Department of Information Technology

ACTION TAKEN ON STAKEHOLDERS FEEDBACKS
2017-18

INDEX

2017-18					
S.No	**Roll No**	**Name**	**IT Curriculum is useful for your Employement**	**Suggestions for improvement of Curriculum**	**Actions Taken**
1	160114737003	M. Alekhya Devi	Very helpful but should include some subjects like full stack, Cloud, Data Analytics	Practical exam questions should be more close to real time problems	Case studies are given as part of Lab Internals and Assignments
2	160114737004	Amulya B	It is advanced and miniprojects are usefull		
3	160114737005	Azeema Begum	Mini Projects and Major Projects are helpful	Latest Technology	Advanced courses like IoT,DataScience Cyber Security,Bigdata,Distributed systems
4	160114737007	Guhapriya Sridar	More bridge courses to connect with industry	Latest Technology courses	
5	160114737013	Patnam Manisha Reddy	Helpful in learning the technical framework	Help students to use the latest technology and gain immence knowledge.	
	160114737014	Niveda V	Really useful for realworld challengers		
6	160114737024	Sai Yana R	Yes usefull for written tests.	No, Include current trending technologies and remove data technologies	
7	160114737025	M. Shravya	Good	More importance should be given to practicla knowledge	Mini Projects that addresses real time Problems are encouraged
8	160114737027	K. Sindhuja reddy	Need to include VR & AR Laboratory		
9	160114737030	J. Abhishek	Nothing is useful	Proper syllabus Adjustement	Syllabus is revised
10	160114737031		Web Technologies, Datastructures	Include Java Script	Web Technology course has been introduced to get exposure to various scripting languages
11	160114737032	Thota Divya Gowtham	Yes the SE should be in 3 year which is very good.		
12	160114737034	Velaga Hemanth	Nil	New Booming subjects in the indystry are to be included	
13	160114737037	Md. Muawz Siddiqui	Really useful for realworld challengers	add more free hours every week	Library and Sports hours are allotted
14	160114737038	Mukesh Manidala	Need to put more electives with pure core subjects in electives, no priority for choosing electives. There should be min. Cpount to put electives.	Need to improve in technical aspects abd decrease in non techical subjects.	Curriculum revised as per the need of the industry
15	160114737039	Durga Prasad MN	Up to 50%	Include latest Technologies	Curriculum revised as per the need of the industry
16	160114737043	Pavan Varma Manthane	Not helpful	Add latest technologies real time certifications like SAS	
17	160114737050	Vutnoor Rohith	100%	More Practicle improve lab curriuculum	
18	160114737052	Cindu Sai Kundan	Useful for understanding the concepts & applications in real time	Need to add python, Php etc	
19	160114737054	V. Saketh Reddy	Good but should involve in technical details also	New Technoligies	
20	160114737055	B. Srilok	Very Helpful	Add R&D	
21	160114737056	Eesom Umakanth	Not up to the mark	Encourage Research oriented Education	
22	160114737057	M. Vamsi	It would be better if practical classes increses.	Introduce internship in courses., introduce I sem Internship which will definatly lead to succes of student	Introduced in R18 curriculum
23	160114737303	Mohammed Arif Ali Baig	Excellent Environment and fastest growing need to improve	In a understandable structure	
24	160114737304	Shravan kumar Maneti	Averaga not up to the mark	add new technologies, need to improve in all aspects.	
25	160114737307	SaiKrishna Katkuri	Average	add new technlogies and subjects to improve for real time. Should improve interaction and Communication	
26	160114737308	Chintakindi Suresh	Average	add new technlogies and subjects to improve for real time. Should improve interaction and Communication	
27	160114737312	Shaik Irfan	Try to teach updated technologies which all useful in real world	More online assignements / offline assignments should be implemented	Encouraged to do MOOC courses and slip tests are introduced through LMS

Head Dept. of IT
CBIT, Hyderabad

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)
Choice Based Credit System (with effect from 2019-20)
B.E. (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	16IT C31	Embedded Systems and Internet of Things	3	-	3	30	70	3
2	16IT C32	Distributed Systems	3	-	3	30	70	3
3	16IT C33	Information Security	3	-	3	30	70	3
4	16IT C34	Big Data Analytics	3	-	3	30	70	3
5		Elective -IV	3	-	3	30	70	3
6		Elective -V	3	-	3	30	70	3
PRACTICALS								
7	16IT C35	Big Data Analytics Lab	-	3	3	25	50	2
8	16IT C36	Embedded Systems and IoT Lab	-	3	3	25	50	2
9	16IT C37	Project Seminar	-	3	-	50	-	2
		TOTAL	18	9	-	280	520	24

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

Elective-IV		
S.No.	Subject Code	Subject Name
1.	16IT E10	Human Computer Interaction
2.	16IT E11	Soft Computing
3.	16IT E12	VLSI Technology

