



CHARUSAT
CSPIT
Department of Information Technology



Summary and Action Taken Report of Feedback on Curriculum
AY: 2015-16

Category	Comments	Action Taken
Alumni	There should be inclusion of some topics like XSLT, XPath, XML, XQuery, RDF & RSS in advanced web technology.	- The course of “Advanced Web Technology” has been updated as per suggestion. - Considered in 12th BoS 03-sep-2016.
	The course “Language Processor” is important for competitive exam hence it should be offered as compulsory course.	- Language processor course has been considered to offer as regular course in final year. - Considered in 12th BoS 03-sep-2016.
	The department should offer the courses related to recent technology like machine learning and cloud computing.	- Department has Introduced machine Learning as a course in our curriculum. NLP has been covered as a part of an AI course. - Considered in 12th BoS 03-sep-2016.
Student	Capstone Course was introduced in curriculum which is very helpful. More such courses will help in preparing competitive exams.	Department teachers have started solving Gate exam questions in every course to prepare student for competitive exam.
	There should be 50-50 ratio of practical and theory exam.	The suggestion was not incorporated as it was not feasible and considered for resolution in future.
Employers	There is need to change the sequence of few courses as per their relevancy and dependency.	The proposed teaching scheme has been prepared as per suggestion and presented in 12th BoS for approval.
Teacher	Modification in, - Teaching scheme, - Theory contents, - Practical contents of few courses.	- Department has considered suggested changes by the teachers into BOS and incorporated it into the new teaching scheme. - Considered in 12th BoS 03-sep-2016.

Minutes – 12th Meeting of Board of studies of Department of Information Technology

Date : September 03, 2016, Saturday

Time : 10:00 am

Venue : Conference Room, Building-II, CSPIT, CHARUSAT Campus

The 12th meeting of the Board of studies, Department of Information Technology, FTE, Charotar University of Science & Technology (CHARUSAT) was held on 3rd September, 2016 at 10:00 a.m. onwards at conference room (CE/IT), CSPIT, CHARUSAT campus.

Following BOS members were remained present:

1.	Prof. Parth Shah	Chairman	HOD, IT Dept
2.	Dr. Amit Ganatra	Member	Dean, Faculty of Tech & Engg
3.	Prof. M A Zaveri	External	Professor, SVNIT, Surat
4.	Prof. M T Savaliya	External	Head, CE Dept., VGEC, Chandkheda
5.	Mr. Dipak Patel	External	Director, Charlie Computers, Ahmedabad
6.	Prof. Amit Thakkar	Member	Asso. Prof.
7.	Mr. Chintan Gajjar	Member	Asst. Prof.
8.	Mr. Amit Nayak	Member	Asst. Prof.
9.	Mr. Bimal Patel	Member	Asst. Prof.
10.	Mr. Nirav Bhatt	Member	Asst. Prof.
11.	Ms. Purvi Prajapati	Member	Asst. Prof.
12.	Ms. Ayesha Shaikh	Member	Asst. Prof.

Initiation:

Head of the Department of Information Technology, Prof. Parth Shah welcomed all the members of Board of Studies to the 12th meeting. He briefed the overall activities carried out by the department during last year.

Agenda Proceedings & Resolutions:-

Item 12.01: For Discussion and Approval;

To approve the proposed teaching scheme for all the semesters of B Tech CBCS courses effective from 2016 admitted batch.

Proceedings 12.01:

- Department had collected feedback of industry experts, academicians, students and faculty members. Based on those feedbacks, proposed teaching scheme, examination scheme and syllabus of different courses were prepared.
- Different course groups have been formed for design and update of detail syllabus which will be offered in proposed CBCS teaching scheme (Course Group Information available in Annexure-I). Minutes of details discussion of each course group have been attached in Annexure-II.
- Experts have suggested change in nomenclature of Computer concepts & programming to Computer program practices in semester-I.
- Experts have suggested change in nomenclature of Basics of electronics engineering to Basics of Electrical & Electronics in semester-I.
- Experts have suggested change in nomenclature of ICT workshop in semester-I.
- Experts have suggested change in nomenclature of English language & literature to English language in semester-II.
- Experts have suggested change in nomenclature of Object-Oriented Programming with C++ in semester-II.
- Experts have suggested change in nomenclature of Operating System Fundamentals to Operating Systems in semester-V.
- Experts have suggested change in nomenclature of Computer Networking to Computer Networks in semester-V.
- Experts have suggested including XSLT, XPath, XML, XQuery, RDF & RSS etc. in Advanced Web Technology in semester-V.
- Experts have suggested that Operating System Administration could not be offered as Elective subject in semester-V.
- Experts have suggested that Language Processor should not be offered as Elective subject in semester-VI.
- Experts have suggested change in nomenclature of Intelligent System to Artificial Intelligence or Machine Learning in semester-VI.
- Experts have suggested change in nomenclature of Image Processing & Multimedia System to Multimedia Communication in semester-VII

- Experts have suggested that Advanced Computer Graphics, Big Data & Analytics, Information Retrieval & Optimization Methods can be offered as Elective courses in semester-VII.
- Experts have suggested that Modeling Simulation & Operation Research should not be offered in semester-VII
- Experts have suggested change in nomenclature of Capstone course to Capstone Project or Comprehensive course. Or it could be removed from semester-VII.
- Experts have suggested that Data Compression should not be offered as Elective subject in semester-VII.
- Experts have suggested change in nomenclature of Advanced Computing to Cloud Computing as an elective in semester-VII.

Resolutions 12.01:

- Computer concepts & programming, Basics of electronics engineering English language & literature courses are offered in 1st year, which have been already executed for the current academic year. Hence nomenclature is not possible for the current academic year. It would be proposed in future revision.
- As per the suggestion of experts, Computer Networking, Intelligent System, Image Processing & Multimedia System, Advanced Computing have been renamed to Computer Network, Machine learning, Multimedia Communication, Cloud Computing respectively.
- Capstone course and Modeling Simulation & Operation Research have been removed from semester-VII.
- Based on the suggestions groups of electives have been reformed. (Annexure III)

Item 12.02: For Discussion and Approval;

To approve the Teaching scheme and detailed syllabus for 2nd year CBCS courses effective for 2016-17 admitted batch during 2017-18 academic year.

Proceedings 12.02:

- The teaching and examination scheme with detailed syllabus of 2nd year B Tech (CBSC) scheme for 2016-17 admitted batch (Annexure-III) and 2nd year B Tech (Existing Teaching Scheme) with detailed syllabus as per attached in (Annexure-IV) were presented to the board members.
- Experts have suggested change in nomenclature of Discrete Mathematics and Application to Discrete Mathematics in semester-III.
- Experts have suggested change in nomenclature of Data Communication & Networking to Data Communication in semester-III. For the same Data Communication & Networking by Behrouz A. Forouzan book can be used as textbook.
- Experts have suggested that Java Programming subject name should have same name in both CE & IT branch. It should be Java Programming or Object-oriented programming using Java in semester-III.
- Experts have suggested change in nomenclature of Digital logic & design to Digital Electronics in semester-III and also suggested to include TTL & CMOS topics in syllabus.
- Experts have suggested theme-based ITC project in different semester for Software Group Project (SGP-I, SGP-II & SGP-III). It should have some broad theme like ITC in digital India, Agriculture, and Governance etc.
- Experts have suggested change in nomenclature of Probability, Statistic & Numerical Analysis to Probability & Statistical Methods in semester-IV.
- Experts have suggested change in nomenclature of Computer Organization & Microprocessor to Computer Organization & Microprocessor Interfacing in semester-IV.
- Experts have suggested change in nomenclature of Web Technologies to Web Engineering in semester-IV and also suggested to include web interfaces, web server etc. topics in syllabus.
- Experts have suggested change in nomenclature of Critical Thinking and Logic to Critical Thinking in semester-IV.

Resolutions 12.02:

- The teaching and examination scheme of 2nd year B Tech (CBCS) with detailed syllabus of 3rd and 4th semester of B Tech courses scheme effective from 2016-17 was reviewed by the experts.
- Experts have suggested change in nomenclature of Java Programming semester-III.
- Discrete Mathematics and Application course name has been changed to Discrete Mathematics in semester-III.
- Data Communication & Networking course name has been changed to Data Communication in semester-III.
- Digital logic & design course name has been changed to Digital Electronics in semester III and suggested contents have been included.
- Experts have suggested change in nomenclature of Statistical And Numerical Techniques semester-IV.
- Experts have suggested change in nomenclature of Data Structures & Algorithms semester-IV.
- Experts have suggested change in nomenclature of Database Management System semester-IV.
- Computer Organization & Microprocessor has been changed to Computer Organization & Microprocessor Interfacing in semester-IV.

Item 12.03: For Discussion and Approval;

To approve the syllabus of Final year for 2013 admitted batch.

Proceedings 12.03:

- Final year syllabus of 2013 admitted batch had been already approved in 10th BOS meeting which was held on 23rd August, 2014.

Resolutions 12.03:

- Based on expert suggestion teaching and examination scheme had been approved for B Tech 4th year (7th & 8th semester) in 10th BOS.

Item 12.04: For Discussion and Approval;

To review and approve any change in PG Syllabus of CBCS courses.

Proceedings 12.04:

- No change has been made to current syllabus of PG CBCS.

Item 12.05: For Discussion and Approval;

Preparation, Discussion and approval for the elective courses (University, Institute and Program Electives)

Approval of IT771-Cyber Security and Laws course as a University Elective in PG.

Approval of teaching and examination scheme for proposed PG in information and Network Security.

Proceedings 12.05:

- As per directives of university certain courses have been introduced as university elective in M Tech 1st and 2nd semester as per list given below: (Annexure-V)

Course Code	Semester 1 (University Elective I)	Course Code	Semester 2 (University Elective II)
MA771	Reliability and Risk Analysis	EE782	Energy Audit and Management
EE781	Optimization Techniques	CE771	Project Management
ME781	Occupational Health and Safety	IT771	Cyber Security and Laws
CE772	Research Methodology	CA842	Mobile Application Development
CA730	Internet and Web Designing	PT796	Fitness and Nutrition
PT795	Health and Physical Activity	NR752	Epidemiology and Community Health
NR751	Women's Health	OC733	Introduction to Polymer Science
RD701	Introduction to Analytical Techniques	MB651	Software based Statistical Analysis
RD702	Introduction to Nano science and Technology	PH826	Intellectual Property Rights
MB650	Creative Leadership	MA772	Design of Experiments
PH825	Community Pharmacy Ownership		

Resolutions 12.05:

- IT771 is approved to be offered as a University Elective from IT Dept.
- Rests of the courses have been found appropriate as university elective for PG.
- Experts have reviewed proposed teaching and examination scheme and approved.

Item 12.06: For Discussion and Approval;

Approval of PO & PEO

Proceedings 12.06:

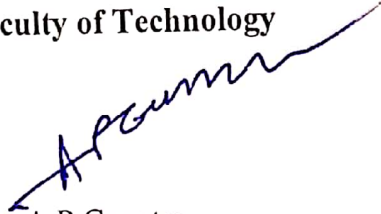
- Discussion on current PO & PEO of department.
- University has been accredited grade 'A' by NAAC and NBA.
- Placement record and result analysis as per attached in Annexure-VI & Annexure-VII.

Chairman - BOS



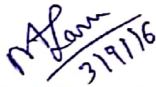
Prof. Parth Shah
Head of Department of Information Technology
CSPIT - CHARUSAT

Dean- Faculty of Technology



Dr. A P Ganatra
Dean- Faculty of Technology
Head of U & P U Patel Department of Computer Engineering
CSPIT - CHARUSAT

External Experts



Prof. M A Zaveri
Assoc Professor, SVNIT,
Surat

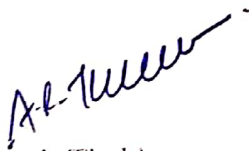


Prof. M T Savaliya
Head, Computer Dept,
VGEC, Chandkheda



Mr. Dipak Patel
Director, Charlie Computers,
Ahmedabad

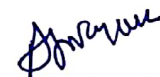
BOS members



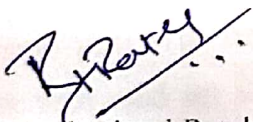
Prof. Amit Thakkar
CSPIT - CHARUSAT



Prof. Chintan Gajjar
CSPIT - CHARUSAT



Prof. Amit Nayak
CSPIT - CHARUSAT



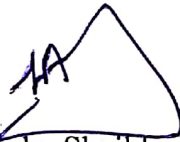
Prof. Bimal Patel
CSPIT - CHARUSAT



Prof. Purvi Prajapati
CSPIT - CHARUSAT



Prof. Nirav Bhatt
CSPIT - CHARUSAT



Prof. Ayesha Shaikh
CSPIT - CHARUSAT

Date: 30th Aug, 2016

To,
Prof M T Savaliya
Head
VGEC, Chandkheda

Subject: To invite you to upcoming Board of Studies (BoS) meet

Dear Sir,

As you aware that Education Campus - Changa, with its constituent technical institutes, is now transformed into Charotar University of Science & Technology (CHARUSAT) - A University Par Excellence.

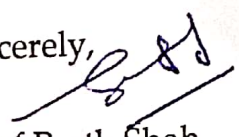
In view of this development, we take the privilege to invite you in meet of Board of studies as an External Expert. Herewith the agendas for the meeting are enclosed.

Day and Date	: 3 rd September, 2016, Saturday
Time	: 10:00 a.m. onwards
Venue	: Conference Hall, Building II (CE/IT Building, CSPIT)

We do hope you will be able to act as an expert in the panel; your experience and comments will add an important dimension to what is potentially a very important discussion for the field.

Thank you again for your continued support.

Sincerely,


Prof Parth Shah
Chairman, BoS
Department of Information
Technology

Course Group for CBCS Detailed syllabus design/modification

Course Group	Courses	Faculty
JAVA & Web Development Group:	JAVA,AJAVA,WT,.Net	PDS,PKS,SMP,JHV,RVP,HNY,JHV,HPP
Network & Security Group:	DCN,CN,WCMC,CRNS,	AJN,BHP,PMP,NHB,PNP,RVP,HNY
Computing Group:	COM,OS,AOS,HPCA,AC,LP	PDS, CHS,JC,HSS,PPP,SPP, CHS,AS, JC, CAG, NHB,PNP,HNS
Data Management Group:	DSA,DAA,DBMS,ADBMS,DWDM	ART,PMP,CAG,SPR,AMP,JC,PNP,JHV, BHP,NHB,NAP,AS
Software Development & Management Group:	SE,ERP	BHP,MDP,SBS
Comp. Vision & Image Processing Group:	GP[Graphics Prog],IP,DC	JC,CAG,ART,PPP
Embedded Group:	ES,IOT,DE	BLK,JP,BG
MSOR Group:	MSOR	SBS,JRP

Existing

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2014) Existing

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN CE/IT/EC ENGINEERING

Sem	Course Code	Course Title	Teaching Scheme					Examination Scheme				
			Contact Hours			Credit	Theory		Practical		Total	
			Theory	Practical	Tutorial		Total	Internal	External	Internal		External
FY Sem-1	MA101	Engineering Mathematics-I	4	0	1	5	4	30	70	0	0	100
	HS101- HS106	A Course from Liberal Arts	2			2	2	50				100
	ME102	Fundamentals of Mechanical Engineering	4	2	0	6	5	30	70	25	25	150
	EC101	Basics of Electronics Engineering	3	2	0	5	4	30	70	25	25	150
	CE103	Computer Concepts & Programming	3	4	1	8	5	30	70	50	50	200
	IT102	ICT Workshop Practices	0	2	0	2	1	25				50
	CL102.01	Environmental Sciences	2	0	0	2	2	30	70	0	0	100
		Student Counselling/Self Study				6						
			18	10	2	36	23	150	350	175	175	850
	MA102	Engineering Mathematics-II	4	0	1	5	4	30	70	0	0	100
FY Sem-2	HS121A	English Language & Literature	2			2	2	25	25	25	25	100
	CL104	Basics of Civil Engineering	2	2	0	4	3	30	70	25	25	150
	ME101.01	Engineering Graphics	2	4	1	7	4	30	70	50	50	200
	CE104	Object Oriented Programming with C++	3	4	0	7	5	30	70	50	50	200
	PY101	Engineering Physics	3	2	0	5	4	30	70	25	25	150
		Remedial Classes/Make-up Classes/Mentoring				6						
			16	12	2	36	22	175	375	175	175	900

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT

Sl. No.	Course Code	Course Title	Teaching Scheme					Examination Scheme				
			Contact Hours				Credit	Theory			Practical	
			Theory	Practical	Tutorial	Total		Internal	External	Total	Internal	External
SY Sem-3	MA207	Discrete Mathematics and Application	4	0	0	4	4	30	70	0	0	100
	IT217	Digital Logic & Design	4	2	1	7	5	30	70	25	25	150
	IT216	Java Programming	2	4	1	7	4	30	70	50	50	200
	EM201.01	Fundamentals of Management	4	0	0	4	4	30	70	0	0	100
	IT210	Data Communication	4	2	1	7	5	30	70	25	25	150
	HS122A	Values and Ethics	2	0	0	2	2	30	70	0	0	100
	IT211	Software Group Project-I	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	3	0	3	0	0	0	0	0	0
			20	13	3	36	25	180	420	125	125	850
	MA206.01	Statistical & Numerical Methods	3	0	1	4	3	30	70	0	0	100
SY Sem-4	IT212	Computer Organization & Microprocessor	3	2	1	6	4	30	70	25	25	150
	IT213	Web Technologies	2	4	0	6	4	30	70	50	50	200
	IT214	Data Structures & Files	3	4	1	8	5	30	70	50	50	200
	IT201.01	Database Management System	3	2	1	6	4	30	70	25	25	150
	HS123	Critical Thinking and Logic	2	0	0	2	2	50	50	0	0	100
	IT215	Software Group Project-II	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			16	16	4	36	23	200	400	175	175	950

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT												
	Course Code	Course Title	Teaching Scheme				Credit	Examination Scheme				
			Contact Hours			Total		Theory		Practical		
			Theory	Practical	Tutorial			Internal	External	Internal	External	Total
TY Sem-5	IT302.02	Design & Analysis of Algorithm	4	2	0	6	5	30	70	25	25	150
	MA301.01	Modelling Simulation & Operation Research	3	0	1	4	3	30	70	0	0	100
	IT314	Operating System Fundamentals	4	4	0	8	6	30	70	50	50	200
	IT303.02	Advanced Database Management System	3	2	1	6	4	30	70	25	25	150
	HS124A	Professional Communication	0	2	0	2	2	0	0	30	70	100
		Elective I	2	4	0	6	4	30	70	50	50	200
	IT318	Software Group Project-III	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			16	18	2	36	25	150	350	205	245	950
TY Sem-6	IT315	Computer Networking	4	2	0	6	5	30	70	25	25	150
	IT319	Capstone Course	4	0	1	5	4	30	70	0	0	100
	IT306.02	Cryptography & Network Security	4	4	0	8	6	30	70	50	50	200
	IT307.02	Software Engineering	3	2	1	6	4	30	70	25	25	150
		Elective II	3	2	0	5	4	30	70	25	25	150
			0	2	0	2	1	0	0	25	25	50
	IT322	Software Group Project-IV	0	2	0	2	2	25	25	25	25	100
	HS125A	Society, Governance and International Studies	0	2	0	2	0	0	0	0	0	0
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			18	16	2	36	26	175	375	175	175	900

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)												
TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT												
S	Course Code	Course Title	Teaching Scheme				'Credit	Examination Scheme				
			Contact Hours			Internal		Theory		Practical		Total
			Theory	Practical	Tutorial			Total	Internal	External	Internal	
Final Year Sem-7	IT415	Data Warehousing & Data Mining	4	2	0	6	5	30	70	25	25	150
	IT409	High Performance Computer Architecture	3	2	1	6	4	30	70	25	25	150
	IT402	Wireless Communication & Mobile Computing	4	4	1	9	6	30	70	50	50	200
	IT410	Enterprise Resource Planning & E-Commerce	3	0	0	3	3	30	70	0	0	100
		Elective III	4	2	0	6	5	30	70	25	25	150
	IT414	Software Group Project-V	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			18	14	2	34	24	150	350	150	150	800
Final Year Sem-8	IT407	Software Project Major	0	36	0	36	20	0	0	250	350	600
			0	36	0	36	20	0	0	250	350	600
		Total	122	135	17	286	188	1180	2620	1430	1570	6800
CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)												

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

LIST OF ELECTIVE SUBJECTS FOR B TECH PROGRAMME IN IT

ELECTIVES	Elective - I		Elective - II		Elective - III	
	Code	Advanced Java programming	Code	Service Oriented Architecture	Code	Advanced Computing
	IT316		IT320		IT405.01	
	IT317	Advanced Programming using .NET Framework	IT321	Intelligent System	IT412	Image Processing & Multimedia System
	IT313.01	Embedded Systems	IT323	Advanced Operating System	IT404.01	Language Processor

Proposed

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2016)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

