Department of Information Technology

ACTION TAKEN ON STAKEHOLDERS FEEDBACKS
2021-22

INDEX

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
DEPARTMENT OF INFORMATION TECHNOLOGY
Report on Program Exit Survey 2021-22

S.No	Description	No. of Responses	Value (At the Scale 1 to 5)	Action Taken
1.	Association	129	3.92	
2.	Infrastructure-Common-Laboratory facilities	129	3.96	
	Computing facilities	129	4.03	
	Library facilities	129	3.91	
	Internet and Wi-Fi facilities	129	2.95	
	Games and Sports facilities	129	3.57	
	Admin. and Accounts Section Services	129	3.67	
	Academics & Examination Cell(AEC) Services	129	3.66	
	Controller of Examinations(CoE)	129	3.88	
	Transport facilities(if applicable)	129	3.62	
	Canteen facilities	129	3.45	
	Health Center facilities	129	3.56	
	Basic amenities including washrooms	129	3.27	
	Hostel facilities(if applicable)	129	3.28	
	Overall facilities	129	3.67	
3.	Placement and Training Cell->Training provided for placements.	129	3.48	
	Training and Placement Office provided on/off campus placement opportunities.	129	3.91	
	Career Counseling & Guidance for higher studies provided.	129	3.61	
	Co and Extra Curricular opportunities provided.	129	3.74	
	Motivation towards Research & Development(R&D)	129	3.62	
4.	Curriculum and Syllabus	129	3.86	
5.	Suggestions-Curriculum	19	1. Would suggest not to make the major project a mandatory one during 4-2 for students who are doing internships. 2. Although the curriculum and syllabus is designed in the best possible way, still some personal suggestions are listed below : i. Include lab work for subjects like Cloud Computing, Data Science, etc. in general, include labs for the subject or at least include an assignment or test or anything else which	1. Curriculum is updated as per the needs of the industry in R-18 & R- 20 and also electives were added right from 3 rd year onwards for exposure/specialisation to cater to the interests of the students\n\nFollowing courses are included in respective PO groups in R-20

revolved around the lab so that the students get exposed into the practical world which gives us an idea of how things work in the real corporate world and make us mentally prepared to see what's coming next.

ii. For subjects like Cloud Computing, if a collaboration is done with popular cloud providers like google and azure (or) if access to these paid cloud portals is given for free to the students and the practical part is implemented using these resources, it helps the student a lot to learn the concept in a better way and expose them to different technology platforms.

3. Better to avoid including many core subjects in the 7th sem, because students need time to prepare for placements.

4. The syllabus needs to be updated with industry standards. We were taught about tom-cat servers and java-servlets in the Web Dev course, which are absolutely obsolete now.

5. The first sem should have coding and training of how the projects are done and next semester should have experiments, implementation on that coding part of projects.

6. Practical Knowledge required to get into placements.

7. Add full stack development Add new technologies introduction(docker,kubernetes,Go lang,Ruby) More projects from different domains instead of only ML/AI.

Curriculum for strengthening the curriculum.
Knowledge – Oriented

PO1: Data Structures and Algorithms in Python, OOPS concepts using Python, AI - ML Tools, Techniques & Applications are included.
Problem Solving Skill group
PO2 to PO4: Courses like Engineering Exploration, Design and Analysis of Algorithms Lab, Data Science and AI Lab, Java Programming & Enterprise Framework theory and lab, Data Analysis and Visualization, Python Full Stack Development.
Skill Oriented Group
PO5, PO9 to PO11: Courses like Soft Skills, Employability Skills, Internships, Mobile Application Development with Kotlin, Augmented Reality and Virtual Reality, Robotics Process Automation, Agile Methodologies and DevOps, Business Intelligence, Reinforcement Learning, Data Engineering, Micro Services and API Cloud API Development and Deployment are included
Attitude-Oriented Group
PO6 to PO8 & PO12: Courses like Community Engagement, Universal Human Values, Rural Internship.

