c.</b>	Perform transaction to different account
2	Write a	simple Smart Contract, compile, deploy it using Metamask Ropsten Test Network.
	•	Setting a Greeting — we should be able to set a greeting.
	•	Displaying the Greeting — we should be able to retrieve the greeting and display it.
3	Write a	smart contract of Election with following tasks:
	a.	Cast vote against two candidates
	b.	Vote should be cast only once.
	c	No voter can vote any third candidate.
4	Study a	nd Configure Geth over windows or Ubuntu. Perform following tasks:
	a.	Build Your Own Private Ethereum Blockchain.
	b.	Create Genesis Block:
	с.	Initialize the Genesis block:
	d.	Create Boot node
	e.	Start Private Network
	f.	Launch Ethereum Wallet:
	g.	Create Address:
	h.	Start Mining

5	Study and Implement Block structure and perform following tasks using Node is/Python/Java.
	a Create Genesis Block and display
	a. Create Genesis Dioek and display.
	b. Create three Blocks and link all of them with Genesis block in chronological order.
	c. Perform transactions by sending and receiving amount.
	d. Mine the transaction (Validation/Verification) and add into block.
	e. After adding Block into chain, try to modify or delete the block.
	f. View the transaction and Blocks creation over the network.
6	Install the development environment to set up the Hyperledger Composer Playground
7	Create simple application using Hyperledger playground.
8	Create Decentralized application "Voting" using Ethereum. Set up development
	environment using Truffle framework and Ganache, Metamask of chrome extension.
9	Build the private blockchain network using Geth.
10.	Setup private parity Ethereum POA blockchain network .
Practice	Write a smart contract to create your own ERC-20 Token using Ethereum mist wallet.
Programs	Study real time case study of Blockchain based application in the areas of Supply chain, Medical
	Record Tracking, Vehicle data Tracking, Insurance, Identity management. Discuss the challenges
	and research issues.