Sem	Course Code	Course Title	Teaching Scheme							Examination Scheme				
			Contact Hours				Credit	Theory		Practical/Project		Total		
			Theory	Practical	Tutorial	Project		Total	Theory	Practical	Internal		External	
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	100
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	200
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	150
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	100
	HS101 A - HS106 A	A Course from Liberal Arts	2		0		2	0	2	2			50	100
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	100
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9							
FY Sem-2	MA142	Engineering Mathematics-II	14	12	1		36	14	7	21	120	280	175	750
	CE142	Object Oriented Programming with C++	4	0	1	0	5	4	0	4	30	70	0	100
	ME144	Elements of Engineering	4	4	0	0	8	4	2	6	30	70	50	200
	PY141	Engineering Physics	4	2	1	0	7	4	1	5	30	70	25	150
	HS121 A	English Language & Literature	3	2	0	0	5	3	1	4	30	70	25	150
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &	2		0		2	2	0	2	25	25	25	100
					0		9					125	700	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
		Teaching Scheme							Examination Scheme							
Course Code	Course Title	Teaching Scheme						Examination Scheme								
		Contact Hours				Credit		Theory			Practical/Project		Total			
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal		External		
SY Sem-3	MA242	4	0	0	0	4	4	0	4	30	70	0	0	100		
	IT241	4	2	0	0	6	4	1	5	30	70	25	25	150		
	IT242	4	4	0	0	8	4	2	6	30	70	50	50	200		
	XXXXXX	2	0	0	0	2	2	0	2	30	70	0	0	100		
	IT243	4	2	0	0	6	4	1	5	30	70	25	25	150		
	HS122A	2	0	0	0	2	2	0	2	30	70	0	0	100		
	IT244	0	0	0	2	2	0	2	2	0	0	50	50	100		
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	6			0	0	0	0	0		
SY Sem-4		20	14	0	2	36	20	6	26	180	420	150	150	900		
	MA244	4	0	0	0	4	4	0	4	30	70	0	0	100		
	IT245	4	2	0	0	6	4	1	5	30	70	25	25	150		
	IT246	2	4	0	0	6	2	2	4	30	70	50	50	200		
	IT247	4	2	0	0	6	4	1	5	30	70	25	25	150		
	IT248	4	2	0	0	6	4	1	5	30	70	25	25	150		
	HS123	2	0	0	0	2	2	0	2	50	50	0	0	100		
	XXXXXX	2	0	0	0	2	2	0	2	30	70	0	0	100		
	University Elective- II	0	6	0	0	6			0	0	0	0	0			
	Assignment Practices/Student Counseling/Remedial Classes	22	16	0	0	38	22	5	27	230	470	125	125	950		

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
		Teaching Scheme										Examination Scheme				
Course Code	Course Title	Teaching Scheme										Examination Scheme				
		Contact Hours					Credit					Theory		Practical/Project		Total
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total			Internal	External	Internal	External	
IT341	Design & Analysis of Algorithm	4	2	0	0	6	4	1	5			30	70	25	25	150
IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3			30	70	25	25	150
IT343	Operating System Fundamentals	4	2	0	0	6	4	1	5			30	70	25	25	150
IT344	Computer Networking	4	2	0	0	6	4	1	5			30	70	25	25	150
HS124A	Professional Communication	0	2	0	0	2	0	1	1			0	0	30	70	100
	Elective-I	2	4	0	0	6	2	2	4			30	70	50	50	200
IT345	Software Group Project-II	0	0	0	2	2	0	2	2			0	0	50	50	100
	Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	4			0			0	0	0	0	0
		16	18	0	2	36	16	9	25			150	350	230	270	1000
IT347	Software Engineering	4	2	0	0	6	4	1	5			30	70	25	25	150
IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5			30	70	25	25	150
IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6			30	70	50	50	200
	Elective-II	4	2	0	0	6	4	1	5			30	70	25	25	150
IT350	Software Group Project-III	0	0	0	2	2	0	2	2			0	0	50	50	100
HS125A	Society, Governance and International Studies	0	2	0	0	2	0	1	1			25	25	25	25	100
	Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	6			0			0	0	0	0	0
		16	18	0	2	36	16	8	24			145	305	200	200	850

TY
Sem-5

TY
Sem-6

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
			Teaching Scheme						Examination Scheme							
Course Code	Course Title	Teaching Scheme						Examination Scheme								
		Contact Hours				Credit		Theory		Practical/Project		Total				
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External		Internal	External		
Final Year Sem-7	IT441	Data Warehousing & Data Mining	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	Modeling Simulation & Operation Research	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT443	Advanced Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Capstone Course	4	0	0	0	4	4	0	4	30	70	0	0	100	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	2	2	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
	Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	6			0	0	0	0	0	0		
			20	12	0	5	37	20	8	28	150	350	175	175	850	
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
		Total	124	135	3	11	291	125	67	192	1120	2480	1430	1570	6600	

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES				Programme Elective - I				Programme Elective - II				Programme Elective - III			
Code	IT371	IT372	IT373	IT374	Code	IT375	IT376	IT377	IT378	Code	IT471	IT472	IT473	IT474	Code
	Advanced Java programming	Advanced Programming using .NET Framework	Embedded Systems	Operating System Administration		Internet of Things	Intelligent System	Advanced Operating System	Language Processor		Advanced Computing	Image Processing & Multimedia System	Data Compression	Enterprise Resource Planning & Ecommerce	

Revised

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2016)																
TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
Sem	Course Code	Course Title	Teaching Scheme						Examination Scheme						Total	
			Contact Hours				Credit		Theory		Practical/Project					
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
	HS101 A - HS106 A	A Course from Liberal Arts	2		0		2	0	2	2			50	50	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
FY Sem-2	MA142	Engineering Mathematics-II	14	12	1		36	14	7	21	120	280	175	175	750	
	CE142	Object Oriented Programming with C++	4	0	1	0	5	4	0	4	30	70	0	0	100	
	ME144	Elements of Engineering	4	4	0	0	8	4	2	6	30	70	50	50	200	
	PY141	Engineering Physics	4	2	1	0	7	4	1	5	30	70	25	25	150	
	HS121 A	English Language & Literature	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &	2		0		2	2	0	2	25	25	25	25	100	
			16	9	2	0	36	17	4	21	145	305	125	125	700	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
			Teaching Scheme							Examination Scheme						
Course Code	Course Title		Teaching Scheme						Examination Scheme							
			Contact Hours				Credit	Theory			Practical/Project			Total		
			Theory	Practical	Tutorial	Project		Total	Theory	Practical	Total	Internal	External		Internal	External
MA242	Discrete Mathematics		4	0	0	0	4	4	0	4	30	70	0	0	100	
IT241	Digital Electronics		4	2	0	0	6	4	1	5	30	70	25	25	150	
IT242	Java Programming		4	4	0	0	8	4	2	6	30	70	50	50	200	
XXXXXX	University Elective- I		2	0	0	0	2	2	0	2	30	70	0	0	100	
IT243	Data Communication		4	2	0	0	6	4	1	5	30	70	25	25	150	
HS122A	Values and Ethics		2	0	0	0	2	2	0	2	30	70	0	0	100	
IT244	Software Group Project-I		0	0	0	4	4	0	2	2	0	0	50	50	100	
	Assignment Practices/Student Counseling/Remedial Classes		0	6	0	0	4			0	0	0	0	0	0	
			20	14	0	4	36	20	6	26	180	420	150	150	900	
MA244	Probability & Statistic		4	0	0	0	4	4	0	4	30	70	0	0	100	
IT245	Computer Organization & Microprocessor Interfacing		4	2	0	0	6	4	1	5	30	70	25	25	150	
IT246	Web Engineering		2	4	0	0	6	2	2	4	30	70	50	50	200	
IT247	Data Structures & Algorithms		4	2	0	0	6	4	1	5	30	70	25	25	150	
IT248	Database Management System		4	2	0	0	6	4	1	5	30	70	25	25	150	
HS123	Critical Thinking and Logic		2	0	0	0	2	2	0	2	50	50	0	0	100	
XXXXXX	University Elective- II		2	0	0	0	2	2	0	2	30	70	0	0	100	
	Assignment Practices/Student Counseling/Remedial Classes		0	6	0	0	4			0	0	0	0	0	0	
			22	16	0	0	36	22	5	27	230	470	125	125	950	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
Course Code	Course Title	Teaching Scheme						Examination Scheme								
		Teaching Scheme						Examination Scheme								
		Contact Hours						Credit								
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	Total		
TY Sem-5	IT341	Design & Analysis of Algorithm	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150	
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150	
	HS124A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100	
TY Sem-6		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0	
	IT347	Software Engineering	16	18	0	4	36	16	9	25	150	350	230	270	1000	
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150	
TY Sem-6	IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	200	
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100	
	HS125A	Society, Governance and International Studies	0	2	0	0	2	0	1	1	25	25	25	25	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
		16	18	0	4	36	16	8	24	145	305	200	200	850		

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
			Teaching Scheme							Examination Scheme						
Course Code	Course Title	Teaching Scheme							Examination Scheme							
		Contact Hours				Credit			Theory			Practical/Project				
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	Total		
Final Year Sem-7	IT441	Data Warehousing & Data Mining	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	High Performance Computer Architecture	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT443	Advanced Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
	Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1				0	0	0	0	0	0	
			18	16	0	7	36	18	10	28	150	350	225	225	950	
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
		Total	122	139	3	19	288	123	69	192	1120	2480	1480	1620	6700	

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES			Programme Elective - II			Programme Elective - III		
Code	Programme Elective - I	Code	Parallel and Distributed Systems			Cloud Computing		
IT371	Advanced Java programming	IT375						
IT372	Advanced Programming using .NET Framework	IT376	Automata Theory & Compiler Design			Multimedia Communication		
IT373	Embedded Systems	IT377	Advanced Operating System			Intelligent System		

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Teaching Scheme				Examination Scheme			
			Contact Hours			Credit	Theory		Practical	
			Theory	Practical	Total		Internal	External	Internal	External
FY Sem I	IT741	Algorithms & Computational Complexity	3	2	5	4	30	70	25	25
	IT742	Advanced Computer Network	3	2	5	4	30	70	25	25
	IT743	High Performance Computing	3	4	7	5	30	70	50	50
		Programme Elective-I	3	2	5	4	30	70	25	25
		Programme Cluster Elective-I	3	2	5	4	30	70	25	25
	HS701A	University Core-I Advance Critical Thinking & Logic	2	0	2	2	30	70	0	0
		University Elective-I	2	0	2	2	30	70	0	0
FY Sem II			19	12	31	25	210	490	150	150
	IT744	Information and Network Security	3	4	7	5	30	70	50	50
	IT745	Data Science & Modelling	3	2	5	4	30	70	25	25
	IT746	Computational Intelligence	3	2	5	4	30	70	25	25
		Programme Elective-II	3	2	5	4	30	70	25	25
		Programme Cluster Elective-II	3	2	5	4	30	70	25	25
	HS702A	University Core-II Academic Writing and Communication Skills	0	2	2	2	0	0	30	70
		University Elective-II	2	0	2	2	30	70	0	0
			17	14	31	25	180	420	180	220

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Credit	Examination Scheme					Total
				Internal		External			
				Progress Report	Progress Seminar	Report	Seminar	Viva -voce	
SY Sem III	IT811	Project Preliminaries	4	50	50	0	50	50	200
	IT812	Project Phase-I	18	100	100	100	100	100	500
			22	150	150	100	150	150	700
SY Sem IV	IT813	Project Phase-II	30	200	200	200	200	200	1000
			30	200	200	200	200	200	1000
			102	400	740	1210	680	720	3700
Total				36	26				
	Course Code	Semester 1 (Programme Elective I)	Course Code	Semester 2 (Programme Elective II)					
	IT761	Advanced Operating System	IT764	Web Services & Service Oriented Computing					
	IT762	Information Storage and Retrieval	IT765	Internet of things					
	IT763	Language Processor	IT766	Cloud Computing					
	Course Code	Semester 1 (Programme Cluster Elective I)	Course Code	Semester 2 (Programme Cluster Elective II)					
	IT767	Micro Device Programming	IT768	Applied Cryptography					
	EC767	Embedded System Design	EC768	Digital Image & Speech Processing					
	CE767	Operating System Design & Concepts	CE768	Software Project Management & Quality Assurance					
	EE771	Digital Signal Processing & its Applications	EE772	Restructuring and Deregulation of Power Systems					

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Course Code	Semester 1 (University Elective I)	Course Code	Semester 2 (University Elective II)
MA771	Reliability and Risk Analysis	EE782	Energy Audit and Management
EE781	Optimization Techniques	CE771	Project Management
ME781	Occupational Health and Safety	IT771	Cyber Security and Laws
CE772	Research Methodology	CA842	Mobile Application Development
CA730	Internet and Web Designing	PT796	Fitness and Nutrition
PT795	Health and Physical Activity	NR752	Epidemiology and Community Health
NR751	Women's Health	OC733	Introduction to Polymer Science
RD701	Introduction to Analytical Techniques	MB651	Software based Statistical Analysis
RD702	Introduction to Nanoscience and Technology	PH826	Intellectual Property Rights
MB650	Creative Leadership	MA772	Design of Experiments
PH825	Community Pharmacy Ownership		

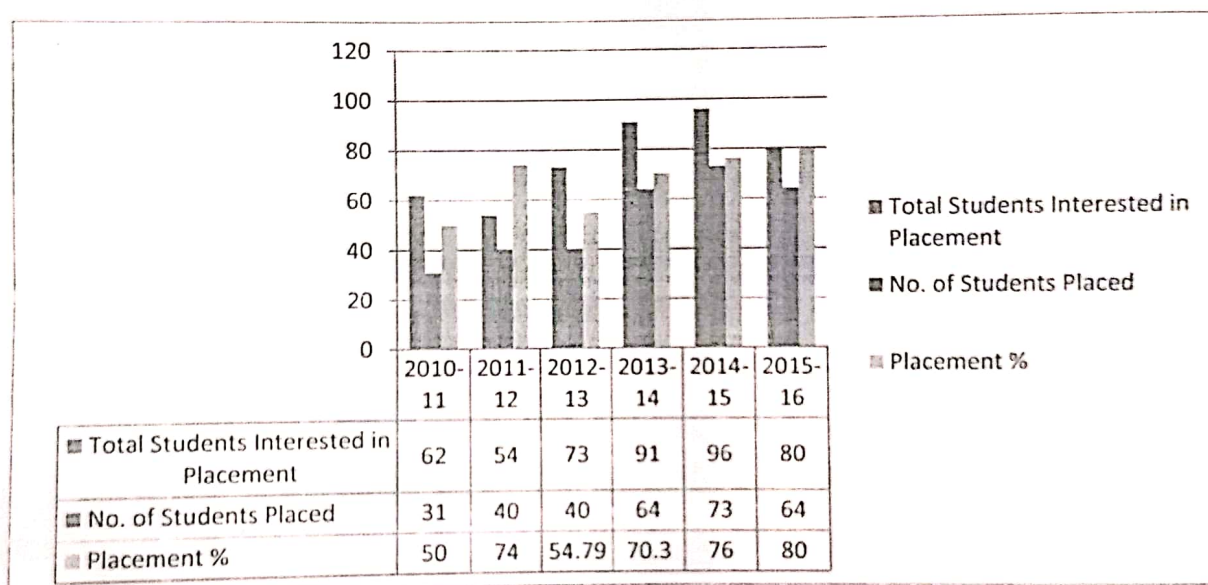


**CHARUSAT
CSPIT**
Department of Information Technology

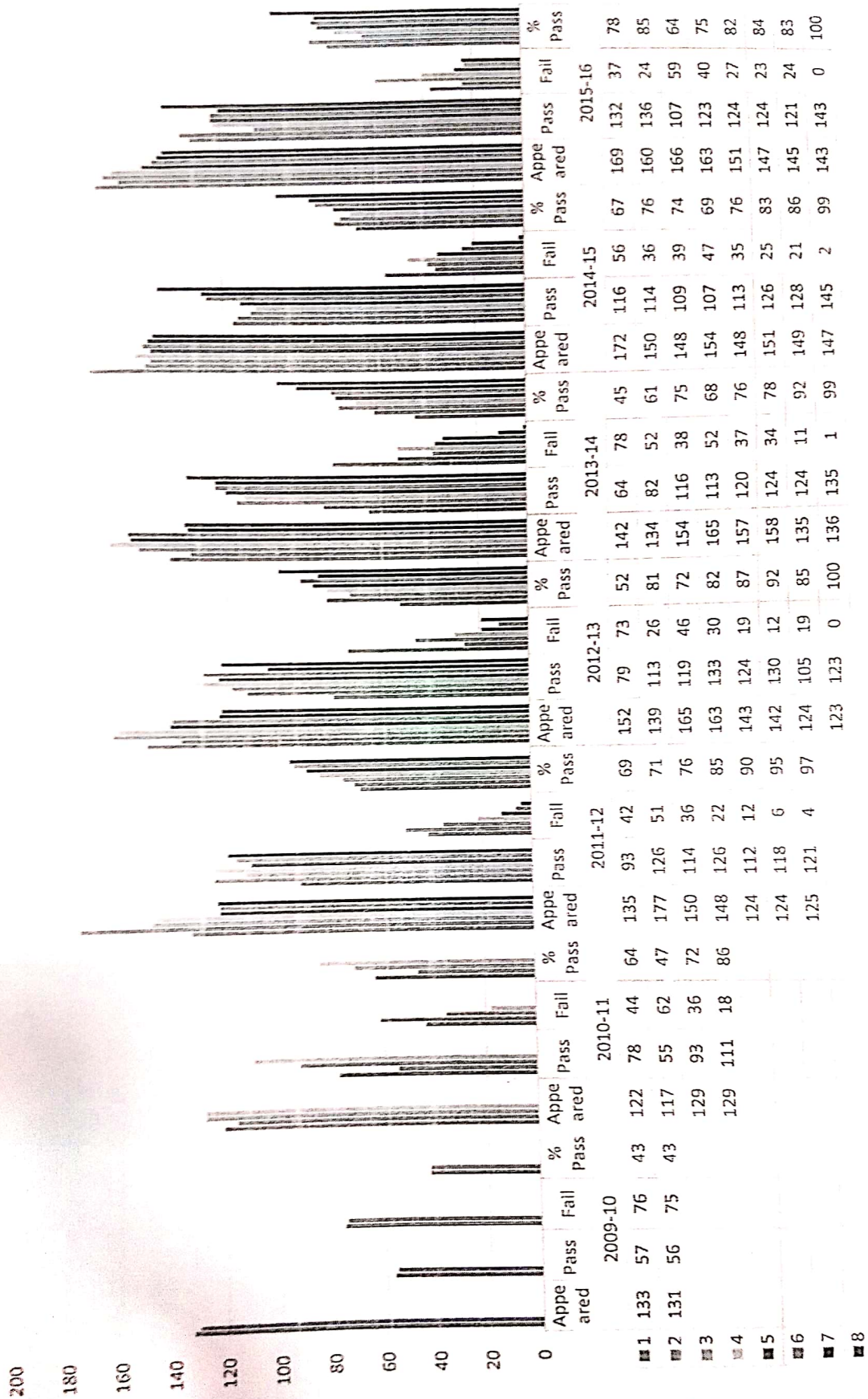


Summary of Placement Record

Placement Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
No. Companies Visited	49	34	14	33	46	31
Highest Package	5.22	5.5	5	3.5	9	3.33
Lowest Package	1.8	1.8	1.2	1	1	0.96
Average Package	2.4	2.5	2	2.02	3	2.1
Total Students Interested in Placement	62	54	73	91	96	80
No. of Students Placed	31	40	40	64	73	64
Placement %	50	74	54.79	70.3	76	80



IT Department Result Analysis



1 2 3 4 5 6 7 8



**CHARUSAT
CSPIT**
Department of Information Technology



**Summary and Action Taken Report of Feedback on Curriculum
AY: 2016-17**

Category	Comments	Action Taken
Alumni	- To incorporate new features of Java 8 like lambda functions. - Java Collection Framework should have more weightage compared to other topics listed in the current draft of syllabus.	- Java 8 and Java collection framework have been added into the syllabus of “Java Programming” Course. - Considered in 12th BoS 03-sep-2016
	Suggestion to incorporate Spring and Hibernate Framework in place of Java Media Framework.	- Hibernate Framework and related practicals have been incorporated into the course. - Considered in 12th BoS 03-sep-2016
	More weightage to Introduction to Machine learning and NLP.	- Department has Introduced machine Learning as a course in our curriculum. NLP has been covered as a part of an AI course. - Considered in 13th BoS 26-Aug-2017
	- Suggestion to add new course: “Digital Marketing” including following topics: - Social Media, SEO, Content Writing and Copywriting.	The suggested topic will be covered in the mode of workshop. (Annexure-1)
Employer	Maybe there is a gap between industry needs to the academia, try to take into consideration to reduce the gap.	- Department has introduced student internships every summer vacation. - Syllabus is aligned with industry needs. - Considered in 13th BoS 26-Aug-2017.
Student	Latest technologies can be offered as an elective course.	- Department started offering all the latest areas relevant to the branch as an elective course in final and pre-final year. - Considered in 13th BoS 26-Aug-2017.
	Number of lab sessions should be increased and internal exams are preferred over unit tests.	- Department has increased the practical credits of courses which require more practical exposure. - Considered in 13th BoS 26-Aug-2017.
Teacher	Modification in, - Teaching scheme, - Theory contents, - Practical contents of few courses	Department has considered suggested changes by the teachers into BOS and incorporated it into the new teaching scheme.

Minutes – 12th Meeting of Board of studies of Department of Information Technology

Date : September 03, 2016, Saturday

Time : 10:00 am

Venue : Conference Room, Building-II, CSPIT, CHARUSAT Campus

The 12th meeting of the Board of studies, Department of Information Technology, FTE, Charotar University of Science & Technology (CHARUSAT) was held on 3rd September, 2016 at 10:00 a.m. onwards at conference room (CE/IT), CSPIT, CHARUSAT campus.

Following BOS members were remained present:

1.	Prof. Parth Shah	Chairman	HOD, IT Dept
2.	Dr. Amit Ganatra	Member	Dean, Faculty of Tech & Engg
3.	Prof. M A Zaveri	External	Professor, SVNIT, Surat
4.	Prof. M T Savaliya	External	Head, CE Dept., VGEC, Chandkheda
5.	Mr. Dipak Patel	External	Director, Charlie Computers, Ahmedabad
6.	Prof. Amit Thakkar	Member	Asso. Prof.
7.	Mr. Chintan Gajjar	Member	Asst. Prof.
8.	Mr. Amit Nayak	Member	Asst. Prof.
9.	Mr. Bimal Patel	Member	Asst. Prof.
10.	Mr. Nirav Bhatt	Member	Asst. Prof.
11.	Ms. Purvi Prajapati	Member	Asst. Prof.
12.	Ms. Ayesha Shaikh	Member	Asst. Prof.

Initiation:

Head of the Department of Information Technology, Prof. Parth Shah welcomed all the members of Board of Studies to the 12th meeting. He briefed the overall activities carried out by the department during last year.

Agenda Proceedings & Resolutions:-

Item 12.01: For Discussion and Approval;

To approve the proposed teaching scheme for all the semesters of B Tech CBCS courses effective from 2016 admitted batch.