				☐ Motivate students to participate in the programs organised in association with THUB, ACIC, TASK, MSME and encourage students and faculty to take up research activities
6.	**Kindly provide suggestions/modifications to revise the Vision of the Department**			
	Improve curriculum, it is very theoretical and bookish. It is dated. Needs renewal and refinement			1. Curriculum is updated as per the needs of the industry in R-18 & R- 20 and also electives were added right from 3 rd year onwards for exposure/specialisation to cater to the interests of the students
	Need more Industrial exposure			MoUs with start-up's to motivate students for internships in start-ups. ☐ To strengthen in-house Internship drive.
	Integrate thinking of strategy and learning mindset than solution oriented			Motivating students to participate in Hackathons, Coding Competitions, Innovations/Product Development competitions.
	Please include corporate ready courses like product management and control version like git			Software Project Management course as an Elective in V Sem
	Include making students ready to face the current industry challenges while learning trending technologies			Motivating students to participate in the programs organised in association with THUB, ACIC, TASK, MSME and encourage students and faculty to take up research activities
	Concentrate more on using latest technologies trending in the software industry			full stack development , Ethical Hacking , Application Development with Kotlin

	Any other feedback / suggestions			
7.	1. The lab courses, exercises and syllabus is perfectly designed to meet the expectations of current market demand. All the latest trends in technologies are being clearly discussed in the labs. Any technology will have its own complexity. The structure and the content of labs are designed in such a way that it gives students the knowledge of technology to its roots thus helping in understanding and implementing it properly. 2. The courses offered (either elective or compulsory) are the latest in demand courses which makes the students stick to the resources and teaching given by the department, thus preventing them from wandering, 2. Mini Projects from 2nd year made us understand not only theoretical but also practical way of using the subject.	-	-	1. Curriculum is updated as per the needs of the industry in R-18 & R-20 and also electives were added right from 3 rd year onwards for exposure/specialisation to cater to the interests of the students. 2. Students are encouraged for internships to bridge the gap between industry and academia. 3. Department is motivating students to do Mini Projects which lead to paper publications. 4.Space, logistics and necessary computing facilities be made available for exclusive Projects Lab.

Head Dept. of IT
CBIT, Hyderabad

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)

**Scheme of Instruction of VII Semester of B.E. – Information Technology
as per AICTE Model Curriculum, w.e.f: 2023-24**

DEPARTMENT OF INFORMATION TECHNOLOGY

SEMESTER-VII

S.No	Course code	Title of the Course	Scheme of Instruction		Scheme of Examination			Credits
			Hours per week		Duration of SEE in Hours	Maximum Marks		
			L/T	P/D		CIE	SEE	
THEORY								
1		Professional Elective - 4	3	-	3	40	60	3
2		Professional Elective - 5	3	-	3	40	60	3
3		Professional Elective - 6	3	-	3	40	60	3
4		Open Elective – 1	3	-	3	40	60	3
5	20EGMO4	Gender Sensitization	2	-	2	-	50	NC
PRACTICALS								
6		Professional Elective-4 Lab	-	2	3	50	50	1
7	20ITC28	Project Part–1	-	4	-	50	-	2
8	20ITI03	Internship-III	135 Hours		-	-	-	3
TOTAL			14	6		260	340	18

L: Lecture   **T: Tutorial**   **P: Practical**

CIE - Continuous Internal Evaluation   **SEE - Semester End Examination**

Professional Elective-4

S.No.	Course Code	Course Name	S.No.	Course Code	Course Name
1.	20ITE13	Computer Vision	6.	20ITE18	Computer Vision Lab
2.	20ITE14	Applied Predictive Analytics	7.	20ITE19	Applied Predictive Analytics Lab
3.	20ITE15	Unmanned Aerial Vehicles	8.	20ITE20	Unmanned Aerial Vehicles Lab
4.	20ITE16	Fundamentals of Block Chain Technology	9.	20ITE21	Fundamentals of Block Chain Technology Lab
5.	20ITE17	Software Architecture and Design Patterns	10.	20ITE22	Software Architecture and Design Patterns Lab