Elective -V		
S.No.	Subject Code	Subject Name
1.	16IT E13	Natural Language Processing
2.	16IT E14	Mobile Computing
3.	16IT E15	Business Intelligence

16ITC 31

EMBEDDED SYSTEMS AND INTERNET OF THINGS

Instruction	3L Hours per week
Duration of End Examination	3 Hours
Semester End Examination	70 Marks
CIE	30 Marks
Credits	3

Course Objectives: This course is introduced to

1. Explore theoretical aspects of the design and development of an embedded system.
2. Provide an overview of basic concepts, structure and development of embedded systems using 8051.
3. Familiarize students with programming using 8051 and advanced processors.
4. Facilitate the Internet of Things, building blocks of IoT and the real world applications
5. Acuire knowledge of Raspberry Pi device, its interfaces and Django Framework.
6. Comprehend on domain specific applications of IoT.

Course Outcomes: After successful completion of this course, student will be able to

1. Acquire knowledge and skill in development of embedded systems.
2. Design and develop embedded systems using 8051.
3. Demonstrate real-time and advanced processor concepts.
4. Describe the role of things and Internet in IoT and determine the IoT levels for designing an IoT system.
5. Learn design methodology for IoT system design.
6. Describe about the Raspberry Pi board and interfacing sensors with Rasberry Pi and work with python based web application framework called Django.

Course Prerequisites: Digital Electronics and Logic Design (16ITC04), Computer Organization (16ITC11)

UNIT-I

Embedded Computing: Introduction, Complex Systems and Microprocessor, Embedded System Design Process. The 8051 Architecture: Introduction, 8051

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)
Choice Based Credit System (with effect from 2018-19)
B.E (Information Technology)
SEMESTER – V

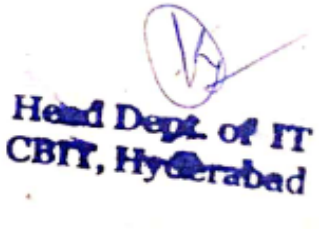
S.No	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination			Credits
			Hours per week		Duration of SEE in Hours	Maximum Marks		
			L/T	P/D		CIE	SEE	
THEORY								
1	16ITC16	Principles of Operating Systems	3	-	3	30	70	3
2	16ITC17	Database Systems	3/1	-	3	30	70	4
3	16ITC18	Software Engineering	3	-	3	30	70	3
4	16ITC19	Web Technology	3	-	3	30	70	3
5	16ITC20	Theory of Automata	3/1	-	3	30	70	4
		Elective - I	3	-	3	30	70	3
PRACTICALS								
6	16ITC21	Operating Systems and Web Technology Lab	-	3	3	25	50	2
7	16ITC22	Database Systems Lab	-	3	3	25	50	2
8	16ITC23	Mini Project-III	-	2	-	50	-	1
TOTAL			**20**	**8**	**-**	**280**	**520**	**25**

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

Elective-I

S.No.	Subject Code	Subject Name
1.	16ITE01	Python Programming
2.	16ITE02	UNIX and Shell Programming
3.	16ITE03	Scripting Languages

Dept.of IT , CBIT -Teachers Feedback 2017-18			
Name of the Faculty (E	Designation (Eg:	Overall feed back on R	**Actions Taken**
Dr B.Veera Jyothi	Assistant Profess	Good	
Sirisha Alamanda	Assistant Profess	4	
T Prathima	Assistant Profess	Its a good blend of foundational and latest courses; Faculty needs to be trained on latest courses like Big Data Analytics; Faculty must be trained on OBE	OBE based NPTEL course was done by most of the faculty in the Dept.
Dr M Trupthi	Assistant Profess	latest subject were missing	Advanced subjects like IoT,Webtechnologies ,Information Security are included in the syllabus
sugamya katta	Assistant Profess	need to reduce ECE related subjects	In R16 sylabus DSP,ECT subjects were removed
Satya Kiranmai Tadepa	Assistant Profess	Not applicable	
U Sairam	Assistant Profess	Good	
S.Rakesh	Assistant Profess	Good	
NVS SRIDEVI KELLA	Assistant Profess	Good	



CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)
Choice Based Credit System (with effect from 2019-20)
B.E. (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	16IT C31	Embedded Systems and Internet of Things	3	-	3	30	70	3
2	16IT C32	Distributed Systems	3	-	3	30	70	3
3	16IT C33	Information Security	3	-	3	30	70	3
4	16IT C34	Big Data Analytics	3	-	3	30	70	3
5		Elective -IV	3	-	3	30	70	3
6		Elective -V	3	-	3	30	70	3
PRACTICALS								
7	16IT C35	Big Data Analytics Lab	-	3	3	25	50	2
8	16IT C36	Embedded Systems and IoT Lab	-	3	3	25	50	2
9	16IT C37	Project Seminar	-	3	-	50	-	2
		TOTAL	18	9	-	280	520	24