Proceedings 12.01:

- Department had collected feedback of industry experts, academicians, students and faculty members. Based on those feedbacks, proposed teaching scheme, examination scheme and syllabus of different courses were prepared.
- Different course groups have been formed for design and update of detail syllabus which will be offered in proposed CBCS teaching scheme (Course Group Information available in Annexure-I). Minutes of details discussion of each course group have been attached in Annexure-II.
- Experts have suggested change in nomenclature of Computer concepts & programming to Computer program practices in semester-I.
- Experts have suggested change in nomenclature of Basics of electronics engineering to Basics of Electrical & Electronics in semester-I.
- Experts have suggested change in nomenclature of ICT workshop in semester-I.
- Experts have suggested change in nomenclature of English language & literature to English language in semester-II.
- Experts have suggested change in nomenclature of Object-Oriented Programming with C++ in semester-II.
- Experts have suggested change in nomenclature of Operating System Fundamentals to Operating Systems in semester-V.
- Experts have suggested change in nomenclature of Computer Networking to Computer Networks in semester-V.
- Experts have suggested including XSLT, XPath, XML, XQuery, RDF & RSS etc. in Advanced Web Technology in semester-V.
- Experts have suggested that Operating System Administration could not be offered as Elective subject in semester-V.
- Experts have suggested that Language Processor should not be offered as Elective subject in semester-VI.
- Experts have suggested change in nomenclature of Intelligent System to Artificial Intelligence or Machine Learning in semester-VI.
- Experts have suggested change in nomenclature of Image Processing & Multimedia System to Multimedia Communication in semester-VII

- Experts have suggested that Advanced Computer Graphics, Big Data & Analytics, Information Retrieval & Optimization Methods can be offered as Elective courses in semester-VII.
- Experts have suggested that Modeling Simulation & Operation Research should not be offered in semester-VII
- Experts have suggested change in nomenclature of Capstone course to Capstone Project or Comprehensive course. Or it could be removed from semester-VII.
- Experts have suggested that Data Compression should not be offered as Elective subject in semester-VII.
- Experts have suggested change in nomenclature of Advanced Computing to Cloud Computing as an elective in semester-VII.

Resolutions 12.01:

- Computer concepts & programming, Basics of electronics engineering English language & literature courses are offered in 1st year, which have been already executed for the current academic year. Hence nomenclature is not possible for the current academic year. It would be proposed in future revision.
- As per the suggestion of experts, Computer Networking, Intelligent System, Image Processing & Multimedia System, Advanced Computing have been renamed to Computer Network, Machine learning, Multimedia Communication, Cloud Computing respectively.
- Capstone course and Modeling Simulation & Operation Research have been removed from semester-VII.
- Based on the suggestions groups of electives have been reformed. (Annexure III)

Item 12.02: For Discussion and Approval;

To approve the Teaching scheme and detailed syllabus for 2nd year CBCS courses effective for 2016-17 admitted batch during 2017-18 academic year.

Proceedings 12.02:

- The teaching and examination scheme with detailed syllabus of 2nd year B Tech (CBSC) scheme for 2016-17 admitted batch (Annexure-III) and 2nd year B Tech (Existing Teaching Scheme) with detailed syllabus as per attached in (Annexure-IV) were presented to the board members.
- Experts have suggested change in nomenclature of Discrete Mathematics and Application to Discrete Mathematics in semester-III.
- Experts have suggested change in nomenclature of Data Communication & Networking to Data Communication in semester-III. For the same Data Communication & Networking by Behrouz A. Forouzan book can be used as textbook.
- Experts have suggested that Java Programming subject name should have same name in both CE & IT branch. It should be Java Programming or Object-oriented programming using Java in semester-III.
- Experts have suggested change in nomenclature of Digital logic & design to Digital Electronics in semester-III and also suggested to include TTL & CMOS topics in syllabus.
- Experts have suggested theme-based ITC project in different semester for Software Group Project (SGP-I, SGP-II & SGP-III). It should have some broad theme like ITC in digital India, Agriculture, and Governance etc.
- Experts have suggested change in nomenclature of Probability, Statistic & Numerical Analysis to Probability & Statistical Methods in semester-IV.
- Experts have suggested change in nomenclature of Computer Organization & Microprocessor to Computer Organization & Microprocessor Interfacing in semester-IV.
- Experts have suggested change in nomenclature of Web Technologies to Web Engineering in semester-IV and also suggested to include web interfaces, web server etc. topics in syllabus.
- Experts have suggested change in nomenclature of Critical Thinking and Logic to Critical Thinking in semester-IV.

Resolutions 12.02:

- The teaching and examination scheme of 2nd year B Tech (CBCS) with detailed syllabus of 3rd and 4th semester of B Tech courses scheme effective from 2016-17 was reviewed by the experts.
- Experts have suggested change in nomenclature of Java Programming semester-III.
- Discrete Mathematics and Application course name has been changed to Discrete Mathematics in semester-III.
- Data Communication & Networking course name has been changed to Data Communication in semester-III.
- Digital logic & design course name has been changed to Digital Electronics in semester III and suggested contents have been included.
- Experts have suggested change in nomenclature of Statistical And Numerical Techniques semester-IV.
- Experts have suggested change in nomenclature of Data Structures & Algorithms semester-IV.
- Experts have suggested change in nomenclature of Database Management System semester-IV.
- Computer Organization & Microprocessor has been changed to Computer Organization & Microprocessor Interfacing in semester-IV.

Item 12.03: For Discussion and Approval;

To approve the syllabus of Final year for 2013 admitted batch.

Proceedings 12.03:

- Final year syllabus of 2013 admitted batch had been already approved in 10th BOS meeting which was held on 23rd August, 2014.

Resolutions 12.03:

- Based on expert suggestion teaching and examination scheme had been approved for B Tech 4th year (7th & 8th semester) in 10th BOS.

Item 12.04: For Discussion and Approval;

To review and approve any change in PG Syllabus of CBCS courses.

Proceedings 12.04:

- No change has been made to current syllabus of PG CBCS.

Item 12.05: For Discussion and Approval;

Preparation, Discussion and approval for the elective courses (University, Institute and Program Electives)

Approval of IT771-Cyber Security and Laws course as a University Elective in PG.

Approval of teaching and examination scheme for proposed PG in information and Network Security.

Proceedings 12.05:

- As per directives of university certain courses have been introduced as university elective in M Tech 1st and 2nd semester as per list given below: (Annexure-V)

Course Code	Semester 1 (University Elective I)	Course Code	Semester 2 (University Elective II)
MA771	Reliability and Risk Analysis	EE782	Energy Audit and Management
EE781	Optimization Techniques	CE771	Project Management
ME781	Occupational Health and Safety	IT771	Cyber Security and Laws
CE772	Research Methodology	CA842	Mobile Application Development
CA730	Internet and Web Designing	PT796	Fitness and Nutrition
PT795	Health and Physical Activity	NR752	Epidemiology and Community Health
NR751	Women's Health	OC733	Introduction to Polymer Science
RD701	Introduction to Analytical Techniques	MB651	Software based Statistical Analysis
RD702	Introduction to Nano science and Technology	PH826	Intellectual Property Rights
MB650	Creative Leadership	MA772	Design of Experiments
PH825	Community Pharmacy Ownership		

Resolutions 12.05:

- IT771 is approved to be offered as a University Elective from IT Dept.
- Rests of the courses have been found appropriate as university elective for PG.
- Experts have reviewed proposed teaching and examination scheme and approved.

Item 12.06: For Discussion and Approval;

Approval of PO & PEO

Proceedings 12.06:

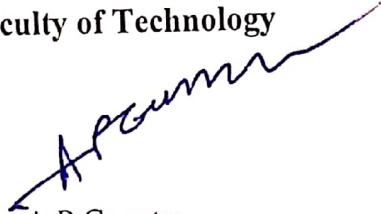
- Discussion on current PO & PEO of department.
- University has been accredited grade 'A' by NAAC and NBA.
- Placement record and result analysis as per attached in Annexure-VI & Annexure-VII.

Chairman - BOS



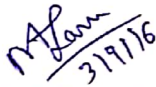
Prof. Parth Shah
Head of Department of Information Technology
CSPIT - CHARUSAT

Dean- Faculty of Technology



Dr. A P Ganatra
Dean- Faculty of Technology
Head of U & P U Patel Department of Computer Engineering
CSPIT - CHARUSAT

External Experts



Prof. M A Zaveri
Assoc Professor, SVNIT,
Surat



Prof. M T Savaliya
Head, Computer Dept,
VGEC, Chandkheda



Mr. Dipak Patel
Director, Charlie Computers,
Ahmedabad

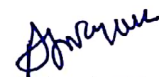
BOS members



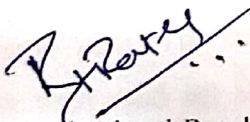
Prof. Amit Thakkar
CSPIT - CHARUSAT



Prof. Chintan Gajjar
CSPIT - CHARUSAT



Prof. Amit Nayak
CSPIT - CHARUSAT



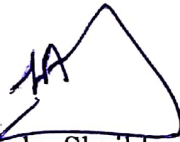
Prof. Bimal Patel
CSPIT - CHARUSAT



Prof. Purvi Prajapati
CSPIT - CHARUSAT



Prof. Nirav Bhatt
CSPIT - CHARUSAT



Prof. Ayesha Shaikh
CSPIT - CHARUSAT

Date: 30th Aug, 2016

To,
Prof M T Savaliya
Head
VGEC, Chandkheda

Subject: To invite you to upcoming Board of Studies (BoS) meet

Dear Sir,

As you aware that Education Campus - Changa, with its constituent technical institutes, is now transformed into Charotar University of Science & Technology (CHARUSAT) - A University Par Excellence.

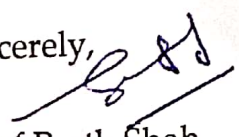
In view of this development, we take the privilege to invite you in meet of Board of studies as an External Expert. Herewith the agendas for the meeting are enclosed.

Day and Date	: 3 rd September, 2016, Saturday
Time	: 10:00 a.m. onwards
Venue	: Conference Hall, Building II (CE/IT Building, CSPIT)

We do hope you will be able to act as an expert in the panel; your experience and comments will add an important dimension to what is potentially a very important discussion for the field.

Thank you again for your continued support.

Sincerely,


Prof Parth Shah
Chairman, BoS
Department of Information
Technology

Course Group for CBCS Detailed syllabus design/modification

Course Group	Courses	Faculty
JAVA & Web Development Group:	JAVA,AJAVA,WT,.Net	PDS,PKS,SMP,JHV,RVP,HNY,JHV,HPP
Network & Security Group:	DCN,CN,WCMC,CRNS,	AJN,BHP,PMP,NHB,PNP,RVP,HNY
Computing Group:	COM,OS,AOS,HPCA,AC,LP	PDS, CHS,JC,HSS,PPP,SPP, CHS,AS, JC, CAG, NHB,PNP,HNS
Data Management Group:	DSA,DAA,DBMS,ADBMS,DWDM	ART,PMP,CAG,SPR,AMP,JC,PNP,JHV, BHP,NHB,NAP,AS
Software Development & Management Group:	SE,ERP	BHP,MDP,SBS
Comp. Vision & Image Processing Group:	GP[Graphics Prog],IP,DC	JC,CAG,ART,PPP
Embedded Group:	ES,IOT,DE	BLK,JP,BG
MSOR Group:	MSOR	SBS,JRP

Existing

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2014) Existing

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN CE/IT/EC ENGINEERING

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2014) Existing													
TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN CE/IT/EC ENGINEERING													
Sem	Course Code	Course Title	Teaching Scheme					Examination Scheme					
			Contact Hours			Credit	Theory		Practical		Total		
			Theory	Practical	Tutorial		Total	Internal	External	Internal		External	
FY Sem-1	MA101	Engineering Mathematics-I	4	0	1	5	4	30	70	0	0	100	
	HS101- HS106	A Course from Liberal Arts	2			2	2			50	50	100	
	ME102	Fundamentals of Mechanical Engineering	4	2	0	6	5	30	70	25	25	150	
	EC101	Basics of Electronics Engineering	3	2	0	5	4	30	70	25	25	150	
	CE103	Computer Concepts & Programming	3	4	1	8	5	30	70	50	50	200	
	IT102	ICT Workshop Practices	0	2	0	2	1	30	70	25	25	50	
	CL102.01	Environmental Sciences	2	0	0	2	2	30	70	0	0	100	
		Student Counselling/Self Study				6							
			18	10	2	36	23	150	350	175	175	850	
			4	0	1	5	4	30	70	0	0	100	
FY Sem-2	MA102	Engineering Mathematics-II	2			2	2	25	25	25	25	100	
	HS121A	English Language & Literature	2	2	0	4	3	30	70	25	25	150	
	CL104	Basics of Civil Engineering	2	4	1	7	4	30	70	50	50	200	
	ME101.01	Engineering Graphics	3	4	0	7	5	30	70	50	50	200	
	CE104	Object Oriented Programming with C++	3	2	0	5	4	30	70	25	25	150	
	PY101	Engineering Physics				6							
		Remedial Classes/Make-up Classes/Mentoring	16	12	2	36	22	175	375	175	175	900	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT

Sl. No.	Course Code	Course Title	Teaching Scheme					Examination Scheme				
			Contact Hours			Credit	Total	Theory		Practical		Total
			Theory	Practical	Tutorial			Internal	External	Internal	External	
SY Sem-3	MA207	Discrete Mathematics and Application	4	0	0	4	4	30	70	0	0	100
	IT217	Digital Logic & Design	4	2	1	7	7	30	70	25	25	150
	IT216	Java Programming	2	4	1	7	4	30	70	50	50	200
	EM201.01	Fundamentals of Management	4	0	0	4	4	30	70	0	0	100
	IT210	Data Communication	4	2	1	7	5	30	70	25	25	150
	HS122A	Values and Ethics	2	0	0	2	2	30	70	0	0	100
	IT211	Software Group Project-I	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	3	0	3	0	0	0	0	0	0
			20	13	3	36	25	180	420	125	125	850
	MA206.01	Statistical & Numerical Methods	3	0	1	4	3	30	70	0	0	100
SY Sem-4	IT212	Computer Organization & Microprocessor	3	2	1	6	4	30	70	25	25	150
	IT213	Web Technologies	2	4	0	6	4	30	70	50	50	200
	IT214	Data Structures & Files	3	4	1	8	5	30	70	50	50	200
	IT201.01	Database Management System	3	2	1	6	4	30	70	25	25	150
	HS123	Critical Thinking and Logic	2	0	0	2	2	50	50	0	0	100
	IT215	Software Group Project-II	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			16	16	4	36	23	200	400	175	175	950

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT												
	Course Code	Course Title	Teaching Scheme				Examination Scheme					
			Contact Hours			Credit	Theory		Practical		Total	
			Theory	Practical	Tutorial		Total	Internal	External	Internal		External
TY Sem-5	IT302.02	Design & Analysis of Algorithm	4	2	0	6	5	30	70	25	25	150
	MA301.01	Modelling Simulation & Operation Research	3	0	1	4	3	30	70	0	0	100
	IT314	Operating System Fundamentals	4	4	0	8	6	30	70	50	50	200
	IT303.02	Advanced Database Management System	3	2	1	6	4	30	70	25	25	150
	HS124A	Professional Communication	0	2	0	2	2	0	0	30	70	100
		Elective I	2	4	0	6	4	30	70	50	50	200
	IT318	Software Group Project-III	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			16	18	2	36	25	150	350	205	245	950
TY Sem-6	IT315	Computer Networking	4	2	0	6	5	30	70	25	25	150
	IT319	Capstone Course	4	0	1	5	4	30	70	0	0	100
	IT306.02	Cryptography & Network Security	4	4	0	8	6	30	70	50	50	200
	IT307.02	Software Engineering	3	2	1	6	4	30	70	25	25	150
		Elective II	3	2	0	5	4	30	70	25	25	150
			0	2	0	2	1	0	0	25	25	50
	IT322	Software Group Project-IV	0	2	0	2	2	25	25	25	25	100
	HS125A	Society, Governance and International Studies	0	2	0	2	0	0	0	0	0	0
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			18	16	2	36	26	175	375	175	175	900

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

TEACHING & EXAMINATION SCHEME FOR B TECH PROGRAMME IN IT

V	Course Code	Course Title	Teaching Scheme				Examination Scheme			
			Contact Hours			Credit	Theory			Total
			Theory	Practical	Tutorial		Internal	External	Internal	
Final Year Sem-7	IT415	Data Warehousing & Data Mining	4	2	0	5	30	70	25	150
	IT409	High Performance Computer Architecture	3	2	1	4	30	70	25	150
	IT402	Wireless Communication & Mobile Computing	4	4	1	6	30	70	50	200
	IT410	Enterprise Resource Planning & E-Commerce	3	0	0	3	30	70	0	100
		Elective III	4	2	0	5	30	70	25	150
Final Year Sem-8	IT414	Software Group Project-V	0	2	0	1	0	0	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	0	0	0	0	0
	IT407	Software Project Major	18	14	2	24	150	350	150	800
Final Year Sem-8			0	36	0	20	0	0	250	600
			0	36	0	20	0	0	250	600
			122	135	17	286	1180	2620	1430	6800
Total						188				

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT)

LIST OF ELECTIVE SUBJECTS FOR B TECH PROGRAMME IN IT

ELECTIVES	Code	Elective - I	Code	Elective - II	Code	Elective - III
	IT316	Advanced Java programming	IT320	Service Oriented Architecture	IT405.01	Advanced Computing
	IT317	Advanced Programming using .NET Framework	IT321	Intelligent System	IT412	Image Processing & Multimedia System
	IT313.01	Embedded Systems	IT323	Advanced Operating System	IT404.01	Language Processor

Proposed

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2016)																
TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
Sem	Course Code	Course Title	Teaching Scheme							Examination Scheme						
			Contact Hours				Credit			Theory		Practical/Project		Total		
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
	HS101 A - HS106 A	A Course from Liberal Arts	2			0	2	0	2	2			50	50	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
FY Sem-2		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
			14	12	1		36	14	7	21	120	280	175	175	750	
	MA142	Engineering Mathematics-II	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE142	Object Oriented Programming with C++	4	4	0	0	8	4	2	6	30	70	50	50	200	
	ME144	Elements of Engineering	4	2	1	0	7	4	1	5	30	70	25	25	150	
	PY141	Engineering Physics	3	2	0	0	5	3	1	4	30	70	25	25	150	
FY Sem-2	HS121 A	English Language & Literature	2			0	2	2	0	2	25	25			100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0	9									
			16	9	2	0	36	17	4	21	145	305	125	125	700	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																	
		Teaching Scheme							Examination Scheme								
Course Code	Course Title	Contact Hours						Credit			Theory			Practical/Project		Total	
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External				
SY Sem-3	MA242	Discrete Mathematics & Applications	4	0	0	0	4	4	0	4			30	70	0	0	100
	IT241	Digital Logic & Design	4	2	0	0	6	4	1	5			30	70	25	25	150
	IT242	Java Programming	4	4	0	0	8	4	2	6			30	70	50	50	200
	XXXXXX	University Elective- I	2	0	0	0	2	2	0	2			30	70	0	0	100
	IT243	Data Communication & Networking	4	2	0	0	6	4	1	5			30	70	25	25	150
	HS122A	Values and Ethics	2	0	0	0	2	2	0	2			30	70	0	0	100
	IT244	Software Group Project-I	0	0	0	2	2	0	2	2			0	0	50	50	100
SY Sem-4		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	6			0		0	0	0	0	0	0
			20	14	0	2	36	20	6	26		180	420	150	150	900	
	MA244	Probability, Statistic & Numerical Analysis	4	0	0	0	4	4	0	4		30	70	0	0	100	
	IT245	Computer Organization & Microprocessor	4	2	0	0	6	4	1	5		30	70	25	25	150	
	IT246	Web Technologies	2	4	0	0	6	2	2	4		30	70	50	50	200	
	IT247	Data Structures & Algorithms	4	2	0	0	6	4	1	5		30	70	25	25	150	
	IT248	Database Management System	4	2	0	0	6	4	1	5		30	70	25	25	150	
SY Sem-4	HS123	Critical Thinking and Logic	2	0	0	0	2	2	0	2		30	70	0	0	100	
	XXXXXX	University Elective- II	0	6	0	0	6			0		0	0	0	0	0	
		Assignment Practices/Student Counseling/Remedial Classes	22	16	0	0	38	22	5	27		230	470	125	125	950	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
		Teaching Scheme										Examination Scheme				
Course Code	Course Title	Teaching Scheme										Examination Scheme				
		Contact Hours						Credit				Theory		Practical/Project		Total
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Theory	Practical	Internal	External	Internal	External	
IT341	Design & Analysis of Algorithm	4	2	0	0	6	4	1	5	30	70	25	25	25	25	150
IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	25	25	150
IT343	Operating System Fundamentals	4	2	0	0	6	4	1	5	30	70	25	25	25	25	150
IT344	Computer Networking	4	2	0	0	6	4	1	5	30	70	25	25	25	25	150
HS124A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	70	0	100
	Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	50	50	200
IT345	Software Group Project-II	0	0	0	2	2	0	2	2	0	0	50	50	50	50	100
	Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	4			0	0	0	0	0	0	0	0
		16	18	0	2	36	16	9	25	150	350	230	270	230	270	1000
IT347	Software Engineering	4	2	0	0	6	4	1	5	30	70	25	25	25	25	150
IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	25	25	150
IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	50	50	200
	Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	25	25	150
IT350	Software Group Project-III	0	0	0	2	2	0	2	2	0	0	50	50	50	50	100
HS125A	Society, Governance and International Studies	0	2	0	0	2	0	1	1	25	25	25	25	25	25	100
	Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	6			0	0	0	0	0	0	0	0
		16	18	0	2	36	16	8	24	145	305	200	200	200	200	850