Professional Elective-5			Professional Elective-6		
S.No.	Course Code	Course Name	S.No.	Course Code	Course Name
1.	20ITE23	Social Media Analytics	1.	20ADE13	Reinforcement Learning
2.	20ADE10	Robotic Process Automation	2.	20ITE25	Software Defined Networks
3.	20ADE11	Business Intelligence	3.	20ADE12	Serverless Computing
4.	20ITE24	Mobile Computing	4.	20ITE26	Digital Forensics
5.	20ADE07	Explainable Artificial Intelligence	5.	20ITE27	Real Time Operating System

Open Elective - 1

S.No.	Course Code	Course Name
1.	20MEO03	Research Methodologies
2.	20MEO12	3D Printing
3.	20ECO14	Neural Networks and Fuzzy Logic
4.	20EGO01	Technical Writing Skills
5.	20BTO04	Bio-Informatics

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

**Scheme of Instruction of VI Semester of B.E. – Information Technology
as per AICTE Model Curriculum w.e.f: 2022-23**

DEPARTMENT OF INFORMATION TECHNOLOGY

SEMESTER –VI

S.No	Course code	Title of the Course	Scheme of Instruction Hours per week		Scheme of Examination	Maximum Marks		Credits
			L/T	P/D	Duration of SEE in Hours	CIE	SEE	
THEORY								
1	20ADC14	Big Data Analytics	3	-	3	40	60	3
2	20ITC24	Embedded Systems and IoT	3	-	3	40	60	3
3	20ADC10	Deep Learning	3	-	3	40	60	3
4	20ITC25	Cloud Computing	3	-	3	40	60	3
5		Professional Elective - 3	3	-	3	40	60	3
6	20EGM03	Universal Human Values II: Understanding Harmony	3	-	3	40	60	3
PRACTICALS								
7	20ADC15	Big Data Analytics Lab	-	3	3	50	50	1.5
8	20ITC26	Embedded Systems and IoT Lab	-	3	3	50	50	1.5
9	20ITC27	Minor Project-II (Deep Learning Lab)	-	3	-	50	-	1.5
10	20EGCO3	Employability Skills	-	2	2	50	50	1
TOTAL			18	11		440	510	23.5

L: Lecture   T: Tutorial   P: Practical
CIE - Continuous Internal Evaluation   SEE - Semester End Examination

Professional Elective-3		
S.No.	Course Code	Course Name
1.	20ADE03	Natural Language Processing
2.	20ITE10	Data Compression
3.	20ADE06	Microservices with Spring Boot
4.	20ITE11	Ethical Hacking

20ADC14   **BIG DATA ANALYTICS**

Instruction	3L Hours per week
Duration of End Examination	3 Hours
SEE	60 Marks
CIE	40 Marks
Credits	3

Course Objectives:
1. To introduce the importance of big data, role of Hadoop framework in analyzing large datasets by writing mapper and reducer for a given problem.
2. To familiarize writing queries in Pig and Hive to process big data.
3. To present latest big data frameworks and applications using Spark and Scala.
4. To discuss the concept and writing applications using SparkSQL.
5. To provide the concepts of NoSQL databases and study the working mechanisms of MongoDB.

Course Outcomes:
Upon completing this course, students will be able to:
1. Understand the processing large datasets in Hadoop framework and Apply MapReduce architecture to solve real world problems.
2. Develop scripts using Pig over large datasets and query using Hive.
3. Understand the fundamentals of Spark and the Scala programming.
4. Expertise in using Resilient Distributed Datasets (RDD) for creating applications in Spark and query using SparkSQL.
5. Understand NoSQL databases and Develop data models using MongoDB.

Mapping of Course Outcomes with Program Outcomes and Program Specific Outcomes:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	3	2	3	3	-	-	-	-	-	-	1	3	3	3
CO2	2	3	2	3	3	-	-	-	-	-	-	1	3	3	3
CO3	2	3	2	3	3	-	-	-	-	-	-	1	3	3	3
CO4	2	3	2	3	3	-	-	-	-	-	-	1	3	3	3
CO5	2	3	2	3	3	-	-	-	-	-	-	1	3	3	3

UNIT-I
What is Big Data: Why is Big Data Important? When to consider a Big Data solution, Big Data use cases
The Hadoop Distributed Files system: The Design of HDFS, HDFS Concepts, HDFS Federation, HDFS High Availability, Basic File system Operations, Hadoop File systems, Anatomy of a File Read, Anatomy of a File Write.
MapReduce: What is Map reduce, Architecture of map reduce.
How MapReduce Works: Anatomy of a MapReduce Job Run, Failures in Map Reduce, MapReduce Types and Formats: MapReduce Types, The Default MapReduce Job, Input Formats, Input Splits and Records, Text Input, Output Formats, Text Output, Developing a MapReduce Application.