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

Elective-IV		
S.No.	Subject Code	Subject Name
1.	16IT E10	Human Computer Interaction
2.	16IT E11	Soft Computing
3.	16IT E12	VLSI Technology

Elective -V		
S.No.	Subject Code	Subject Name
1.	16IT E13	Natural Language Processing
2.	16IT E14	Mobile Computing
3.	16IT E15	Business Intelligence

16ITC 31

EMBEDDED SYSTEMS AND INTERNET OF THINGS

Instruction	3L Hours per week
Duration of End Examination	3 Hours
Semester End Examination	70 Marks
CIE	30 Marks
Credits	3

Course Objectives: This course is introduced to

1. Explore theoretical aspects of the design and development of an embedded system.
2. Provide an overview of basic concepts, structure and development of embedded systems using 8051.
3. Familiarize students with programming using 8051 and advanced processors.
4. Facilitate the Internet of Things, building blocks of IoT and the real world applications
5. Acuire knowledge of Raspberry Pi device, its interfaces and Django Framework.
6. Comprehend on domain specific applications of IoT.

Course Outcomes: After successful completion of this course, student will be able to

1. Acquire knowledge and skill in development of embedded systems.
2. Design and develop embedded systems using 8051.
3. Demonstrate real-time and advanced processor concepts.
4. Describe the role of things and Internet in IoT and determine the IoT levels for designing an IoT system.
5. Learn design methodology for IoT system design.
6. Describe about the Raspberry Pi board and interfacing sensors with Rasberry Pi and work with python based web application framework called Django.

Course Prerequisites: Digital Electronics and Logic Design (16ITC04), Computer Organization (16ITC11)

UNIT-I

Embedded Computing: Introduction, Complex Systems and Microprocessor, Embedded System Design Process. The 8051 Architecture: Introduction, 8051

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)
Choice Based Credit System (with effect from 2018-19)
B.E (Information Technology)
SEMESTER – V

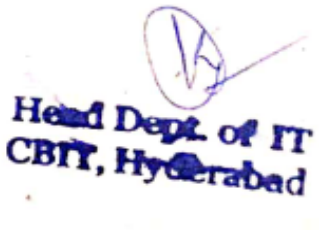
S.No	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination			Credits
			Hours per week		Duration of SEE in Hours	Maximum Marks		
			L/T	P/D		CIE	SEE	
THEORY								
1	16ITC16	Principles of Operating Systems	3	-	3	30	70	3
2	16ITC17	Database Systems	3/1	-	3	30	70	4
3	16ITC18	Software Engineering	3	-	3	30	70	3
4	16ITC19	Web Technology	3	-	3	30	70	3
5	16ITC20	Theory of Automata	3/1	-	3	30	70	4
		Elective - I	3	-	3	30	70	3
PRACTICALS								
6	16ITC21	Operating Systems and Web Technology Lab	-	3	3	25	50	2
7	16ITC22	Database Systems Lab	-	3	3	25	50	2
8	16ITC23	Mini Project-III	-	2	-	50	-	1
TOTAL			**20**	**8**	**-**	**280**	**520**	**25**

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

Elective-I

S.No.	Subject Code	Subject Name
1.	16ITE01	Python Programming
2.	16ITE02	UNIX and Shell Programming
3.	16ITE03	Scripting Languages

,Employer Feedback Form Responses -2017-18				
Name of the Co	**Designation:**	**Name(s) of the**	**Suggest few Courses that s**	**Action Taken**
Google	Product Suppor	NA		
Wipro Limited	Project Enginee	Bharath Erukulla	Content management system , machine learning, python ,react js	R-18 Regulation_ AI course V-Unit. R-18 _Data Dcience with Python



18IT C22 **ARTIFICIAL INTELLIGENCE**

Instruction	3 Hours per week
Duration of SEE	3 Hours
SEE	70 Marks
CIE	30 Marks
Credits	3

Course Objectives:

1. Learn problem solving through search techniques.
2. Familiarize with knowledge representation and logical reasoning techniques in AI.
3. Learn probabilistic reasoning models on uncertain data.
4. Acquaint with supervised and reinforcement learning.
5. Learn syntax and semantic analysis of the natural language.

Course Outcomes:

Upon successful completion of this course, students will be able to:

1. Understand the basics of AI and analyze various Exhaustive and Heuristic Search Techniques.
2. Apply logical concepts and representation techniques to infer knowledge.
3. Understand quantification of uncertainty and evaluate data using probabilistic reasoning models.
4. Apply the techniques of supervised and reinforcement learning on data.
5. Process Natural Language and perform syntax & semantic analysis.