TY
Sem-5

TY
Sem-6

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
			Teaching Scheme						Examination Scheme							
Course Code	Course Title	Teaching Scheme						Examination Scheme								
		Contact Hours				Credit		Theory		Practical/Project		Total				
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External		Internal	External		
Final Year Sem-7	IT441	Data Warehousing & Data Mining	4	2	0	0	6	4	1	5	30	25	25	150		
	IT442	Modeling Simulation & Operation Research	4	0	0	0	4	4	0	4	30	70	0	100		
	IT443	Advanced Database Management System	4	2	0	0	6	4	1	5	30	70	25	150		
	IT444	Capstone Course	4	0	0	0	4	4	0	4	30	70	0	100		
		Elective III	4	2	0	0	6	4	1	5	30	70	25	150		
	IT445	Software Group Project-IV	0	0	0	2	2	0	2	2	0	0	50	100		
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	100		
	Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	6			0	0	0	0	0			
			20	12	0	5	37	20	8	28	150	350	175	850		
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
		Total	124	135	3	11	291	125	67	192	1120	2480	1430	1570	6600	

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES				Programme Elective - I				Programme Elective - II				Programme Elective - III			
Code	IT371	IT372	IT373	IT374	Code	IT375	IT376	IT377	IT378	Code	IT471	IT472	IT473	IT474	Code
	Advanced Java programming	Advanced Programming using .NET Framework	Embedded Systems	Operating System Administration		Internet of Things	Intelligent System	Advanced Operating System	Language Processor		Advanced Computing	Image Processing & Multimedia System	Data Compression	Enterprise Resource Planning & Ecommerce	

Revised

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2016)																
TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
Sem	Course Code	Course Title	Teaching Scheme						Examination Scheme						Total	
			Contact Hours				Credit		Theory		Practical/Project					
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
	HS101 A - HS106 A	A Course from Liberal Arts	2		0		2	0	2	2			50	50	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
FY Sem-2	MA142	Engineering Mathematics-II	14	12	1		36	14	7	21	120	280	175	175	750	
	CE142	Object Oriented Programming with C++	4	0	1	0	5	4	0	4	30	70	0	0	100	
	ME144	Elements of Engineering	4	4	0	0	8	4	2	6	30	70	50	50	200	
	PY141	Engineering Physics	4	2	1	0	7	4	1	5	30	70	25	25	150	
	HS121 A	English Language & Literature	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &	2		0		2	2	0	2	25	25	25	25	100	
						0	9									
			16	9	2	0	36	17	4	21	145	305	125	125	700	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
			Teaching Scheme							Examination Scheme						
Course Code	Course Title		Teaching Scheme						Examination Scheme							
			Contact Hours				Credit	Theory			Practical/Project			Total		
			Theory	Practical	Tutorial	Project		Total	Theory	Practical	Total	Internal	External		Internal	External
MA242	Discrete Mathematics		4	0	0	0	4	4	0	4	30	70	0	0	100	
IT241	Digital Electronics		4	2	0	0	6	4	1	5	30	70	25	25	150	
IT242	Java Programming		4	4	0	0	8	4	2	6	30	70	50	50	200	
XXXXXX	University Elective- I		2	0	0	0	2	2	0	2	30	70	0	0	100	
IT243	Data Communication		4	2	0	0	6	4	1	5	30	70	25	25	150	
HS122A	Values and Ethics		2	0	0	0	2	2	0	2	30	70	0	0	100	
IT244	Software Group Project-I		0	0	0	4	4	0	2	2	0	0	50	50	100	
	Assignment Practices/Student Counseling/Remedial Classes		0	6	0	0	4			0	0	0	0	0	0	
			20	14	0	4	36	20	6	26	180	420	150	150	900	
MA244	Probability & Statistic		4	0	0	0	4	4	0	4	30	70	0	0	100	
IT245	Computer Organization & Microprocessor Interfacing		4	2	0	0	6	4	1	5	30	70	25	25	150	
IT246	Web Engineering		2	4	0	0	6	2	2	4	30	70	50	50	200	
IT247	Data Structures & Algorithms		4	2	0	0	6	4	1	5	30	70	25	25	150	
IT248	Database Management System		4	2	0	0	6	4	1	5	30	70	25	25	150	
HS123	Critical Thinking and Logic		2	0	0	0	2	2	0	2	50	50	0	0	100	
XXXXXX	University Elective- II		2	0	0	0	2	2	0	2	30	70	0	0	100	
	Assignment Practices/Student Counseling/Remedial Classes		0	6	0	0	4			0	0	0	0	0	0	
			22	16	0	0	36	22	5	27	230	470	125	125	950	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																				
	Course Code	Course Title	Teaching Scheme						Examination Scheme											
			Teaching Scheme						Examination Scheme											
			Contact Hours						Credit				Theory				Practical/Project			
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	Internal	External	Total			
TY Sem-5	IT341	Design & Analysis of Algorithm	4	2	0	0	6	4	1	5	30	70	25	25	150					
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150					
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150					
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150					
	HS124A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100					
TY Sem-6		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200					
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100					
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0					
	IT347	Software Engineering	16	18	0	4	36	16	9	25	150	350	230	270	1000					
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150					
TY Sem-6	IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	200					
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150					
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100					
	HS125A	Society, Governance and International Studies	0	2	0	0	2	0	1	1	25	25	25	25	100					
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0					
			16	18	0	4	36	16	8	24	145	305	200	200	850					

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
	Course Code	Course Title	Teaching Scheme						Examination Scheme							
			Teaching Scheme						Examination Scheme							
			Contact Hours						Credit				Theory			
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	Total	
Final Year Sem-7	IT441	Data Warehousing & Data Mining	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	High Performance Computer Architecture	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT443	Advanced Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
Final Year Sem-8		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1			0	0	0	0	0	0	
			18	16	0	7	36	18	10	28	150	350	225	225	950	
	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
Total			122	139	3	19	288	123	69	192	1120	2480	1480	1620	6700	

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES			Programme Elective - II			Programme Elective - III		
Code	Programme Elective - I	Code	Parallel and Distributed Systems			Cloud Computing		
IT371	Advanced Java programming	IT375						
IT372	Advanced Programming using .NET Framework	IT376	Automata Theory & Compiler Design			Multimedia Communication		
IT373	Embedded Systems	IT377	Advanced Operating System			Intelligent System		

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Teaching Scheme			Examination Scheme				
			Contact Hours			Credit	Theory		Practical	
			Theory	Practical	Total		Internal	External	Internal	External
FY Sem I	IT741	Algorithms & Computational Complexity	3	2	5	4	30	70	25	25
	IT742	Advanced Computer Network	3	2	5	4	30	70	25	25
	IT743	High Performance Computing	3	4	7	5	30	70	50	50
		Programme Elective-I	3	2	5	4	30	70	25	25
		Programme Cluster Elective-I	3	2	5	4	30	70	25	25
	HS701A	University Core-I Advance Critical Thinking & Logic	2	0	2	2	30	70	0	0
		University Elective-I	2	0	2	2	30	70	0	0
FY Sem II			19	12	31	25	210	490	150	150
	IT744	Information and Network Security	3	4	7	5	30	70	50	50
	IT745	Data Science & Modelling	3	2	5	4	30	70	25	25
	IT746	Computational Intelligence	3	2	5	4	30	70	25	25
		Programme Elective-II	3	2	5	4	30	70	25	25
		Programme Cluster Elective-II	3	2	5	4	30	70	25	25
	HS702A	University Core-II Academic Writing and Communication Skills	0	2	2	2	0	0	30	70
		University Elective-II	2	0	2	2	30	70	0	0
			17	14	31	25	180	420	180	220

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Credit	Examination Scheme					Total
				Internal		External			
				Progress Report	Progress Seminar	Report	Seminar	Viva -voce	
SY Sem III	IT811	Project Preliminaries	4	50	50	0	50	50	200
	IT812	Project Phase-I	18	100	100	100	100	100	500
			22	150	150	100	150	150	700
SY Sem IV	IT813	Project Phase-II	30	200	200	200	200	200	1000
			30	200	200	200	200	200	1000
			102	400	740	1210	680	720	3700
Total				36	26				
	Course Code	Semester 1 (Programme Elective I)	Course Code	Semester 2 (Programme Elective II)					
	IT761	Advanced Operating System	IT764	Web Services & Service Oriented Computing					
	IT762	Information Storage and Retrieval	IT765	Internet of things					
	IT763	Language Processor	IT766	Cloud Computing					
	Course Code	Semester 1 (Programme Cluster Elective I)	Course Code	Semester 2 (Programme Cluster Elective II)					
	IT767	Micro Device Programming	IT768	Applied Cryptography					
	EC767	Embedded System Design	EC768	Digital Image & Speech Processing					
	CE767	Operating System Design & Concepts	CE768	Software Project Management & Quality Assurance					
	EE771	Digital Signal Processing & its Applications	EE772	Restructuring and Deregulation of Power Systems					

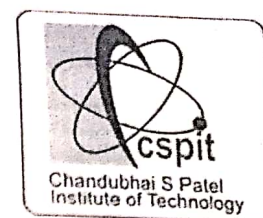
CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Course Code	Semester 1 (University Elective I)	Course Code	Semester 2 (University Elective II)
MA771	Reliability and Risk Analysis	EE782	Energy Audit and Management
EE781	Optimization Techniques	CE771	Project Management
ME781	Occupational Health and Safety	IT771	Cyber Security and Laws
CE772	Research Methodology	CA842	Mobile Application Development
CA730	Internet and Web Designing	PT796	Fitness and Nutrition
PT795	Health and Physical Activity	NR752	Epidemiology and Community Health
NR751	Women's Health	OC733	Introduction to Polymer Science
RD701	Introduction to Analytical Techniques	MB651	Software based Statistical Analysis
RD702	Introduction to Nanoscience and Technology	PH826	Intellectual Property Rights
MB650	Creative Leadership	MA772	Design of Experiments
PH825	Community Pharmacy Ownership		

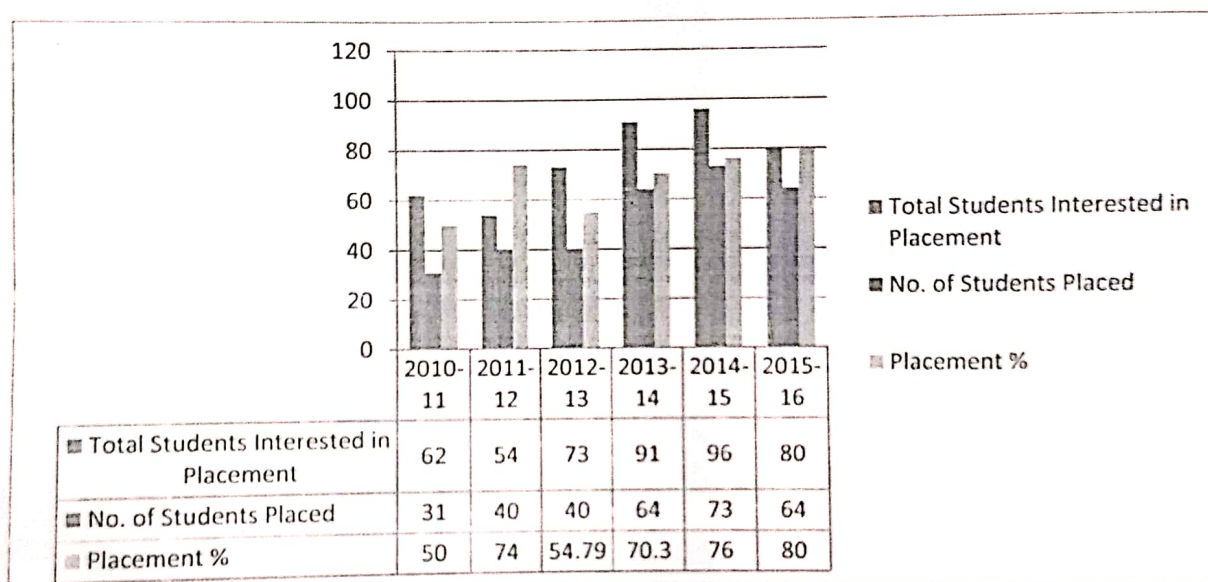


**CHARUSAT
CSPIT**
Department of Information Technology

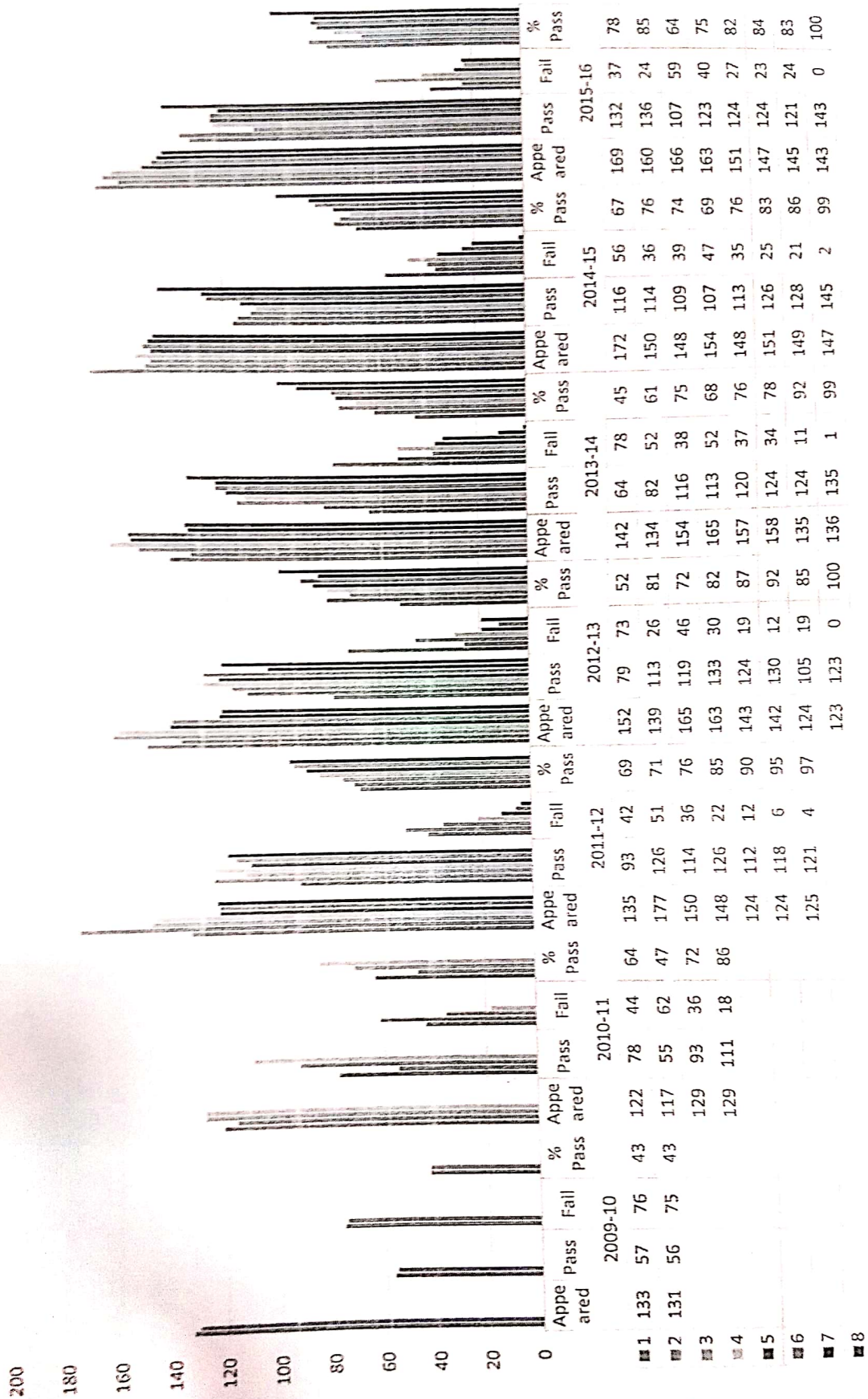


Summary of Placement Record

Placement Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
No. Companies Visited	49	34	14	33	46	31
Highest Package	5.22	5.5	5	3.5	9	3.33
Lowest Package	1.8	1.8	1.2	1	1	0.96
Average Package	2.4	2.5	2	2.02	3	2.1
Total Students Interested in Placement	62	54	73	91	96	80
No. of Students Placed	31	40	40	64	73	64
Placement %	50	74	54.79	70.3	76	80



IT Department Result Analysis



1 2 3 4 5 6 7 8

Minutes – 13th Meeting of Board of studies of Department of Information Technology

Date : August 26, 2017, Saturday

Time : 10:00 am

Venue : Conference Room, Building-II, CSPIT, CHARUSAT Campus

The 13th meeting of the Board of studies, Department of Information Technology, FTE, Charotar University of Science & Technology (CHARUSAT) was held on 26th August, 2017 at 10:00 a.m. onwards at conference room (CE/IT), CSPIT, CHARUSAT campus.

Following BOS members were remained present:

1.	Prof. Parth Shah	Chairman	HOD, IT Dept
2.	Dr. Amit Ganatra	Member	Dean, Faculty of Tech & Engg
3.	Dr. Ketan Kotecha	External	VC, Parul University
4.	Prof. B. V. Buddhadev	External	Head, Dept of CE, GEC-28
5.	Prof. M T Savaliya	External	Head, CE Dept., VGEC, Chandkheda
6.	Dr. Sanjay Chaudhary	External	Dean, Research, Ahmedabad University
7.	Mr. Roshan Shah	External	Technical Evangelist, Cybage, Pune
8.	Mr Nikunj Patel	External	Senior Vice President, Cape Gemini, Gandhinagar
9.	Prof. Amit Thakkar	Member	Asso. Prof.
10.	Mr. Amit Nayak	Member	Asst. Prof.
11.	Mr. Nirav Bhatt	Member	Asst. Prof.
12.	Ms. Purvi Prajapati	Member	Asst. Prof.
13.	Ms. Ayesha Shaikh	Member	Asst. Prof.
14.	Mr. Bimal Patel	Member	Asst. Prof.

Initiation:

Head of the Department of Information Technology, Prof. Parth Shah welcomed all the members of Board of Studies to the 13th meeting. He briefed the overall activities carried out by the department during last year.

Agenda Proceedings & Resolutions:-

Item 13.01: For Discussion and Approval;

To approve the teaching scheme for all the semesters of B Tech CBCS courses effective from 2016.

Proceedings 13.01:

Dean FTE had requested to the chairman BoS of humanities department to introduce and update existing courses related to B Tech students. Existing offered courses to the B Tech students along with the proposed courses are given below (refer annexure I for old courses and annexure II for new courses):

Program	Semester	Old Course	New Course
B Tech	I	A Course from Liberal Arts	HS Elective-I
	II	English Language & Literature	Communication Skills – I
	III	Values and Ethics	HS Elective-II
	IV	Critical Thinking and Logic	HS Elective-III
	V	Professional Communication	Professional Communication
	VI	Society, Governance and International Studies	HS Elective-IV

Resolutions 13.01:

Suggestions given by the members have been agreed and approved as per annexure II.

Item 13.02: For Discussion and Approval;

To approve the Teaching scheme and detailed syllabus for 3rd year (5th and 6th semester) CBCS B Tech courses.

Proceedings 13.02:

- Department had collected feedback from industry/academic experts, students and faculty members. Based on those feedback, few changes have been proposed in the teaching and examination schemes along with detail syllabi.
- Members have suggested change in nomenclature of Design & Analysis of Algorithm to Design & Analysis of Algorithms in semester-V.
- Members have suggested to offer Operating System fundamentals and operating system internals as a single course in semester-V.
- Members have suggested change in nomenclature of Advanced Programming using .NET Framework to Programming using .NET Framework as an elective course in semester-V.

- Members have suggested that course on Machine Learning should be combined offered as Intelligent System such that it should include contents of Artificial Intelligence and Machine Learning in semester-VI.
- Members have suggested to introduce summer internship for the 5th semester student to get the awareness about working of industries.

Resolutions 13.02:

Suggestions given by the members have been agreed and approved as per annexure II.

Item 13.03: For Discussion and Approval;

Any change in PG Syllabus of CBCS courses

Proceedings 13.03:

Dean FTE has requested to the chairman BoS of humanities department to introduce and update existing coursed related to M Tech students. Existing offered courses to the M Tech students along with the proposed courses are given below (refer annexure III and IV for old courses and new courses respectively):

Program	Semester	Existing Course	New Course
M Tech	I	Advance Critical Thinking & Logic	Advance Critical Thinking & Logic Languages (French/ German) Academic Speaking
	II	Academic Writing and Communication Skills	Academic Writing

Resolutions 13.03:

Suggestions given by the members have been agreed and approved as per annexure IV.

Item 13.04: For Discussion and Approval;

Preparation, Discussion and approval for the Elective Courses (University, Institute, Program and Program Electives)

Proceedings 13.04:

As per directives of the university and CBCS norms, various departments and institutes have been requested to offer the courses as a University Elective. The list of the courses offered by various department/institute is given in annexure

Resolutions 13.04:

Members have approved the courses and wished the success for the same as per annexure V.

Item 13.05: For Discussion and Approval;

Additional item(s) other than syllabus to be reviewed during BOS:

Review of University Exam Question Papers (Quality of Question Papers), Experiment Lists, Examiners' Panel, Placement Records and Result Analysis of Academic Year plus Analysis of Semester Results, Reg. Innovation in Pedagogy, World Class Universities, Outcome Based Education (OBE), Research (Publications, Proposals and Grants), Funding Agencies, Reg. NBA Accreditation Status, NAAC Accreditation of the University, Going for International Accreditation, Project works, Panel of Ph D Supervisors, Synopsis submission if any and its Approval, Approval of Reviewer's (Examiners) Panel, Feedback from Students, Identification of Slow Learners, Students Counselling, Quality of Inputs (Admission Scenario), Remedial Coaching, Quality of M Tech Dissertations, Industry Exposure, Responsible University etc. or any other additional items.

Proceedings 13.05:

Members have reviewed the information and data related to the Item.

Resolutions 13.05:

Members have appreciated effort taken by the department to strengthen each and every activity.