UNIT-II

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (AUTONOMOUS)

Scheme of Instruction of IV Semester of B.E. – Information Technology
as per AICTE Model Curriculum, w.e.f: 2021-22

B.E. – INFORMATION TECHNOLOGY

SEMESTER-IV

S.No	Course code	Title of the Course	Scheme of Instruction — Hours per week L/T	Scheme of Instruction — Hours per week P/D	Scheme of Examination — Duration of SEE in Hours	Scheme of Examination — Maximum Marks CIE	Scheme of Examination — Maximum Marks SEE	Credits L/T
— THEORY
1	20MTC12	Probability and Queueing Theory	3/1	-	3	40	60	4
2	20ITC13	Software Engineering	3	-	3	40	60	3
3	20ITC14	Automata Theory and Compiler Design	3/1	-	3	40	60	4
4	20ITC15	Design and Analysis of Algorithms	3	-	3	40	60	3
5		Professional Elective – I	3	-	3	40	60	3
6	20MBC01	Engineering Economics & Accountancy	3	-	3	40	60	3
7	20CEM01	Environmental Science	2	-	2	-	50	NC
PRACTICALS
8	20ITC16	Software Engineering Lab	-	2	3	50	50	1
9	20ITC17	Design and Analysis of Algorithms Lab	-	2	3	50	50	1
10	20ADC03	Artificial Intelligence & Machine Learning Tools, Techniques and Applications	-	2	-	50	-	1
11	20ITC18	Mini Project – II	-	2	-	50	-	1
		TOTAL	**20/2**	**8**		**440**	**510**	**24**

L: Lecture   T: Tutorial   P: Practical
CIE - Continuous Internal Evaluation   SEE - Semester End Examination

Professional Elective-1		
S.No.	Subject Code	Subject Name
1.	20ITE01	Digital Image Processing
2.	20ADE01	Data Analysis and Visualization
3.	20ITE02	Mobile Application Development with Android and Kotlin
4.	20ITE03	Fundamentals of Cryptography
5.	20ITE04	Data Warehousing and Data Mining

Dept.of IT , CBIT -Teachers Feedback 2021-22

Name	Other	Action Taken
K Gangadhara Rao		
Rajesh Kannan K		
Dr B.Veera Jyothi		
V.K.Aravinda		
Inapanuri Sucharitha		
Anireddy Srilakshmi		
kratika sharma		
Swathi Sowmya Bavirthi		
Dr.P. Ramesh babu		
SIRISHA ALAMANDA		
Dr. T.Satyanarayana Murthy		
D JAYARAM		
E Ramalakshmi		
Sheena Mohammed		
Shoba Rani		
Madhuri T		
Kiranmaie P		
Dr M trupthi	Latest courses introduced as per industry need, mandate internship are encouraged	https://www.cbit.ac.in/wp-content/uploads/2022/11/CBIT-IT-R22-I-and-II-Sem-Syllabus-2022-23.pdf
Dr.Ramu Ruchipudi		
T Prathima	More Electives that emphasis on Technology Advancements	https://www.cbit.ac.in/wp-content/uploads/2021/09/BE-IT-R-20-VII-VIII-Sem-syllabus_compressed.pdf
T. Satya Kiranmai		
Dr.Rajanikanth Aluvalu		
K H Vijaya Kumari		
p vasanth sena	Superb	
K. Radhika		
R Govardhan Reddy		