UNIT-I

Introduction: The Foundations of AI, History of AI. Intelligent agents – Agents and Environments, Good Behavior: The Concept of Rationality, The Nature of Environments, The Structure of Agents.

Solving problems by searching: Problem Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies, Informed Search Strategies, Heuristic Functions.

Adversarial search: Games, Optimal decisions in games, Alpha-Beta Pruning. Constraint Satisfaction Problems- Defining constraint satisfaction Problems.

UNIT-II

Logic Concepts and Logic Programming: Introduction, Propositional Calculus, Propositional Logic, Natural Deduction System, Axiomatic System, Semantic Tableau System in Propositional Logic, Resolution Refutation in Propositional Logic, Predicate Logic, Logic Programming.

Knowledge Representation: Introduction, Approaches to Knowledge Representation, Knowledge Representation using Semantic Network, Extended Semantic Networks for KR, Knowledge Representation using Frames.

UNIT-III

Quantifying Uncertainty: Acting under Uncertainty, Basic Probability Notation, Inference Using Full Joint Distributions, Independence, Bayes' Rule and its Use.

Probabilistic Reasoning: Representing Knowledge in an Uncertain Domain, The Semantics of Bayesian Networks, Efficient Representation of Conditional Distributions, Exact Inference in Bayesian Networks.

Probabilistic Reasoning over Time: Time and Uncertainty, Inference in Temporal Models, Hidden Markov Models, Kalman Filters.

UNIT-IV

Learning from Examples: Forms of Learning, Supervised Learning, Learning Decision Trees, Evaluating and Choosing the Best Hypothesis, The Theory of Learning, Regression and Classification with Linear Models, Artificial Neural Networks, Nonparametric Models, Support Vector Machines.

Learning Probabilistic Models: Statistical Learning, Learning with Complete Data.

Learning with Hidden Variables: The EM Algorithm

Reinforcement Learning: Passive reinforcement learning, direct utility estimation, adaptive dynamic programming, temporal difference learning, active reinforcement learning-Q learning.

UNIT–V

Natural Language Processing: Language Models, Text Classification, Information Retrieval, Information Extraction.

Natural Language for Communication: Phrase Structure Grammars, Syntactic Analysis, Augmented Grammars and Semantic Interpretation.

Text Books:

1. Stuart Russell, Peter Norvig, "Artificial Intelligence: A Modern Approach" , Prentice Hall, 3rd Edition.
2. Saroj Kaushik, "Artificial Intelligence", Cengage Learning India, 2011.

Suggested Reading:

1. Nilsson, N., "Artificial Intelligence: A New Synthesis", San Francisco, Morgan Kaufmann, 1998.
2. Rich, Knight, Nair: "Artificial intelligence", Tata McGraw Hill, Third Edition, 2009.
3. Tom M. Mitchell, "Machine Learning", McGraw Hill, 1997.
4. Kulkarni, Parag, Joshi, Prachi ,"Artificial Intelligence : Building Intelligent Systems", PHI, 2015.
5. Peter Jackson, "Introduction to Expert Systems", Third Edition, Pearson Addison Wesley, 1998.

Web Resources:

1. https://onlinecourses.nptel.ac.in/noc19_cs19/
2. https://www.coursera.org/learn/ai-for-everyone

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)

AICTE Model Curriculum (with effect from 2020-21)
B.E. (Information Technology)

SEMESTER– VI

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	18IT C22	Artificial Intelligence	3	-	3	30	70	3
2	18IT C23	Information Security	2	-	2	20	50	2
3		Core Elective – 3	3	-	3	30	70	3
4		Core Elective – 4	3	-	3	30	70	3
5	18MB C01	Engineering Economics and Accountancy	3	-	3	30	70	3
6		Open Elective - 1	3	-	3	30	70	3
7	18EE M01	Indian Traditional Knowledge	2	-	2	-	50	Non - Credit
7	18IT C24	Artificial Intelligence Lab	-	2	2	15	35	1
8	18IT C25	Information Security Lab	-	2	2	15	35	1
9	18IT C26	Mini Project - IV	-	2	-	50	-	1
		TOTAL	19	6	-	250	520	20

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

Core Elective-3		
S.No.	**Subject Code**	**Subject Name**
1.	18IT E09	Social Media Analytics
2.	18IT E10	Virtual Reality
3.	18IT E11	Soft Computing
4.	18IT E12	Mobile Commerce

Core Elective-4		
S.No.	**Subject Code**	**Subject Name**
1.	18IT E13	Data Science with Python
2.	18IT E14	Digital Image Processing and Analysis
3.	18IT E15	Artificial Neural Networks and Deep Learning
4.	18IT E16	Cyber Security

Open Elective-1		
S.No.	**Subject Code**	**Subject Name**
1.	18BT O01	Basics of Biology
2.	18EG O02	Gender Sensitization
3.	18ME O04	Research Methodologies
4.	18MT O02	Graph Theory