Annexure I

(Agenda – I & II)

Existing Teaching & Examination Schemes

for

**B Tech
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2016)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

Sem	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
	HS101 A - HS106 A	A Course from Liberal Arts	2			0	2	0	2	2			50	50	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
			14	12	1		36	14	7	21	120	280	175	175	750	
FY Sem-2	MA142	Engineering Mathematics-II	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE142	Object Oriented Programming with C++	4	4	0	0	8	4	2	6	30	70	50	50	200	
	ME144	Elements of Engineering	4	2	1	0	7	4	1	5	30	70	25	25	150	
	PY141	Engineering Physics	3	2	0	0	5	3	1	4	30	70	25	25	150	
	HS121 A	English Language & Literature	2			0	2	2	0	2	25	25	25	25	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0	9									
			16	9	2	0	36	17	4	21	145	305	125	125	700	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT															
			Teaching Scheme								Examination Scheme				
			Teaching Scheme								Examination Scheme				
	Course Code	Course Title	Contact Hours					Credit			Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	
SY Sem-3	MA242	Discrete Mathematics	4	0	0	0	4	4	0	4	30	70	0	0	100
	IT241	Digital Electronics	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT242	Java Programming	4	4	0	0	8	4	2	6	30	70	50	50	200
	XXXXX	University Elective- I	2	0	0	0	2	2	0	2	30	70	0	0	100
	IT243	Data Communication	4	2	0	0	6	4	1	5	30	70	25	25	150
	HS122A	Values and Ethics	2	0	0	0	2	2	0	2	30	70	0	0	100
	IT244	Software Group Project-I	0	0	0	4	4	0	2	2	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0
			20	14	0	4	36	20	6	26	180	420	150	150	900
SY Sem-4	MA244	Probability and Numerical Techniques	4	0	0	0	4	4	0	4	30	70	0	0	100
	IT245	Computer Organization & Microprocessor Interfacing	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT246	Web Engineering	2	4	0	0	6	2	2	4	30	70	50	50	200
	IT247	Data Structures & Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT248	Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150
	HS123	Critical Thinking and Logic	2	0	0	0	2	2	0	2	30	50	0	0	100
	XXXXX	University Elective- II	2	0	0	0	2	2	0	2	30	70	0	0	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0
			22	16	0	0	36	22	5	27	230	470	125	125	950

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT															
			Teaching Scheme								Examination Scheme				
			Teaching Scheme								Examination Scheme				
	Course Code	Course Title	Contact Hours					Credit			Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	
TY Sem-5	IT341	Design & Analysis of Algorithm	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150
	HS124A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100
		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100
	IT346	Summer Internship-I	0	0	0	3	3	0	3	3	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0
			16	18	0	7	39	16	12	28	150	350	280	320	1100
TY Sem-6	IT347	Software Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	200
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100
	HS125A	Society, Governance and International Studies	0	2	0	0	2	0	1	1	25	25	25	25	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0
			16	18	0	4	36	16	8	24	145	305	200	200	850

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT															
			Teaching Scheme								Examination Scheme				
	Course Code	Course Title	Teaching Scheme								Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	
Final Year Sem-7	IT441	Data Warehousing & Data Mining	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT442	High Performance Computer Architecture	3	2	0	0	5	3	1	4	30	70	25	25	150
	IT443	Advanced Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1			0	0	0	0	0	0
			18	16	0	7	36	18	10	28	150	350	225	225	950
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600
			0	36	0	0	36	0	20	20	0	0	250	350	600
Total			122	139	3	22	191	123	72	195	1120	2480	1530	1670	6800
LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT															
ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II						Code	Programme Elective - III				
	IT371	Advanced Java programming	IT375	Advanced Computing						IT471	Python Programming				
	IT372	Advanced Programming using .NET Framework	IT376	Language Processors						IT472	Image Processing				
	IT373	Embedded Systems	IT377	Machine Learning						IT473	Big Data Analytics				

Annexure II

(Agenda – I & II)

Approved Teaching & Examination Schemes

for

**B Tech
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

Sem	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
		HS Elective-I	2			0	2	0	2	2			30	70	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
			14	12	1		36	14	7	21	120	280	155	195	750	
FY Sem-2	MA142	Engineering Mathematics-II	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE142	Object Oriented Programming with C++	4	4	0	0	8	4	2	6	30	70	50	50	200	
	ME144	Elements of Engineering	4	2	1	0	7	4	1	5	30	70	25	25	150	
	PY141	Engineering Physics	3	2	0	0	5	3	1	4	30	70	25	25	150	
	HS126.01 A	Communication Skills – I	2			0	2	2	0	2	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0	9									
			16	9	2	0	36	17	4	21	150	350	100	100	700	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
SY Sem-3	MA242	Discrete Mathematics	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT241	Digital Electronics	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT242	Java Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	XXXXX	University Elective- I	2	0	0	0	2	2	0	2	30	70	0	0	100	
	IT243	Data Communication	4	2	0	0	6	4	1	5	30	70	25	25	150	
		HS Elective-II	2	0	0	0	2	2	0	2	30	70	0	0	100	
	IT244	Software Group Project-I	0	0	0	4	4	0	2	2	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
			20	14	0	4	36	20	6	26	180	420	150	150	900	
SY Sem-4	MA244	Probability and Numerical Techniques	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT245	Computer Organization & Microprocessor Interfacing	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT246	Web Engineering	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT247	Data Structures & Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT248	Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150	
		HS Elective-III	2	0	0	0	2	2	0	2	30	70	0	0	100	
	XXXXX	University Elective- II	2	0	0	0	2	2	0	2	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
			22	16	0	0	36	22	5	27	210	490	125	125	950	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
TY Sem-5	IT341	Design & Analysis of Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150	
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150	
	HS124.01A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100	
		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT346	Summer Internship-I	0	0	0	3	3	0	3	3	0	0	75	75	150	
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0	
		16	18	0	7	39	16	12	28	150	350	305	345	1150		
TY Sem-6	IT347	Software Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	200	
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100	
		HS Elective-IV	0	2	0	0	2	0	1	1	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
		16	18	0	4	36	16	8	24	150	350	175	175	850		

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
Final Year Sem-7	IT441	Big Data Analytics	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	High Performance Computer Architecture	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT443	Service Oriented Architecture	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1			0	0	0	0	0	0	
			18	16	0	7	36	18	10	28	150	350	225	225	950	
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
Total			122	139	3	22	291	123	72	195	1110	2590	1485	1665	6850	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
	IT371	Advanced Java programming	IT375	Advanced Computing	IT471	Python Programming
	IT372	Programming using .NET Framework	IT376	Language Processors	IT472	Image Processing
	IT373	Embedded Systems	IT377	Intelligent System	IT473	Cyber Security & Laws

HS Elective - I

HS101.01 A - Painting

HS102.01 A - Photography

HS103.01 A - Sculpting

HS104.01 A - Pottery and Ceramic Arts

HS105.01 A - Media and Graphic Design

HS106.01 A - Art and Craft

HS107.01 A - Fashion Designing

HS108.01 A - Interior Designing

HS109.01 A - Dramatics

HS110.01 A - Contemporary Dance

HS132 A - Academic English

HS Elective - II

HS122 A - Values and Ethics

HS131 A - Philosophy

HS Elective - III

HS123.01 A - Critical Thinking and Logic

HS127.01 A - Communication Skills - II

HS133 A - Creativity, Problem Solving and Innovation

HS Elective - IV

HS125.01 A - Society, Governance and International Studies

HS130 A - Law & Justice

HS134 A - Contributor Personality Development

Annexure III

(Agenda - III)

Proposed Teaching & Examination Scheme

for

**M Tech
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Teaching Scheme				Examination Scheme				
			Contact Hours			Credit	Theory		Practical		Total
			Theory	Practical	Total		Internal	External	Internal	External	
FY Sem I	IT741	Algorithms & Computational Complexity	3	2	5	4	30	70	25	25	150
	IT742	Advanced Computer Network	3	2	5	4	30	70	25	25	150
	IT743	High Performance Computing	3	4	7	5	30	70	50	50	200
		Programme Elective-I (PE-I)	3	2	5	4	30	70	25	25	150
		Cluster Elective-I (CT-I)	3	2	5	4	30	70	25	25	150
	HS701	University Core-I Advance Critical Thinking & Logic (UC-I)	2	0	2	2	30	70	0	0	100
		Institute Elective-I (IE-I)	2	0	2	2	30	70	0	0	100
			19	12	31	25	210	490	150	150	1000
FY Sem II	IT744	Information and Network Security	3	4	7	5	30	70	50	50	200
	IT745	Data Science & Modelling	3	2	5	4	30	70	25	25	150
	IT746	Computational Intelligence	3	2	5	4	30	70	25	25	150
		Programme Elective-II (PE-II)	3	2	5	4	30	70	25	25	150
		Cluster Elective-II (CT-II)	3	2	5	4	30	70	25	25	150
	HS702	University Core-II Academic Writing and Communication Skills (UC-II)	2	0	2	2	0	0	30	70	100
		Institute Elective-II (IE-II)	2	0	2	2	30	70	0	0	100
			19	12	31	25	180	420	180	220	1000

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY										
TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY										
Sem	Course Code	Course Title	Teaching Scheme			Examination Scheme				
			Contact Hours			Credit	Theory		Practical	
			Theory	Practical	Total		Internal	External	Internal	External
Sem	Course Code	Course Title			Credit	Examination Scheme				
						Internal		External		
						Progress Report	Progress Seminar	Report	Seminar	Viva -voce
SY Sem III	IT811	Project Preliminaries			4	50	50	0	50	50
	IT812	Project Phase-I			18	100	100	100	100	100
					22					700
SY Sem IV	IT813	Project Phase-II			30	200	200	200	200	200
					30					1000
Total			38	24	102	60	390	910	330	370
	Semester 1 (Programme Elective I)		Semester 2 (Programme Elective II)		Cluster Electives offered by the Departments					Sem
	IT761	Advanced Operating System	IT764	Web Services & Service Oriented Computing	IT767	Micro Device Programming				I
	IT762	Information Storage and Retrieval	IT765	Internet of things	IT768	Applied Cryptography				II
	IT763	Language Processor	IT766	Cloud Computing	EC767	Embedded System Design				I
					EC768	Digital Image & Speech Processing				II
	Semester 1 (Institute Elective I)		Semester 2 (Institute Elective II)		CE767	Operating System Design & Concepts				I
	MA771	Reliability and Risk Analysis	EE782	Energy Audit and Management	CE768	Software Project Management & Quality Assurance				II
	EE781	Optimization Techniques	CE771	Project Management	EE771	Digital Signal Processing & its Applications				I
	ME781	Occupational Health & Safety	IT771	Cyber Security and Laws	EE772	Restructuring and Deregulation of Power Systems				II

Annexure IV

(Agenda - III)

Approved Teaching & Examination Scheme

for

**M Tech
Information technology**

**Effective From
(CHARUSAT 2017 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Teaching Scheme				Examination Scheme				
			Contact Hours			Credit	Theory		Practical		Total
			Theory	Practical	Total		Internal	External	Internal	External	
FY Sem I	IT741	Algorithms & Computational Complexity	3	2	5	4	30	70	25	25	150
	IT742	Advanced Computer Network	3	2	5	4	30	70	25	25	150
	IT743	High Performance Computing	3	4	7	5	30	70	50	50	200
		Programme Elective-I	3	2	5	4	30	70	25	25	150
		Programme Cluster Elective-I	3	2	5	4	30	70	25	25	150
	HS	HS701A - Advance Critical Thinking & Logic	2	0	2	2	30	70	0	0	100
		HS703.01A - Languages (French/ German)	0	2	2	2	0	0	30	70	100
		HS704A -Academic Speaking	0	2	2	2	0	0	30	70	100
		University Elective-I	2	0	2	2	30	70	0	0	100
			19	16	35	29	210	490	210	290	1200
FY Sem II	IT744	Information and Network Security	3	4	7	5	30	70	50	50	200
	IT745	Data Science & Modelling	3	2	5	4	30	70	25	25	150
	IT746	Computational Intelligence	3	2	5	4	30	70	25	25	150
		Programme Elective-II	3	2	5	4	30	70	25	25	150
		Programme Cluster Elective-II	3	2	5	4	30	70	25	25	150
	HS	HS705 A - Academic Writing	0	2	2	2	0	0	30	70	100
		University Elective-II	2	0	2	2	30	70	0	0	100
			17	14	31	25	180	420	180	220	1000

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title			Credit	Examination Scheme					Total
						Internal		External			
						Progress Report	Progress Seminar	Report	Seminar	Viva -voce	
SY Sem III	IT811	Project Preliminaries			4	50	50	0	50	50	200
	IT812	Project Phase-I			18	100	100	100	100	100	500
					22	150	150	100	150	150	700
SY Sem IV	IT813	Project Phase-II			30	200	200	200	200	200	1000
			30	200	200	200	200	200	1000		
Total			36	30	106	404	740	1210	740	860	3900

Course Code	Semester 1 (Programme Elective I)	Course Code	Semester 2 (Programme Elective II)
IT761	Advanced Operating System	IT764	Web Services & Service Oriented Computing
IT762	Information Storage and Retrieval	IT765	Internet of things
IT763	Language Processor	IT766	Cloud Computing
Course Code	Semester 1 (Programme Cluster Elective I)	Course Code	Semester 2 (Programme Cluster Elective II)
IT767	Micro Device Programming	IT768	Applied Cryptography
EC767	Embedded System Design	EC768	Digital Image & Speech Processing
CE767	Operating System Design & Concepts	CE768	Software Project Management & Quality Assurance
EE771	Digital Signal Processing & its Applications	EE772	Restructuring and Deregulation of Power Systems

Annexure V

(Agenda - IV)

Approved list of university elective courses

for

B Tech

Information technology

Effective From

(CHARUSAT 2016 Admitted Batch)

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

List of University Elective Courses under

Choice Based Credit System

Second Year Undergraduate Programme

(Effective From Academic year 2017-18)

Sr. No.	Course Code & Course Name	Department / Faculty offering the Course	Semester in which the course to be offered / Remarks
1	EC281: Introduction to MATLAB Programming	EC / FTE	3
2	EC282: Prototyping Electronics with Arduino		4
3	CE281: Art of Programming	CE / FTE	3
4	CE282: Web Designing		4
5	CL281: Environmental Sustainability and Climate Change	CL / FTE	3
6	CL282: Basics of Environmental Impact Assessment		4
7	EE281: Electrical Engineering Materials	EE/FTE	3
8	EE282: Electrical Power Utilization		4
9	IT281: ICT Resources and Multimedia	IT/FTE	3
10	IT282: Internet Technology and Web Design		4
11	ME281: Engineering Drawing	ME/FTE	3
12	ME282: Material Science		4
13	PH233: Fundamentals of Packaging	RPCP/FPH	3
14	PH238: Cosmetics in daily life		4
15	PD260: Basic Laboratory Techniques	PDPIAS/FAS	Semester 3 is submitted; Semester 4 is pending.
16	NR251: First Aid & Life Support	NURSING / FMD	3
17	NR261: Life Style Diseases & Management		4
18	PT191: Health Promotion and Fitness	ARIP / FMD	3
19	PT192: Occupational Health & Ergonomics		4
20	CA224: Introduction to Web Designing	CMPICA / FCA	3
21	CA225: Programming the Internet		4
20	BM231: Banking and Insurance	I2IM / FMS	3
21	BM241: Health Care Management		4



CHARUSAT
CSPIT

Smt. Kundanben Dinsha Patel

Department of Information Technology



Annexure-1

A Report on

Report on Blogging Basics: Developing Blog

Skills Workshop

under Eager Beavers Club

05-03-2020

Index

1. Event Details with Brochure & Schedule
2. Expert Profile
3. About Event (At least one paragraph)
4. Event Photograph
5. List of Participant
6. Certificate copy
7. Fund proof (Account Ledger)
8. Other supporting Documents (If any)

1. Event Brochure



EAGER BEAVERS

— Never Be Complacent Of Learning —

Extra Curricular Club

Initiated By

Smt. Kundanben Dinsha Patel Department Of Information Technology

Presents

A One Day Workshop on

Blogging Basics:

Developing Blog Skills

Vishal Ahuja

Shalvi Desai

Vasu Gamdha

Student Co-ordinators

Dr. Tarun Patel

Mentor

Date of the Event: 05/03/2020

2. Expert Details

MR. TARUNKUMAR PATEL

DESIGNATION: ASSISTANT PROFESSOR

QUALIFICATION: M.A., B.ED., M.PHIL., PH.D.

EXPERIENCE: 9 YEARS

AREA OF INTEREST: ENGLISH LANGUAGE TEACHING, COMMUNICATION

3. About The Event

The students and teachers of Chandubhai Institute of Science and Technology, Charusat, Changa came up with a non-technical club called EagerBeavers. The soul purpose of the club was to teach college students extracurricular skills to help them improve, holistically. After the inauguration, the first event of blogging started in full gear. Relevant to the workshop, the organizers and volunteers came up with a game called Spelling Bee for the participants, which they thoroughly enjoyed. After that, Dr. Tarun Patel, the speaker of the event, tried and explained the A to Z of what blogging is. He made an intricate presentation, covering all the points and also answered questions that came his way. He showed us some famous blogs as well as bloggers for inspiring us. He explained to us as to why a person should blog and in which situations he can begin blogging.

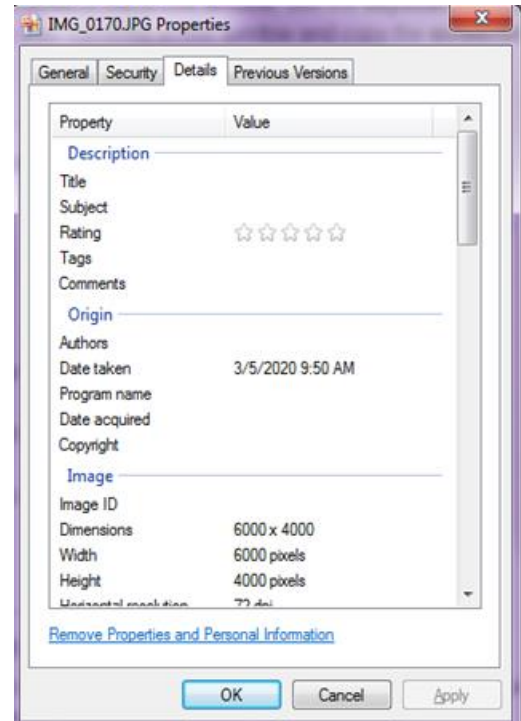
The second part of the event was about participants creating their own blogs. Participants were divided into a group of 4 or 5 and were given a plain white sheet and some sketch pens. They were asked to discuss among each other and pen down some ideas. The organizers came up with a lot of topics they could blog on and asked the participants to choose one or come up with their own topic.

All the students thoroughly enjoyed the process and respected Dr. Tarun even came up to check up on the progress of every group personally. At the end of the session, Dr. Tarun discussed some of the eye-catching and interesting titles, topics and contents he liked, and shared it with everyone. This way, the workshop ended successfully and students walked away with abundance of knowledge towards their home. At the very end, a small cake-cutting ceremony with our chief guest/speaker Dr. Tarun, Amit Parmar sir, the organizing team and the volunteers, was held to mark the success of the event. After all, a good beginning lasts a lifetime!