Dept. of IT,CBIT.Alumni Feedback-2021-22

Name	Name of the Organization	The transition	How well do you think	Action taken
Shashi Priyatham Chita	Synchrony Financials		Adequately	
M.Sumedhaa	J P Morgan Chase and Co.		Quite well	
Yashaswi Kandimalla	Factset		Quite well	
Sai Priyanka	Chaitanya bharathi institu	Yes	Quite well	
Pravallika Elluri	Chaitanya Bharathi Institute of Technolo	Quite well		
Jashwanth Thammana	oracle		Very well prepared	
Maddipatla Mukta	mavQ	If more industry specific and relevant(current) technologies like Full stack frameworks would've been included as electives if the student wants to pursue a career in fs	Adequately	https://www.cbit.ac.in/wp-content/uploads/2021/09/BE-IT-R-20-V-VI-Sem-syllabus_compressed.pdf
Shaik Abdullah Adnan	Barclays	Compiler Des	Very well prepared	
Sathvika Chekuri	Cbit		Very well prepared	
Anusha Prakash	Pepsico		Quite well	
Pabba Varshith	Cognizant		Very well prepared	
Tarun Kumar P V	F5 Networks		Very well prepared	
Vennela Paladugu	Amazon		Quite well	
Sai Prakash Chillara	Hexagon		Quite well	

Head Dept. of IT
CBIT, Hyderabad

Dept. of IT ,CBIT -Employer Feedback Responses 2021-22					
of the Company:	he of the Employer:	Designatio	Name(s) o	Suggest few Cou	
GE Appliances	Vasudeva Thumati	Sr Manager	Revanth Ra		Action Taken
Kriti social initiative	DELOITTE TAX SEI	Technology	Sona Gudu	visualize big picture, courses on real time issue, and when it is fully complete, more on applying the knowledge what they already have	
DELOITTE TAX S	anil kumar	Software En	Mithula Re	Robotic process automation	IN R20 _VIII Sem
Micron	Ananth Nibhanupudi	IT Agile Lea	Sushma Ku	N/A	
Micron Technology	Jpmc	Analyst	Jpmc	React and angular and full stack	IN R20_MC_V Sem
Planit testing india	Bharath Kumar G	Test Engine	None		
Microsoft	Microsoft	Architect	shweta		
Expedia	Expedia	Sde 2	Sneha redd	Cloud practical training	
Infosys limited	Kallepu Meena Kum	Digital Spec	Btech		
Cognizant technol	Phani	Associate p	Sharan Ga	Hands on experience in Blockchain technology will be an add on advantage for students.	In R20_MC_VII SemElective

Head Dept. of IT
CBIT, Hyderabad

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)

**Scheme of Instruction of VII Semester of B.E. – Information Technology
as per AICTE Model Curriculum, w.e.f: 2023-24**

DEPARTMENT OF INFORMATION TECHNOLOGY

SEMESTER-VII

S.No	Course code	Title of the Course	Scheme of Instruction		Scheme of Examination			Credits
			Hours per week		Duration of SEE in Hours	Maximum Marks		
			L/T	P/D		CIE	SEE	
THEORY								
1		Professional Elective - 4	3	-	3	40	60	3
2		Professional Elective - 5	3	-	3	40	60	3
3		Professional Elective - 6	3	-	3	40	60	3
4		Open Elective – 1	3	-	3	40	60	3
5	20EGMO4	Gender Sensitization	2	-	2	-	50	NC
PRACTICALS								
6		Professional Elective-4 Lab	-	2	3	50	50	1
7	20ITC28	Project Part–1	-	4	-	50	-	2
8	20ITI03	Internship-III	135 Hours		-	-	-	3
TOTAL			14	6		260	340	18

L: Lecture   **T: Tutorial**   **P: Practical**

CIE - Continuous Internal Evaluation   **SEE - Semester End Examination**

Professional Elective-4					
S.No.	Course Code	Course Name	S.No.	Course Code	Course Name
1.	20ITE13	Computer Vision	6.	20ITE18	Computer Vision Lab
2.	20ITE14	Applied Predictive Analytics	7.	20ITE19	Applied Predictive Analytics Lab
3.	20ITE15	Unmanned Aerial Vehicles	8.	20ITE20	Unmanned Aerial Vehicles Lab
4.	20ITE16	Fundamentals of Block Chain Technology	9.	20ITE21	Fundamentals of Block Chain Technology Lab
5.	20ITE17	Software Architecture and Design Patterns	10.	20ITE22	Software Architecture and Design Patterns Lab