4. Event Photograph

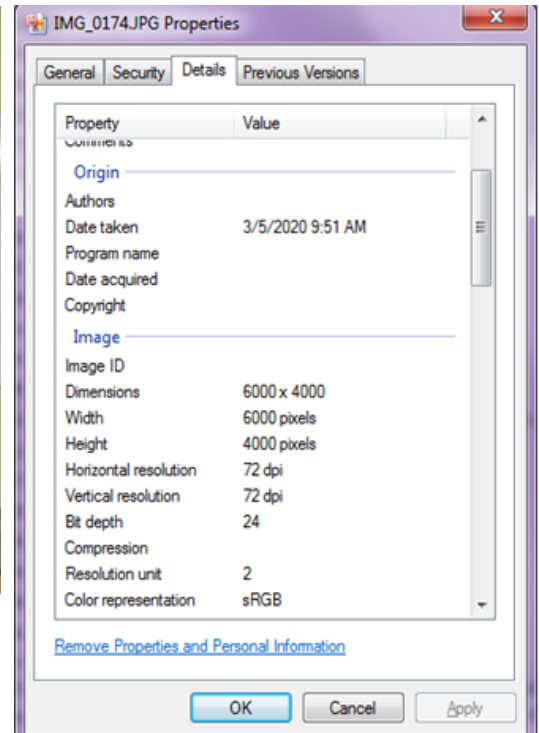


Blogging Basics: Developing Blog

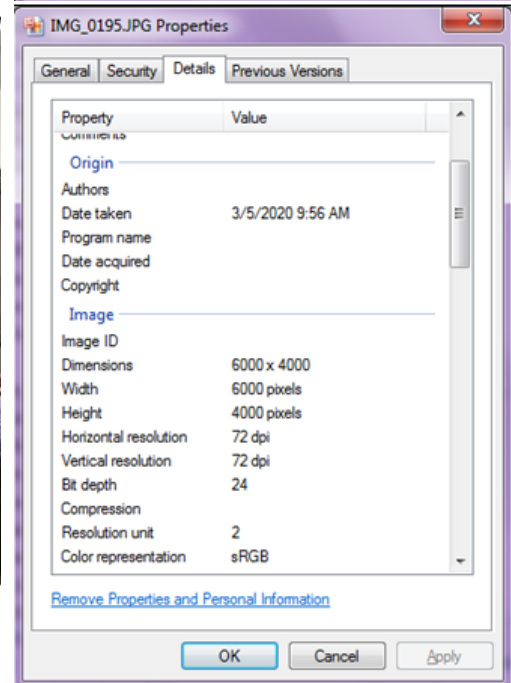




Blogging Basics: Developing Blog

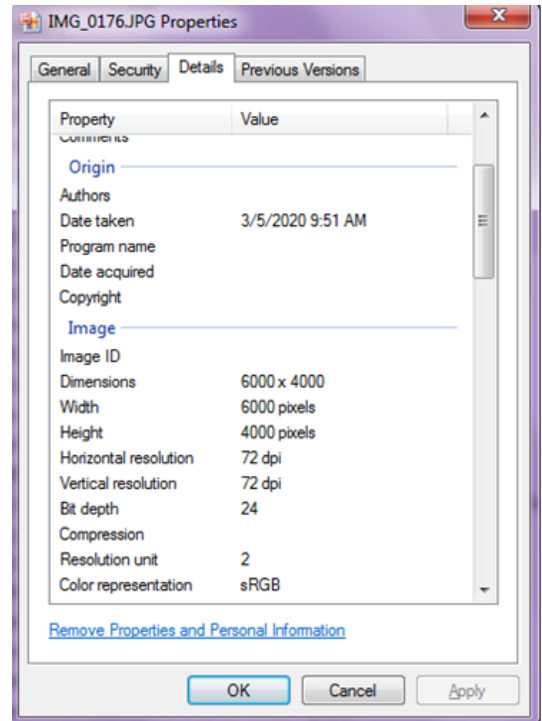


Blogging Basics: Developing Blog

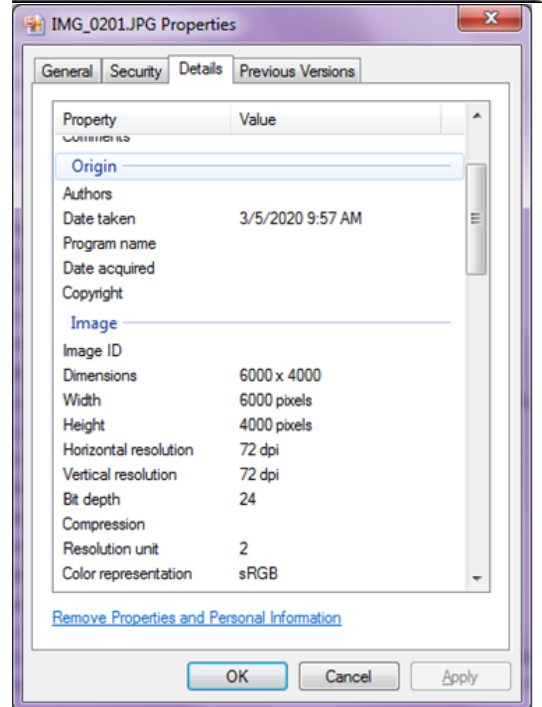




Blogging Basics: Developing Blog

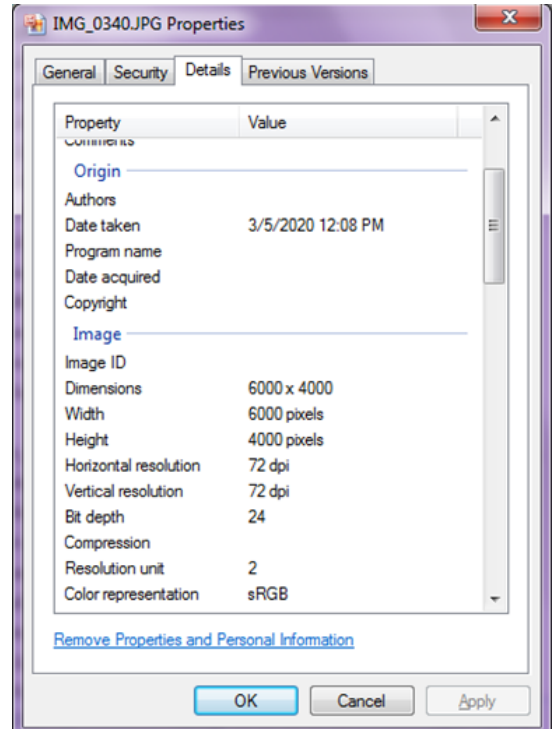


Blogging Basics: Developing Blog

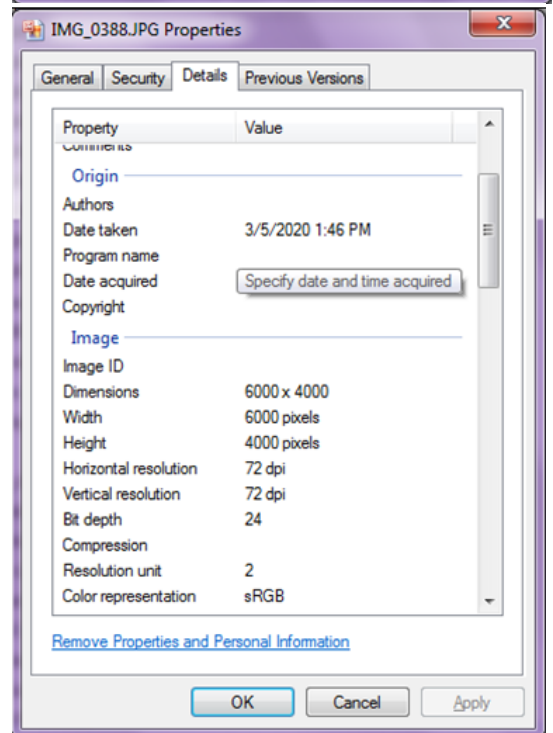




Blogging Basics: Developing Blog



Blogging Basics: Developing Blog



1. List of Participant

Total No. of Participants: 68

Sr. No.	ID No.	Email Id
1	17IT002	17IT002@charusat.edu.in
2	17IT004	17IT004@charusat.edu.in
3	17IT005	17IT005@charusat.edu.in
4	17IT019	17IT019@charusat.edu.in
5	17IT026	17IT026@charusat.edu.in
6	17IT027	17IT027@charusat.edu.in
7	17IT037	17IT037@charusat.edu.in
8	17IT045	17IT045@charusat.edu.in
9	17IT047	17IT047@charusat.edu.in
10	18IT002	18IT002@charusat.edu.in
11	18IT045	18IT045@charusat.edu.in
12	18IT052	18IT052@charusat.edu.in
13	18IT053	18IT053@charusat.edu.in
14	18IT071	18IT071@charusat.edu.in
15	18IT099	18IT099@charusat.edu.in
16	19IT010	19IT010@charusat.edu.in
17	19IT012	19IT012@charusat.edu.in
18	19IT015	19IT015@charusat.edu.in
19	19IT017	19IT017@charusat.edu.in
20	19IT020	19IT020@charusat.edu.in
21	19IT025	19IT025@charusat.edu.in
22	19IT032	19IT032@charusat.edu.in
23	19IT038	19IT038@charusat.edu.in
24	19IT043	19IT043@charusat.edu.in
25	19IT059	19IT059@charusat.edu.in
26	19IT065	19IT065@charusat.edu.in
27	19IT066	19IT066@charusat.edu.in
28	19IT067	19IT067@charusat.edu.in
29	19IT068	19IT068@charusat.edu.in
30	19IT069	19IT069@charusat.edu.in
31	19IT070	19IT070@charusat.edu.in
32	19IT071	19IT071@charusat.edu.in
33	19IT072	19IT072@charusat.edu.in
34	19IT075	19IT075@charusat.edu.in
35	19IT077	19IT077@charusat.edu.in

36	19IT081	19IT081@charusat.edu.in
37	19IT082	19IT082@charusat.edu.in
38	19IT084	19IT084@charusat.edu.in
39	19IT087	19IT087@charusat.edu.in
40	19IT088	19IT088@charusat.edu.in
41	19IT089	19IT089@charusat.edu.in
42	19IT092	19IT092@charusat.edu.in
43	19IT095	19IT095@charusat.edu.in
44	19IT096	19IT096@charusat.edu.in
45	19IT098	19IT098@charusat.edu.in
46	19IT099	19IT099@charusat.edu.in
47	19IT100	19IT100@charusat.edu.in
48	19IT101	19IT101@charusat.edu.in
49	19IT105	19IT105@charusat.edu.in
50	19IT107	19IT107@charusat.edu.in
51	19IT109	19IT109@charusat.edu.in
52	19IT113	19IT113@charusat.edu.in
53	19IT114	19IT114@charusat.edu.in
54	19IT115	19IT115@charusat.edu.in
55	19IT117	19IT117@charusat.edu.in
56	19IT121	19IT121@charusat.edu.in
57	19IT122	19IT122@charusat.edu.in
58	19IT123	19IT123@charusat.edu.in
59	19IT125	19IT125@charusat.edu.in
60	19IT126	19IT126@charusat.edu.in
61	19IT132	19IT132@charusat.edu.in
62	19IT133	19IT133@charusat.edu.in
63	19IT136	19IT136@charusat.edu.in
64	19IT140	19IT140@charusat.edu.in
65	19IT151	19IT151@charusat.edu.in
66	19CE032	19CE032@charusat.edu.in
67	19CE102	19CE102@charusat.edu.in
68	19CE152	19CE152@charusat.edu.in





CHARUSAT
CSPIT

Department of Information Technology



Summary and Action Taken Report of Feedback on Curriculum

AY: 2017-18

Category	Comments	Action Taken
Alumni	Some entrepreneurship training from college or initiative from college to let student try new things.	Department has already started giving training/ awareness session under EDIC cell. (Annexure-1)
	Machine learning course should be there in syllabus to attract nice companies for placement.	- Department has Introduced machine Learning as a course in our curriculum. - Considered in 13th BoS 26-Aug-2017.
	Encourage Students to write a simple code in lab session where they can have web scraping implementation on real websites or use open API to have a real example.	Department has included the practical where they use the open API.
Parent	Focus on Internship/Training more that will help our child ready for industry.	- Department has introduced student internships every summer vacation. - Considered in 13th BoS 26-Aug-2017
	Provision of Industry visit for students is very good and should continue	Department organize industry visit on regular basis and will continue the same.
Student	Arrange the preparation for competitive exam like GATE.	Department started a practice to solve previous GATE examples in every basic course after the completion of relevant topics/units.
	More focus and practice of practical apart from practical list	- Department have started organizing project competition and motivating students to involve in codevita and other relevant competition. (Annexure-II). - Considered in GALA Industry meet.

DST – NIMAT PROJECT POST PROGRAMME REPORT (PPR) OF TEDP

1. Name & Address of Programme :

Charotar University of Science & Technology (CHARUSAT)

CHARSUAT Campus Changa, Off Nadiad – Petlad Highway, Dist. Anand

02697-265171, Fax: 02697-265007; Email: govinddave.mba@charusat.ac.in

2. Programme : Technology based Entrepreneurship Development Programme (TEDP)
Trade : Data Mining and Network Security
3. Programme Location : Interaction Theater – (IT) VI
Indukaka Ipcowala Institute of Management (I²IM), CHARUSAT
4. Programme Date : From **December 10, 2018** to **January 22, 2019**
5. Name of the Coordinator : **Dr. Govind B Dave,**
Dean, Faculty of Management Studies, CHARUSAT
Principal, Indukaka Ipcowala Institute of Management (I²IM)
CHARUSAT
6. Methods adopted to promote the programme:
- ☒ Pamphlets / Broacher
- ☐ News paper Advertisement
- ☒ Posters/ Hand Bills
- ☒ Other (Please Specify) – Promotion had been done through Social Media
7. Date of interview : December 07, 2018
8. No. of application received : 50
9. No. of candidates attended the interview : 32
10. No. of candidate selected : 30
11. No. of candidate completed the programme successfully: Male: **19** Female: **03**
12. List of participants : ANNEXURE – I
13. Program schedule : ANNEXURE – II
14. List of resource persons : ANNEXURE – III
15. List of industries visited : ANNEXURE – IV
16. Participant's feedback : ANNEXURE – V

17. Photographs of Programme :

[Photograph 1: Group Photo]



[Photograph 2: Classroom Photo]



[Photograph 3: Industry Visit Photo]



National Science & Technology Entrepreneurship Development Board (NSTEDB)
Department of Science & Technology (DST), Government of India, New Delhi
Sponsored

TECHNOLOGY BASED ENTREPRENEURSHIP DEVELOPMENT PROGRAMME (TEDP)

Organised by Entrepreneurship Development & Incubation Cell (EDIC)

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT)

December 10, 2018- January 22, 2019

Annexure-1: List of Participants

Sl. No.:	Name, Address and Contact details of Participant	Age	Gender	Education	Category	Project/ Product Selected	Aadhaar Number
		(in Years)			Gen / SC / ST / OBC / Minority		
1	GADHIYA KISHAN KANJIBHAI "KRISHNA", KEVALIYA WADI, PLOT NO-66/D, MEHULNAGAR, JAMNAGAR, 361006 Gujarat Phone No : 9998892423 Mobile No : 9979701792 Email : kishangadhiya99@gmail.com	21	Male	8 th Semester Electrical Engineering	General	Voice Operated Home Automation	528003258086
2	BHUVA RUSHI KANTILAL B-9, Kartikey Nagar -4 b/h Swaminarayan Temple Iskon Temple Road, Vadodara 390007 Phone No : 9925204834 Mobile No : 9925212834 Email : rbhuva1996@gmail.com	22	Male	8 th Semester Electrical Engineering	General	Voice Operated Home Automation	494598075635
3	DAVE ARCHIT PRAMODKUMAR 10, GOVIND NAGAR SOCIETY NEAR SAHAJ DHAM ROW HOUSE, HONEY PARK ROAD, ADAJAN, SURAT 395009 Phone No : 9898425040 Mobile No : 9725008691 Email : architdave07.ad@gmail.com	21	Male	8 th Semester Electrical Engineering	General	Infra Red Security System Using Laser Beam	898282958564
4	PATEL ABHISHEK KAMLESHBHAI MOTI KHADKI SANTOKPURA BORSAD, 388545 Gujarat Phone No : 02696224847 Mobile No : 7359030520 Email : abhi112396@gmail.com	22	Male	Final Year B Sc in Biotechnology	General	Mushroom Production through Technology based Farming	221138670788
5	DESAI MANAN PRADIPKUMAR 93, KARNAVATI PARK SOCIETY OPP BARODA EXPRESS WAY, C.T.M POST AMRAIWADI, AHMEDABAD 380026 Phone No : 07925850507 Mobile No : 9099969679 Email : manandesai886@gmail.com	21	Male	8 th Semester Electrical Engineering	General	IOT Based Robot (Control through Internet)	505035444176

6	DALSANIA VAIBHAV RASIKLAL "ASHISH" SOMNATH SOCIETY,150,RINGROAD RIYA TELEPHONE EX., RAJKOT 360005 Phone No : 9409412056 Mobile No : 9664951651 Email : vaibhavdalsania2011@gmail.com	21	Male	8 th Semester Electrical Engineering	General	IOT Based Robot (Control through Internet)	911052716556
7	DAVE JAY TUSHARKANT A-23 PRERANA BUNGLOWS NR.BAPA SITARAM CHOWK, NAVA NARODA,KRISHNANAGAR Ahmedabad 382345 Phone No : 7359610902 Mobile No : 8401835089 Email : jaydave@gmail.com	23	Male	8 th Semester Electrical Engineering	General	IOT Based Robot (Control through Internet)	397125743687
8	BHATT MILANKUMAR AJAYKUMAR 104,SATYAM APP OPP,DHOLAKIYA GARDENKATARGAM. SURAT 395004 Phone No : 7359291391 Mobile No : 9825493392 Email : milan.bhatt2714@gmail.com	21	Male	8 th Semester Electrical Engineering	General	IoT based Induction Heating	574703812522
9	CHUGH VIVEK DHARMPAL 105-106, TULSI ANGAN APPT., NEW CIVIL ROAD NEAR KAPADIA HEALTH CLUB, SURAT 395002 Mobile No : 9586893022 Email : dimmpychugh@yahoo.com	21	Male	8 th Semester Electrical Engineering	General	IoT based Induction Heating	278054751666
10	VISHW JOSHI 1, Vaibhav Society Near IRMA Gate Behind Ganesh Dairy Anand 388001 Mobile No : 9427178739 Email : joshivishw@gmail.com	18	Male	2 nd Semester Civil Engineering	General	Smart Building	448277735823
11	SINGH SAUMYA DEVENDRA A2-33 TIRTHAK BUNGALOWS KUBERESHWAR MARG, WAGHODIA-DABHOI ROAD, VADODARA 390019 Mobile No : 9586893022 Email : saumyasingh995@yahoo.com	23	Female	B.Tech CE (MBA First year)	General	UWP EYE	682738987246
12	DESAI KRISHNA SANATKUMAR VHALABHAI NI KHADKI NR. ASHAPURI TEMPLE UTTARSANDA 387370 Mobile No : 9924613354 Email : krishnadesai18@gmail.com	24	Female	B.Tech EC (MBA First year)	General	UWP EYE	320464057138
13	PREKH PARTH NIMESHKUMAR A-37 JANKIDAS SMRUTI BUNGLOWS, NEAR, RAGHUVIR RESIDENCY, SANTRAM DERI ROAD, NADIAD 387002 Mobile No : 9904199396 Email : prekhp989@gmail.com	24	Male	B Pharm	General	A Software For Identification of Medication Error	398296993832

14	KAKKAD HARSH ARUNKUMAR B-403, MOTI PALACE PIUS VANTHALI ROAD TIMBAVADI JUNAGADH 362015 Mobile No : 9904199396 Email : parekhp989@gmail.com	24	Male	B Pharm	General	A Software For Identification of Medication Error	475565892423
15	SHETH SRUSTI SUKETUKUMAR 510 SUMERU HEIGHTS, KISHAN SAMOSA LANE, NADIAD 387001 Mobile No : 9574270648 Email : kakkadharsh@gmail.com	24	Female	B Pharm	General	A Software For Identification of Medication Error	362312751729
16	PATEL JAY ALPESHKUMAR 4,PATELVAS NR.SAIBABATEMPLE AANADCHOWK, KHOKHARA, AHMEADABAD 380008 Mobile No : 9904070232 Email : kakkadharsh@gmail.com	21	Male	6 th Semester Electrical Engineering	General	Clap Switch Project	373393594595
17	JAYDEEPKUMAR PRAVINBHAI PATEL NEAR LAKSHMINARAYAN TEMPLE VILL: RAJSITAPUR SURENDRANAGAR 363320 Mobile No : 9586508797 Email : jaydeeppatel5085@gmail.com	22	Male	6 th Semester Electrical Engineering	General	Clap Switch Project	834850765172
18	PATEL KARAN SURESHBHAI AT POST AAT PATEL FALIYA TA-JALALPORE NAVASRI 396403 Mobile No : 9909240417 Email : karanpatelsd@gmail.com	22	Male	6 th Semester Electrical Engineering	General	Clap Switch Project	891686436711
19	AHIR DHRUVIKKUMAR KISHORBHAI AHIRWAS GADAT GANDEVI NAVSARI 396445 Mobile No : 9737637216 Email : ahirdhruvik21@gmail.com	21	Male	6 th Semester Electrical Engineering	SEBC	Fire Alarm System	548378510547
20	CHAUDHARI NIXIPT AJITBHAI GSECL COLONY UKAI TYPE 3-252 TA-SONGADH DIST-TAPI SONGADH 394680 Mobile No : 7874317009 Email : nixiptchaudhari@gmail.com	22	Male	6 th Semester Electrical Engineering	ST	Fire Alarm System	873181525588
21	DABHI JAGDISH CHANUBHAI SBF-29 TCL TOWNSHIP MITHAPUR MITHAPUR 361345 Mobile No : 8734977377 Email : dabhujagdish901@gmail.com	23	Male	6 th Semester Electrical Engineering	SEBC	Fire Alarm System	993094515672
22	DESAI HARDIKBHAI HASMUKHBHAI AT:SURYAPRATAPGADH TA:KUNKAVAV DIST:AMRELI SURYAPRATAPGADH 365450 Mobile No : 9825965103 Email : hardikdesai682@gmail.com	22	Male	6 th Semester Electrical Engineering	General	Fire Alarm System	536530440121

TECHNOLOGY BASED ENTREPRENEURSHIP DEVELOPMENT PROGRAMME (TEDP)

Organized by Entrepreneurship Development & Incubation Cell (EDIC)
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT)

December 10, 2018- January 22, 2019

Annexure-2: Programme Schedule

Module	Date and Day	Session	Time	Topic	Resource Person
MODULE – 1: ENTREPRENEURSHIP & SCHEMES OF ASSISTANCE	December 10, 2018 1 st Day	I	09:15 AM – 10:30 AM	Inauguration	Dr. Govind Dave Dean Faculty of Management Studies - CHARUSAT
		II	10:45 AM – 11:30 AM	Who is an Entrepreneur & Charms of Being an Entrepreneur:	
		III	12:30 PM- 01:45 PM	Schemes of Assistance for MSMEs: Financial Agencies / Institutions	
		IV	02:00 PM 03:15 PM		
	December 11, 2018 2 nd Day	I	09:15 AM – 10:30 AM	Schemes of Assistance for MSMEs: NSIC, SIDBI, DIC and Other Support Agencies	Mr. Ravi Shah Asst. Manager, SBI, Nadiad
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Importance of Technology and knowledge based entrepreneurship	Dr. Ritesh Patel Associate Professor, U & P U Patel Department of Computer Engineering, C S Patel Institute of Technology, Faculty of Technology and Engineering – CHARUSAT
		IV	02:00 PM 03:15 PM		
MODULE –2: PROJECT SELECTION & IT’S PRE FEASIBILITY	December 12, 2018 3 rd Day	I	09:15 AM – 10:30 AM	How to Identify Business Opportunities	Dr. Chintan Pathak Lawyer, Educator, Ethical Hacker, Cyber Security Consultant, Cyber Care Clinic - A Technolegal Consultancy, Surat
		II	10:45 AM – 11:30 AM	Opportunities identification: Criteria of selection & Sources of Information	
		III	12:30 PM- 01:45 PM	How to conduct Market Survey: Tools, Techniques and Guidelines	
		IV	02:00 PM 03:15 PM		
	December 13, 2018 4 th Day	I	09:15 AM – 10:30 AM	How to find out pre-feasibility of a Project: Preparing Preliminary Project Report (PPR)	Mr. Chandramauli Pathak, Entrepreneurship Expert / International Trainer
		II	10:45 AM – 11:30 AM		

		III	12:30 PM-01:45 PM	Factory Visit and Experience Sharing with Innovative Entrepreneurs	Dr. Pranav Desai Asst. Professor, Indukaka Ipcowala Institute of Management(I ² IM) - , FMS, CHARUSAT
		IV	02:00 PM 03:15 PM		
MODULE - 3: CONSOLIDATION OF BUSINESS IDEA	December 14, 2018 5 th Day	I	09:15 AM – 10:30 AM	Soft Skill Development: Communication	Dr. Bhaskar Pandya Associate Professor, Dept. of Humanities and Social Sciences, Faculty of Management Studies CHARUSAT, Changa
		II	10:45 AM – 11:30 AM	Soft Skill Development: Information Seeking	
		III	12:30 PM-01:45 PM		
		IV	02:00 PM 03:15 PM	Briefing and Planning for the Market Survey: Questionnaire Preparation	Dr. Govind Dave
	December 15, 2018 6 th Day	I	09:15 AM – 10:30 AM	Brief on Factory Visit Factory Visit and Experience Sharing with Entrepreneurs	Mr. Chintan Trivedi Founder Nirvana Technologies, Vadodara
		II	10:45 AM – 11:30 AM		
		III	12:30 PM-01:45 PM		
		IV	02:00 PM 03:15 PM		
	December 17, 2018 7 th Day	I	09:15 AM – 10:30 AM	Interaction with the first Generation Entrepreneur	
		II	10:45 AM – 11:30 AM		
		III	12:30 PM-01:45 PM		
		IV	02:00 PM 03:15 PM		
	December 18-20, 2018 8-9-10 th Day December 21, 2018 11 th Day	I	09:15 AM – 10:30 AM	Feedback, Discussion on Market Survey & evaluating PPRs	Dr. Amit Thakkar Associate Professor, Department of IT Engineering C S Patel Institute of Technology, Faculty of Technology and Engineering - CHARUSAT
		II	10:45 AM – 11:30 AM		
		III	12:30 PM-01:45 PM	Interactions with Technical Experts for finalizing projects	
		IV	02:00 PM 03:15 PM		
E – 4: MOTIVATIONAL	December 22, 2018 12 th Day	Developing Entrepreneurial Competencies (Achievement Motivation Training)			Mr. Chandramauli Pathak, Entrepreneurship Expert / International Trainer

MODULE – 5: PROJECT REPORT PREPARATION	December 24, 2018 13 rd Day	I	09:15 AM – 10:30 AM	How to Prepare Detail Project Report	Mr. Niket Naik Chief Technical Officer / Board of Director DigiFarm Tecnologies, Navsari
		II	10:45 AM – 11:30 AM	Production Planning in MSME	
		III	12:30 PM- 01:45 PM		
		IV	02:00 PM 03:15 PM	Purchase Technique	
	December 26, 2018 14 th Day	I	09:15 AM – 10:30 AM	Working Capital Assessment & Management in SSI	Mr. Roopin Patel Chartered Accountants, Patel & Mehta Chartered Accountants, Anand
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Break Even Point	
		IV	02:00 PM 03:15 PM		
	December 27, 2018 15 th Day	I	09:15 AM – 10:30 AM	Product Costing and Cost Consciousness	
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Profitability & Balance Sheet	
		IV	02:00 PM 03:15 PM		
	December 28, 2018 16 th Day	I	09:15 AM – 10:30 AM	Cash flow Production Planning	Mr. Rajesh Sadhwani Asst. Professor, Indukaka Ipcowala Institute of Management (I ² IM), FMS, CHARUSAT
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Financial Management	
		IV	02:00 PM 03:15 PM		
MODULE – 5 : MANAGEMENT INPUTS	December 29, 2018 17 th Day	I	09:15 AM – 10:30 AM	Marketing Management: Product Promotion, Sales and Advertisement	Dr. Govind Dave
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Preparation of Detail Project Report	
		IV	02:00 PM 03:15 PM		
	December 31, 2018 18 th Day	I	09:15 AM – 10:30 AM	Human Resource Management	Ms. Kirti Makwana Asst. Professor, Indukaka Ipcowala Institute of Management(I ² IM), FMS, CHARUSAT
		II	10:45 AM – 11:30 AM	Time Management	
		III	12:30 PM- 01:45 PM	IPR and It's Management	Mr. Padmin Buch IPR Domian Expert,

MODULE – 6: TECHNICAL TRAINING / EXPOSURE		IV	02:00 PM 03:15 PM	Pattern, Copy Rights, Trade Mark and Industrial Management	Ahmedabad
	January 01, 2018 19 th Day	I	09:15 AM – 10:30 AM	Negotiation and Networking	Dr. Govind Dave
		II	10:45 AM – 11:30 AM	Delegation of Authority and Work Effort	
		III	12:30 PM- 01:45 PM	Leadership Modes	
		IV	02:00 PM 03:15 PM	Efficiency Orientation and Systematic Planning	
	January 02, 2018 20 th Day	I	09:15 AM – 10:30 AM	Legal Formalities in an Enterprise: (Factory Act, PF, Labour Laws etc.)	Mr. Joel Evans Company Secretary, Gujarat Mineral Development Corporation Ltd. (A GOVERNMENT OF GUJARAT UNDERTAKING)
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Taxation: Various Taxes Applicable to MSME	
		IV	02:00 PM 03:15 PM		
	January 03, 2018 21 st Day	I	09:15 AM – 10:30 AM	Legal formalities for Loan Disbursement	
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Interfacing with Leading Institutions for Business Plan Appraisal	
		IV	02:00 PM 03:15 PM	Interfacing with R&D Institutions for Technology Sourcing	
	January 04, 2018 21 st Day to January 21, 2019 35 th Day Technical Training / Exposure on the projects chosen by the Trainees				
	January 22, 2018 36 th Day	I	09:15 AM – 10:30 AM	Feedback and Evaluation of the Programme	Dr. Govind Dave Dean Faculty of Management Studies - CHARUSAT
		II	10:45 AM – 11:30 AM		
		III	12:30 PM- 01:45 PM	Action plan preparation	
		IV	02:00 PM 03:15 PM	Valedictory	

TECHNOLOGY BASED ENTREPRENEURSHIP DEVELOPMENT PROGRAMME (TEDP)

Organised by Entrepreneurship Development & Incubation Cell (EDIC)
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT)

December 10, 2018- January 22, 2019

Annexure-3: List of Faculty Members / Resource Person

Sr. No.	Name	Designation	Organisation
01.	Dr. Govind Dave	Dean	Faculty of Management Studies CHARUSAT, Changa
		Principal	Indukaka Ipcowala Institute of Management (I ² IM), CHARUSAT, Changa
02.	Dr. Pranav Desai	Asst. Professor	Indukaka Ipcowala Institute of Management, Faculty of Management Studies CHARUSAT, Changa
03.	Ms. Kirti Makwana	Asst. Professor	Indukaka Ipcowala Institute of Management(I ² IM), FMS, CHARUSAT
04.	Mr. Rajesh Sadhwani	Asst. Professor	Indukaka Ipcowala Institute of Management(I ² IM), FMS, CHARUSAT
05.	Mr. Chandramauli Pathak	Entrepreneurship Expert / International Trainer	Ahmedabad
06.	Mr. Roopin Patel	Chartered Accountants	Patel & Mehta Chartered Accountants, Anand
07.	Mr. Joel Evans	Company Secretary	Gujarat Mineral Development Corporation Ltd.(A GOVERNMENT OF GUJARAT UNDERTAKING)
08.	Dr. Ritesh Patel	Associate Professor	Department of Computer Engineering C S Patel Institute of Technology, Faculty of Technology and Engineering - CHARUSAT
09.	Dr. Amit Thakkar	Associate Professor	Department of IT Engineering C S Patel Institute of Technology, Faculty of Technology and Engineering - CHARUSAT
10.	Mr. Ravi Shah	Asst. Manager	State Bank of India, Nadiad
11.	Mr. Jay Mehta	Cyber Law Consultant	Anand
12.	Mr. Padmin Buch	IPR Domian Expert	Ahmedabad

13.	Mr. Chintan Trivedi	Founder Director	Nirvana Technologies, Vadodara
14.	Dr. Chintan Pathak	Lawyer, Educator, Ethical Hacker, Cyber Security Consultant	Cyber Care Clinic - A Technolegal Consultancy, Surat
15.	Mr Niket Naik	Chief Technical Officer / Board of Director	DigiFarm Technologies, Navsari

National Science & Technology Entrepreneurship Development Board (NSTEDB)
Department of Science & Technology (DST), Government of India, New Delhi
Sponsored

TECHNOLOGY BASED ENTREPRENEURSHIP DEVELOPMENT PROGRAMME (TEDP)

Organised by Entrepreneurship Development & Incubation Cell (EDIC)
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT)

December 10, 2018- January 22, 2019

Annexure-4: Detail of Industry Visited

Sr. No.	Name Address and Contact Details	Product / Services
01.	Nirvana Technologies Near, 16-B, Ajay Colony, Opp. Jain Temple, Delux Cross Road, Nizampura, Vadodara - 390002 Mr. Chintan Trivedi Founder Director, Nirvana Technologies, Vadodara Phone: 099987 62768	• Web Design • Web Development • Search Engine Optimization • E-commerce Solutions • Content Management System • Graphics Design • Domain & Web Hosting

TECHNOLOGY BASED ENTREPRENEURSHIP DEVELOPMENT PROGRAMME (TEDP)

Organised by Entrepreneurship Development & Incubation Cell (EDIC)
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT)
December 10, 2018- January 22, 2019

Annexure-5: Feedback Analysis of Report

Programme Location:

Interaction Theater – (IT) VI , Indukaka Ipcowala Institute of Management (I²IM), CHARUSAT
Charotar University of Science & Technology (CHARUSAT)
CHARSUAT Campus Changa, Off Nadiad – Petlad Highway, Dist. Anand
Date: : From **Decebmber10, 2018** to **January 22, 2019**

Total No. of Participants: **22**

Q.1) From where you got the information about this programme?

- | | |
|----------------------------|---------------|
| a) Pamphlets / Brochure | 00 Nos. (00%) |
| b) Newspaper Advertisement | 00 Nos. (00%) |
| c) Posters/ Hand Bills | 12 Nos. (55%) |
| d) Other (Please Specify) | 10 Nos. (45%) |
- (Class to class information has been circulated about the Programme)

Q.2) What is your opinion about the duration of Programme?

- | | |
|-------------|---------------|
| a) Short | 00 Nos. (00%) |
| b) Adequate | 16 Nos. (73%) |
| c) Long | 06 Nos. (27%) |

Q.3) Did you find the Programme useful?

- | | |
|-------------------|---------------|
| a) Very much | 17 Nos. (77%) |
| b) To some extent | 05 Nos. (23%) |
| c) Not useful | 00 Nos. (00%) |

Q.4) Did it fulfill your expectations?

- | | |
|-------------------|----------------|
| a) Yes | 19 Nos. (86.%) |
| b) To some extent | 03 Nos. (14%) |
| c) No | 00 Nos. (00%) |

Q.5) Planning of the Programme

- | | |
|-----------------|---------------|
| a) Excellent | 18 Nos. (60%) |
| b) Very good | 03 Nos. (10%) |
| c) Good | 01 Nos. (03%) |
| d) Satisfactory | 00 Nos. (00%) |
| e) Poor | 00 Nos. (00%) |



Minutes – 13th Meeting of Board of studies of Department of Information Technology

Date : August 26, 2017, Saturday

Time : 10:00 am

Venue : Conference Room, Building-II, CSPIT, CHARUSAT Campus

The 13th meeting of the Board of studies, Department of Information Technology, FTE, Charotar University of Science & Technology (CHARUSAT) was held on 26th August, 2017 at 10:00 a.m. onwards at conference room (CE/IT), CSPIT, CHARUSAT campus.

Following BOS members were remained present:

1.	Prof. Parth Shah	Chairman	HOD, IT Dept
2.	Dr. Amit Ganatra	Member	Dean, Faculty of Tech & Engg
3.	Dr. Ketan Kotecha	External	VC, Parul University
4.	Prof. B. V. Buddhadev	External	Head, Dept of CE, GEC-28
5.	Prof. M T Savaliya	External	Head, CE Dept., VGEC, Chandkheda
6.	Dr. Sanjay Chaudhary	External	Dean, Research, Ahmedabad University
7.	Mr. Roshan Shah	External	Technical Evangelist, Cybage, Pune
8.	Mr Nikunj Patel	External	Senior Vice President, Cape Gemini, Gandhinagar
9.	Prof. Amit Thakkar	Member	Asso. Prof.
10.	Mr. Amit Nayak	Member	Asst. Prof.
11.	Mr. Nirav Bhatt	Member	Asst. Prof.
12.	Ms. Purvi Prajapati	Member	Asst. Prof.
13.	Ms. Ayesha Shaikh	Member	Asst. Prof.
14.	Mr. Bimal Patel	Member	Asst. Prof.

Initiation:

Head of the Department of Information Technology, Prof. Parth Shah welcomed all the members of Board of Studies to the 13th meeting. He briefed the overall activities carried out by the department during last year.

Agenda Proceedings & Resolutions:-

Item 13.01: For Discussion and Approval;

To approve the teaching scheme for all the semesters of B Tech CBCS courses effective from 2016.

Proceedings 13.01:

Dean FTE had requested to the chairman BoS of humanities department to introduce and update existing courses related to B Tech students. Existing offered courses to the B Tech students along with the proposed courses are given below (refer annexure I for old courses and annexure II for new courses):

Program	Semester	Old Course	New Course
B Tech	I	A Course from Liberal Arts	HS Elective-I
	II	English Language & Literature	Communication Skills – I
	III	Values and Ethics	HS Elective-II
	IV	Critical Thinking and Logic	HS Elective-III
	V	Professional Communication	Professional Communication
	VI	Society, Governance and International Studies	HS Elective-IV

Resolutions 13.01:

Suggestions given by the members have been agreed and approved as per annexure II.

Item 13.02: For Discussion and Approval;

To approve the Teaching scheme and detailed syllabus for 3rd year (5th and 6th semester) CBCS B Tech courses.

Proceedings 13.02:

- Department had collected feedback from industry/academic experts, students and faculty members. Based on those feedback, few changes have been proposed in the teaching and examination schemes along with detail syllabi.
- Members have suggested change in nomenclature of Design & Analysis of Algorithm to Design & Analysis of Algorithms in semester-V.
- Members have suggested to offer Operating System fundamentals and operating system internals as a single course in semester-V.
- Members have suggested change in nomenclature of Advanced Programming using .NET Framework to Programming using .NET Framework as an elective course in semester-V.

- Members have suggested that course on Machine Learning should be combined offered as Intelligent System such that it should include contents of Artificial Intelligence and Machine Learning in semester-VI.
- Members have suggested to introduce summer internship for the 5th semester student to get the awareness about working of industries.

Resolutions 13.02:

Suggestions given by the members have been agreed and approved as per annexure II.

Item 13.03: For Discussion and Approval;

Any change in PG Syllabus of CBCS courses

Proceedings 13.03:

Dean FTE has requested to the chairman BoS of humanities department to introduce and update existing coursed related to M Tech students. Existing offered courses to the M Tech students along with the proposed courses are given below (refer annexure III and IV for old courses and new courses respectively):

Program	Semester	Existing Course	New Course
M Tech	I	Advance Critical Thinking & Logic	Advance Critical Thinking & Logic Languages (French/ German) Academic Speaking
	II	Academic Writing and Communication Skills	Academic Writing

Resolutions 13.03:

Suggestions given by the members have been agreed and approved as per annexure IV.

Item 13.04: For Discussion and Approval;

Preparation, Discussion and approval for the Elective Courses (University, Institute, Program and Program Electives)

Proceedings 13.04:

As per directives of the university and CBCS norms, various departments and institutes have been requested to offer the courses as a University Elective. The list of the courses offered by various department/institute is given in annexure

Resolutions 13.04:

Members have approved the courses and wished the success for the same as per annexure V.

Item 13.05: For Discussion and Approval;

Additional item(s) other than syllabus to be reviewed during BOS:

Review of University Exam Question Papers (Quality of Question Papers), Experiment Lists, Examiners' Panel, Placement Records and Result Analysis of Academic Year plus Analysis of Semester Results, Reg. Innovation in Pedagogy, World Class Universities, Outcome Based Education (OBE), Research (Publications, Proposals and Grants), Funding Agencies, Reg. NBA Accreditation Status, NAAC Accreditation of the University, Going for International Accreditation, Project works, Panel of Ph D Supervisors, Synopsis submission if any and its Approval, Approval of Reviewer's (Examiners) Panel, Feedback from Students, Identification of Slow Learners, Students Counselling, Quality of Inputs (Admission Scenario), Remedial Coaching, Quality of M Tech Dissertations, Industry Exposure, Responsible University etc. or any other additional items.

Proceedings 13.05:

Members have reviewed the information and data related to the Item.

Resolutions 13.05:

Members have appreciated effort taken by the department to strengthen each and every activity.

Annexure I

(Agenda – I & II)

Existing Teaching & Examination Schemes

for

**B Tech
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2016)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

Sem	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
	HS101 A - HS106 A	A Course from Liberal Arts	2			0	2	0	2	2			50	50	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
			14	12	1		36	14	7	21	120	280	175	175	750	
FY Sem-2	MA142	Engineering Mathematics-II	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE142	Object Oriented Programming with C++	4	4	0	0	8	4	2	6	30	70	50	50	200	
	ME144	Elements of Engineering	4	2	1	0	7	4	1	5	30	70	25	25	150	
	PY141	Engineering Physics	3	2	0	0	5	3	1	4	30	70	25	25	150	
	HS121 A	English Language & Literature	2			0	2	2	0	2	25	25	25	25	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0	9									
			16	9	2	0	36	17	4	21	145	305	125	125	700	

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT															
			Teaching Scheme						Examination Scheme						
			Teaching Scheme						Examination Scheme						
	Course Code	Course Title	Contact Hours					Credit			Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	
SY Sem-3	MA242	Discrete Mathematics	4	0	0	0	4	4	0	4	30	70	0	0	100
	IT241	Digital Electronics	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT242	Java Programming	4	4	0	0	8	4	2	6	30	70	50	50	200
	XXXXX	University Elective- I	2	0	0	0	2	2	0	2	30	70	0	0	100
	IT243	Data Communication	4	2	0	0	6	4	1	5	30	70	25	25	150
	HS122A	Values and Ethics	2	0	0	0	2	2	0	2	30	70	0	0	100
	IT244	Software Group Project-I	0	0	0	4	4	0	2	2	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0
			20	14	0	4	36	20	6	26	180	420	150	150	900
SY Sem-4	MA244	Probability and Numerical Techniques	4	0	0	0	4	4	0	4	30	70	0	0	100
	IT245	Computer Organization & Microprocessor Interfacing	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT246	Web Engineering	2	4	0	0	6	2	2	4	30	70	50	50	200
	IT247	Data Structures & Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT248	Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150
	HS123	Critical Thinking and Logic	2	0	0	0	2	2	0	2	30	50	0	0	100
	XXXXX	University Elective- II	2	0	0	0	2	2	0	2	30	70	0	0	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0
			22	16	0	0	36	22	5	27	230	470	125	125	950

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT															
			Teaching Scheme								Examination Scheme				
			Teaching Scheme								Examination Scheme				
	Course Code	Course Title	Contact Hours					Credit			Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External	
TY Sem-5	IT341	Design & Analysis of Algorithm	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150
	HS124A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100
		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100
	IT346	Summer Internship-I	0	0	0	3	3	0	3	3	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0
			16	18	0	7	39	16	12	28	150	350	280	320	1100
TY Sem-6	IT347	Software Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	200
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100
	HS125A	Society, Governance and International Studies	0	2	0	0	2	0	1	1	25	25	25	25	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0
			16	18	0	4	36	16	8	24	145	305	200	200	850

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT																
			Teaching Scheme									Examination Scheme				
Course Code	Course Title	Teaching Scheme									Examination Scheme					
		Contact Hours					Credit			Theory		Practical/Project		Total		
		Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External			
Final Year Sem-7	IT441	Data Warehousing & Data Mining	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	High Performance Computer Architecture	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT443	Advanced Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1			0	0	0	0	0	0	
			18	16	0	7	36	18	10	28	150	350	225	225	950	
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
Total			122	139	3	22	191	123	72	195	1120	2480	1530	1670	6800	
LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT																
ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II			Code	Programme Elective - III								
	IT371	Advanced Java programming	IT375	Advanced Computing			IT471	Python Programming								
	IT372	Advanced Programming using .NET Framework	IT376	Language Processors			IT472	Image Processing								
	IT373	Embedded Systems	IT377	Machine Learning			IT473	Big Data Analytics								

Annexure II

(Agenda – I & II)

Approved Teaching & Examination Schemes

for

**B Tech
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

Sem	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
		HS Elective-I	2			0	2	0	2	2			30	70	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
			14	12	1		36	14	7	21	120	280	155	195	750	
FY Sem-2	MA142	Engineering Mathematics-II	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE142	Object Oriented Programming with C++	4	4	0	0	8	4	2	6	30	70	50	50	200	
	ME144	Elements of Engineering	4	2	1	0	7	4	1	5	30	70	25	25	150	
	PY141	Engineering Physics	3	2	0	0	5	3	1	4	30	70	25	25	150	
	HS126.01 A	Communication Skills – I	2			0	2	2	0	2	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0	9									
			16	9	2	0	36	17	4	21	150	350	100	100	700	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
SY Sem-3	MA242	Discrete Mathematics	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT241	Digital Electronics	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT242	Java Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	XXXXX	University Elective- I	2	0	0	0	2	2	0	2	30	70	0	0	100	
	IT243	Data Communication	4	2	0	0	6	4	1	5	30	70	25	25	150	
		HS Elective-II	2	0	0	0	2	2	0	2	30	70	0	0	100	
	IT244	Software Group Project-I	0	0	0	4	4	0	2	2	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
			20	14	0	4	36	20	6	26	180	420	150	150	900	
SY Sem-4	MA244	Probability and Numerical Techniques	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT245	Computer Organization & Microprocessor Interfacing	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT246	Web Engineering	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT247	Data Structures & Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT248	Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150	
		HS Elective-III	2	0	0	0	2	2	0	2	30	70	0	0	100	
	XXXXX	University Elective- II	2	0	0	0	2	2	0	2	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
			22	16	0	0	36	22	5	27	210	490	125	125	950	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
TY Sem-5	IT341	Design & Analysis of Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150	
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150	
	HS124.01A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100	
		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT346	Summer Internship-I	0	0	0	3	3	0	3	3	0	0	75	75	150	
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0	
		16	18	0	7	39	16	12	28	150	350	305	345	1150		
TY Sem-6	IT347	Software Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	200	
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100	
		HS Elective-IV	0	2	0	0	2	0	1	1	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
		16	18	0	4	36	16	8	24	150	350	175	175	850		