Professional Elective-5			Professional Elective-6		
S.No.	Course Code	Course Name	S.No.	Course Code	Course Name
1.	20ITE23	Social Media Analytics	1.	20ADE13	Reinforcement Learning
2.	20ADE10	Robotic Process Automation	2.	20ITE25	Software Defined Networks
3.	20ADE11	Business Intelligence	3.	20ADE12	Serverless Computing
4.	20ITE24	Mobile Computing	4.	20ITE26	Digital Forensics
5.	20ADE07	Explainable Artificial Intelligence	5.	20ITE27	Real Time Operating System

Open Elective - 1		
S.No.	Course Code	Course Name
1.	20MEO03	Research Methodologies
2.	20MEO12	3D Printing
3.	20ECO14	Neural Networks and Fuzzy Logic
4.	20EGO01	Technical Writing Skills
5.	20BTO04	Bio-Informatics

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

Scheme of Instruction of V Semester of B.E. – Information Technology as per AICTE Model Curriculum, w.e.f: 2022-23

DEPARTMENT OF INFORMATION TECHNOLOGY

SEMESTER -V

S.No	Course Code	Title of the Course	Scheme of Instruction Hours per week		Scheme of Examination			Credits
			L/T	P/D	Duration of SEE in Hours	CIE	SEE	
THEORY								
1	20ITC19	Operating Systems	3	-	3	40	60	3
2	20ITC20	Computer Networks	3	-	3	40	60	3
3	20ITC21	Basic Machine Learning	3	-	3	40	60	3
4	20ADC07	Full Stack Development	3	-	3	40	60	3
5		Professional Elective - 2	3	-	3	40	60	3
PRACTICALS								
6	20ITC22	Networks and Security Lab	-	3	3	50	50	1.5
7	20ITC23	Basic Machine Learning Lab	-	3	3	50	50	1.5
8	20ADC09	Minor Project-I (Full Stack Development Lab)	-	3	-	50	-	1.5
9	20ITI02	Industrial / Rural Internship-II	90 Hours		-	-	-	2
	TOTAL		**15**	**9**		**350**	**400**	**21.5**

L: Lecture   **T: Tutorial**   **D: Drawing**   **P: Practical**
CIE - Continuous Internal Evaluation   **SEE - Semester End Examination**

Professional Elective-2		
S.No.	**Course Code**	**Course Name**
1.	20ITE05	Information Retrieval Systems
2.	20ITE06	Advanced Databases
3.	20ITE07	Augmented Reality and Virtual Reality

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)

AICTE Model Curriculum (with effect from 2021-22)
B.E. (Information Technology)

SEMESTER– VII

S.No	Course Code	Title of the Course	Scheme of Instruction Hours per Week		Scheme of Examination			Credits
			L/T	P/D	Duration of SEE in Hours	CIE	SEE	
THEORY								
1	18IT C27	Big Data Analytics	3	-	3	30	70	3
2	18IT C28	Embedded Systems	3	-	3	30	70	3
3	18IT C29	Internet of Things	3	-	3	30	70	3
4	18IT C30	Distributed Systems	3	-	3	30	70	3
5		Core Elective - 5	3	-	3	30	70	3
PRACTICAL								
6	18IT C31	Big Data Analytics Lab	-	2	2	15	35	1
7	18IT C32	Embedded Systems and IoT Lab	-	2	2	15	35	1
8	18IT C33	Distributed Systems Lab	-	2	2	15	35	1
9	18IT C34	Project Part - 1	-	4	-	50	-	2
		TOTAL	15	10	-	245	455	20

L: Lecture   **T: Tutorial**   **D: Drawing**   **P: Practical**
CIE-Continuous Internal Evaluation   **SEE-Semester End Examination**

Core Elective-5		
S.No.	**Subject Code**	**Subject Name**
1.	18IT E17	Cloud Computing
2.	18IT E18	Quantum Computing
3.	18IT E19	Natural Language Processing
4	18IT E20	Block Chain Technology