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
Final Year Sem-7	IT441	Big Data Analytics	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	High Performance Computer Architecture	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT443	Service Oriented Architecture	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1			0	0	0	0	0	0	
			18	16	0	7	36	18	10	28	150	350	225	225	950	
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
Total			122	139	3	22	291	123	72	195	1110	2590	1485	1665	6850	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2017)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES

Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
IT371	Advanced Java programming	IT375	Advanced Computing	IT471	Python Programming
IT372	Programming using .NET Framework	IT376	Language Processors	IT472	Image Processing
IT373	Embedded Systems	IT377	Intelligent System	IT473	Cyber Security & Laws

HS Elective - I

HS101.01 A - Painting

HS102.01 A - Photography

HS103.01 A - Sculpting

HS104.01 A - Pottery and Ceramic Arts

HS105.01 A - Media and Graphic Design

HS106.01 A - Art and Craft

HS107.01 A - Fashion Designing

HS108.01 A - Interior Designing

HS109.01 A - Dramatics

HS110.01 A - Contemporary Dance

HS132 A - Academic English

HS Elective - II

HS122 A - Values and Ethics

HS131 A - Philosophy

HS Elective - III

HS123.01 A - Critical Thinking and Logic

HS127.01 A - Communication Skills - II

HS133 A - Creativity, Problem Solving and Innovation

HS Elective - IV

HS125.01 A - Society, Governance and International Studies

HS130 A - Law & Justice

HS134 A - Contributor Personality Development

Annexure III

(Agenda - III)

Proposed Teaching & Examination Scheme

for

**M Tech
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Teaching Scheme				Examination Scheme				
			Contact Hours			Credit	Theory		Practical		Total
			Theory	Practical	Total		Internal	External	Internal	External	
FY Sem I	IT741	Algorithms & Computational Complexity	3	2	5	4	30	70	25	25	150
	IT742	Advanced Computer Network	3	2	5	4	30	70	25	25	150
	IT743	High Performance Computing	3	4	7	5	30	70	50	50	200
		Programme Elective-I (PE-I)	3	2	5	4	30	70	25	25	150
		Cluster Elective-I (CT-I)	3	2	5	4	30	70	25	25	150
	HS701	University Core-I Advance Critical Thinking & Logic (UC-I)	2	0	2	2	30	70	0	0	100
		Institute Elective-I (IE-I)	2	0	2	2	30	70	0	0	100
			19	12	31	25	210	490	150	150	1000
FY Sem II	IT744	Information and Network Security	3	4	7	5	30	70	50	50	200
	IT745	Data Science & Modelling	3	2	5	4	30	70	25	25	150
	IT746	Computational Intelligence	3	2	5	4	30	70	25	25	150
		Programme Elective-II (PE-II)	3	2	5	4	30	70	25	25	150
		Cluster Elective-II (CT-II)	3	2	5	4	30	70	25	25	150
	HS702	University Core-II Academic Writing and Communication Skills (UC-II)	2	0	2	2	0	0	30	70	100
		Institute Elective-II (IE-II)	2	0	2	2	30	70	0	0	100
			19	12	31	25	180	420	180	220	1000

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY													
TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY													
Sem	Course Code	Course Title	Teaching Scheme			Credit	Examination Scheme				Total		
			Contact Hours				Theory		Practical				
			Theory	Practical	Total		Internal	External	Internal	External			
Sem	Course Code	Course Title			Credit	Examination Scheme					Total		
						Internal		External					
						Progress Report	Progress Seminar	Report	Seminar	Viva -voce			
SY Sem III	IT811	Project Preliminaries			4	50	50	0	50	50	200		
	IT812	Project Phase-I			18	100	100	100	100	100	500		
					22						700		
SY Sem IV	IT813	Project Phase-II			30	200	200	200	200	200	1000		
					30						1000		
Total					38	24	102	50	390	910	330	370	3700
		Semester 1 (Programme Elective I)			Semester 2 (Programme Elective II)		Cluster Electives offered by the Departments				Sem		
	IT761	Advanced Operating System	IT764	Web Services & Service Oriented Computing		IT767	Micro Device Programming			I			
	IT762	Information Storage and Retrieval	IT765	Internet of things		IT768	Applied Cryptography			II			
	IT763	Language Processor	IT766	Cloud Computing		EC767	Embedded System Design			I			
						EC768	Digital Image & Speech Processing			II			
		Semester 1 (Institute Elective I)			Semester 2 (Institute Elective II)		CE767	Operating System Design & Concepts			I		
	MA771	Reliability and Risk Analysis	EE782	Energy Audit and Management		CE768	Software Project Management & Quality Assurance			II			
	EE781	Optimization Techniques	CE771	Project Management		EE771	Digital Signal Processing & its Applications			I			
	ME781	Occupational Health & Safety	IT771	Cyber Security and Laws		EE772	Restructuring and Deregulation of Power Systems			II			

Annexure IV

(Agenda - III)

Approved Teaching & Examination Scheme

for

**M Tech
Information technology**

**Effective From
(CHARUSAT 2017 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title	Teaching Scheme				Examination Scheme				
			Contact Hours			Credit	Theory		Practical		Total
			Theory	Practical	Total		Internal	External	Internal	External	
FY Sem I	IT741	Algorithms & Computational Complexity	3	2	5	4	30	70	25	25	150
	IT742	Advanced Computer Network	3	2	5	4	30	70	25	25	150
	IT743	High Performance Computing	3	4	7	5	30	70	50	50	200
		Programme Elective-I	3	2	5	4	30	70	25	25	150
		Programme Cluster Elective-I	3	2	5	4	30	70	25	25	150
	HS	HS701A - Advance Critical Thinking & Logic	2	0	2	2	30	70	0	0	100
		HS703.01A - Languages (French/ German)	0	2	2	2	0	0	30	70	100
		HS704A -Academic Speaking	0	2	2	2	0	0	30	70	100
		University Elective-I	2	0	2	2	30	70	0	0	100
			19	16	35	29	210	490	210	290	1200
FY Sem II	IT744	Information and Network Security	3	4	7	5	30	70	50	50	200
	IT745	Data Science & Modelling	3	2	5	4	30	70	25	25	150
	IT746	Computational Intelligence	3	2	5	4	30	70	25	25	150
		Programme Elective-II	3	2	5	4	30	70	25	25	150
		Programme Cluster Elective-II	3	2	5	4	30	70	25	25	150
	HS	HS705 A - Academic Writing	0	2	2	2	0	0	30	70	100
		University Elective-II	2	0	2	2	30	70	0	0	100
			17	14	31	25	180	420	180	220	1000

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR M TECH (CBCS) PROGRAMME IN INFORMATION TECHNOLOGY

Sem	Course Code	Course Title			Credit	Examination Scheme					Total
						Internal		External			
						Progress Report	Progress Seminar	Report	Seminar	Viva -voce	
SY Sem III	IT811	Project Preliminaries			4	50	50	0	50	50	200
	IT812	Project Phase-I			18	100	100	100	100	100	500
					22	150	150	100	150	150	700
SY Sem IV	IT813	Project Phase-II			30	200	200	200	200	200	1000
					30	200	200	200	200	200	1000
Total			36	30	106	404	740	1210	740	860	3900

Course Code	Semester 1 (Programme Elective I)	Course Code	Semester 2 (Programme Elective II)
IT761	Advanced Operating System	IT764	Web Services & Service Oriented Computing
IT762	Information Storage and Retrieval	IT765	Internet of things
IT763	Language Processor	IT766	Cloud Computing
Course Code	Semester 1 (Programme Cluster Elective I)	Course Code	Semester 2 (Programme Cluster Elective II)
IT767	Micro Device Programming	IT768	Applied Cryptography
EC767	Embedded System Design	EC768	Digital Image & Speech Processing
CE767	Operating System Design & Concepts	CE768	Software Project Management & Quality Assurance
EE771	Digital Signal Processing & its Applications	EE772	Restructuring and Deregulation of Power Systems

Annexure V

(Agenda - IV)

Approved list of university elective courses

for

B Tech

Information technology

Effective From

(CHARUSAT 2016 Admitted Batch)

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

List of University Elective Courses under

Choice Based Credit System

Second Year Undergraduate Programme

(Effective From Academic year 2017-18)

Sr. No.	Course Code & Course Name	Department / Faculty offering the Course	Semester in which the course to be offered / Remarks
1	EC281: Introduction to MATLAB Programming	EC / FTE	3
2	EC282: Prototyping Electronics with Arduino		4
3	CE281: Art of Programming	CE / FTE	3
4	CE282: Web Designing		4
5	CL281: Environmental Sustainability and Climate Change	CL / FTE	3
6	CL282: Basics of Environmental Impact Assessment		4
7	EE281: Electrical Engineering Materials	EE/FTE	3
8	EE282: Electrical Power Utilization		4
9	IT281: ICT Resources and Multimedia	IT/FTE	3
10	IT282: Internet Technology and Web Design		4
11	ME281: Engineering Drawing	ME/FTE	3
12	ME282: Material Science		4
13	PH233: Fundamentals of Packaging	RPCP/FPH	3
14	PH238: Cosmetics in daily life		4
15	PD260: Basic Laboratory Techniques	PDPIAS/FAS	Semester 3 is submitted; Semester 4 is pending.
16	NR251: First Aid & Life Support	NURSING / FMD	3
17	NR261: Life Style Diseases & Management		4
18	PT191: Health Promotion and Fitness	ARIP / FMD	3
19	PT192: Occupational Health & Ergonomics		4
20	CA224: Introduction to Web Designing	CMPICA / FCA	3
21	CA225: Programming the Internet		4
20	BM231: Banking and Insurance	I2IM / FMS	3
21	BM241: Health Care Management		4

Department of Information Technology, CSPIT, CHARUSAT

Annexure-II

Event Report

1. Event Title : IT Startup Project Competition
2. Department : Smt. Kundanben Dinsha Patel
Department of Information Technology,,
CSPIT, CHARUSAT, Changa
3. Proposed Event Date : 19th March, 2021 (Friday): 1st Round
9th April, 2021 (Friday): 2nd Round
30th April, 2021(Friday): 3rd Round
4. Duration of the Event : 6 hour each round = Total 18 Hours
5. Participants : UG students (B.Tech IT)
6. Objective of the Event : The objective of this competition is to align software project development toward startup activities in engineering students and help them to venture into business entity.
7. Proposed Expense : Rs. 30,000/-

[1st Prize : 15,000/-
2nd Prize : 10,000/-
3rd Prize : 5000/-]
8. Approved Amount from Charusat : 10000
[1st Prize : 5,000/-
2nd Prize : 3,000/-
3rd Prize : 2000/-]
9. Total Participants : 1st Round: 100+ Projects
2nd Round: 40 Projects Projects
3rd Round: 14 Projects

Hemant N Yadav
Event Coordinator



Dr. Parth Shah
HOD IT

Department of Information Technology, CSPIT, CHARUSAT

Date: 10 Mar 2021

Proposal for organizing Event

1. Event Title : IT Startup Project Competition
2. Department : Department of Information Technology,
CSPIT, CHARUSAT, Changa
3. Proposed Event Date : 19th March 2021 (Friday): 1st Round
9th April 2021 (Friday): 2nd Round
30th April 2021 (Friday): 3rd Round
4. Duration of the Event : 6 hour each round = Total of 18 Hours
5. Participants : UG students (B.Tech IT)
6. The objective of the Event : The objective of this competition is to align software project development toward startup activities in engineering students and help them to venture into a business entity.
7. Proposed Expense : Rs. 30,000/-

[1st Prize: 15,000/-
2nd Prize: 10,000/-
3rd Prize: 5000/-]



Hemant N Yadav
Event Coordinator



Dr. Parth Shah
HOD IT

Prize money is too high
It should be
5000/-
3000/-
& 2000/- as per your sequence.
Approved
10/3/21

Round 1 Project List

19IT003	AMRUTIYA ZEELKUMAR VIPULKUMAR	Microsoft-teams class attender (bot)
19IT004	ANTALA NEVILY JANAKBHAI	Job Finder website with database in redis, platforms : html, css, javascript, node, react
19IT006	BALAR RUTVIK NARESHBHAI	Virtual painter
19IT007	BANGORIYA ROHAN RAMNIKBHAI	android music player application using android studio
19IT008	BAROT SAMEER RAJENDRABHAI	CV Generator
19IT009	SHREYANSH UMESHCHANDRA BHAGAT	CV Generator
19IT010	BHATTI MAYUR AJAYBHAI	Crypt-It
19IT011	BHAVSAR JAINAM DHARMENDRAKUMAR	Cartoonify an Image with OpenCV in Python
19IT013	BHEDA RAJ SNEHAL	PhotoCode : A Cross platform Code Editor which fetches handwritten code from paper
19IT014	BHUVA KEVAL MUKESHBHAI	Foliar disease classification in apple leaves using Python 3.6, anaconda, tensorflow, keras, , matploatlib, numpy, sqlite Database, OS
19IT015	BHUVA PINAK MITESHKUMAR	PhotoCode : A Cross platform Code Editor which fetches handwritten code from paper
19IT016	BUTANI MANAV MAGANBHAI	Magic notes website using html,css,Javascript,mongoDB,
19IT017	BUTANI OMSHREE ATULBHAI	Cartoonify an Image with OpenCV in Python
19IT018	BUTANI RUTKUMAR RAJESH	android music player application using android studio
19IT019	BUTANI RUTU JITESHBHAI	Job Finder website with database in redis, platforms : html, css, javascript, node, react
19IT020	CARPENTER KHUSHI AMBERISH	Crypt-It
19IT021	CHANDRAVADIA VIPUL KUMAR	Microsoft-teams class attender (bot)
19IT025	CHAUHAN RUDRA PRAMODBHAI	Musically Mine (Dating application based on music taste)
19IT026	CHAVDA PRADEEPSINH ANOPSINH	IOT based Smart security system
19IT028	DADHANIYA RAJ DILIPBHAI	Vacation place recommendation using Twitter trends
19IT029	DARJI UTSAVKUMAR HASMUKHKUMAR	identification of diseases from pathology report
19IT030	DELVADIYA KARAN MAHENDRABHAI	College/University Event management
19IT031	DESAI AMAN HARISHKUMAR	Indian Sign Language Detection
19IT032	DESAI MANSI JAGDISHKUMAR	Indian Sign Language Detection

19IT034	GABANI ARPIT HIMMATBHAI	Farmer helping app
19IT035	GADHIYA KRUTIK RAJESHBHAI	College/University Event management
19IT036	GAJERA RAJKUMAR CHANDULAL	identification of deases from pathology report
19IT037	GANDHI HARDIK MEHULKUMAR	Indian Sign Language Detection
19IT038	GANDHI SHRUTI PARESH	Musically Mine (Dating application based on music taste)
19IT039	GHADIYA AYUSH HARESH	Vacation place recommendation using Twitter trends
19IT042	GOHIL DIVYANSHKUMAR GAMBHIRSINH	Farmer helping app
19IT043	GOHIL JENIS RASHMIKANT	Salary management system using java and SQLite
19IT044	GONDALIYA KEYURKUMAR BABUBHAI	Electricity billing system
19IT045	GORIYA MEGHA KETANKUMAR	Health monitoring system using arduino
19IT046	GUJARATI AUM AMITKUMAR	Weather forecasting app using flutter
19IT047	JADAV KRUTIKSINH AJITSINH	Weather forecasting app using flutter
19IT048	JHAVERI DRASHTIBEN RIPALKUMAR	Chatbot for appointment
19IT051	KALATHIYA RUCHIT JAGDISHBHAI	News App using react native
19IT052	KANANI DIXIT DHANJIBHAI	Electricity billing system
19IT053	KANJARIYA SAHIL MANSUKHBHAI	Document storaging app using flutter
19IT054	KAVAR DEEP MAHESHBHAI	Document storaging app using flutter
19IT055	KHATRI FARHAN ASHFAK	Chatbot for appointment
19IT056	KOTAK DEVARSH MANISHKUMAR	Salary management system using java and SQLite
19IT057	LAD STUTIKUMARI SATISHBHAI	Health monitoring system using arduino
19IT058	LADHANI TEJAS RAJESHBHAI	Portfolio Managment website using react js
19IT059	SHREYKUMAR HARSHADKUMAR MAKWANA	Portfolio Managment website using react js
19IT061	MALAVIYA AKSHAY DINESHBHAI	Weather Station App
19IT062	MANDANI VIVEK BHARATBHAI	News App using react native
19IT063	MANDANKA KEVALKUMAR BHIKHABHAI	Weather Station App
19IT064	MANGUKIYA JEET DINESHBHAI	Chat Application
19IT067	MISTRY CHINTAN AJAYBHAI	AN ANDROID VIDEO CALLING APP HAVING ABUNDANTLY MANY FEATURES IN IT.
19IT068	MODI MIHIR KALPESHBHAI	Multiplayer online game
19IT069	MORADIYA VEET VINUBHAI	Android application like GoMechanic
19IT070	NAGAR DHARUVKUMAR DINESHKUMAR	Collage Extension For Charusat

19IT071	NASARIWALA SAHIL SAMIRBHAI	Multiplayer online game
19IT072	NATHANI HARSHKUMAR BHARATBHAI	AN ANDROID VIDEO CALLING APP HAVING ABUNDANTLY MANY FEATURES IN IT.
19IT073	NAVADIA SHREY ASHVIN	IMDB for books
19IT074	AKANKSHA PANDEY	To create a Machine Learning based web application that will suggest and compare phones according to the user's priority and budget.
19IT075	PAREKH DEVANSHU MEHUL	Android application like GoMechanic
19IT076	PAREKH KAMAL ASHWINKUMAR	To create a Weather forecasting web application with data given in API id.
19IT077	PARIKH KHUSHI SANDIPBHAI	IMDB for books
19IT078	PARMAR ANGEL KANTIBHAI	To create a Machine Learning based web application that will suggest and compare phones according to the user's priority and budget.
19IT080	PARMAR VATSAL MAHESHBHAI	cryptocurrency analysis with python
19IT081	PARVADIYA RAVIKUMAR VINODBHAI	Collage Extension For Charusat
19IT082	AAYUSHKUMAR PATEL	Chat Application
19IT084	PATEL AKSHATKUMAR RAKESHBHAI	cryptocurrency analysis with python
19IT085	PATEL ARSHKUMAR NITINBHAI	Phonic Sound Learnign App for Kids
19IT087	PATEL BREEZE PRAVINKUMAR	Crossword for kids Mobile App
19IT088	CHARMI PRAVINBHAI PATEL	Krushu Bazar (Online Crop Selling Platform)
19IT089	PATEL DEEP CHETANBHAI	Equity Market News Scrapping App
19IT090	PATEL DEEP NARENDRAKUMAR	GST Billing Android App
19IT091	PATEL DEEP SANDIPKUMAR	Equity Market News Scrapping App
19IT092	PATEL DEV HARSHAD	Learning App for Junior
19IT093	PATEL DHAIRYA BIPINKUMAR	Health record App
19IT094	PATEL DHARMIK MUKESHBHAI	Drop Shipping
19IT095	DHRUV KAMLESHBHAI PATEL	Krushu Bazar (Online Crop Selling Platform)
19IT096	DHVANI PATEL	Add/Sub/Mul/Div Learnign App for kids
19IT097	PATEL DHYEYKUMAR JIGNESHBHAI	Health record App
19IT098	PATEL HIRAK RAKESHKUMAR	Mobile App for Tiffin Service Provider
19IT099	PATEL JATIN HITESHBHAI	Health record App
19IT100	PATEL KOMIL BHUPENDRAKUMAR	Health record App
19IT101	KRISHNA JIGNESHKUMAR PATEL	Add/Sub/Mul/Div Learnign App for kids

19IT102	KRUNAL PATEL	GST Billing android app
19IT103	PATEL MANAN RAJESHKUMAR	Mobile App for Tiffin Service Provider
19IT105	PATEL NISHIT NARENDRAKUMAR	Crossword for kids Mobile App
19IT107	PATEL RUTUL MANUBHAI	Automated Green House (Android)
19IT108	PATEL SHACHI PINAKIN	Automated Green House (Android)
19IT109	PATEL SHIVAM CHIRAGBHAI	Expense Manager App (Android)
19IT110	PATEL SHREYALIKUMARI RAJNIKANT	Face Recognition System
19IT111	PATEL SHREYAS SANJAYBHAI	Settle Up (Android)
19IT112	PATEL TIRTH YASHVANTBHAI	Expense Manager App (Android)
19IT113	PATEL VEDANT BHAVENBHAI	Stock Price Predictor
19IT114	PATEL VIRAGKUMAR PRADEEPBHAI	Object Detection for Road Transport
19IT115	PATEL VISHRUTI JITENDRAKUMAR	Face Recognition System
19IT116	PATEL VRUNDKUMAR MAHESHBHAI	Settle Up (Android)
19IT117	PATVA VIRAJ KAMLESHBHAI	Medical ChatBot
19IT119	PRAJAPATI KAILASH RAJESHBHAI	Online Secondhand Hostel material Rent,Buying & Selling
19IT120	PRAJAPATI SAVANKUMAR RAJENDRAKUMAR	Online Secondhand Hostel material Rent,Buying & Selling
19IT121	PRAJAPATI VENIS VINODKUMAR	CHARUSAT CodeHub
19IT122	PUNJABI KRUTARTH SURESHBHAI	Stock Price Predictor
19IT123	RAJVADIYA DHARAM DINESHBHAI	Digit Recognition of English
19IT124	SAVALIYA SAVAN MUKUNDBHAI	Foliar Disease Classification in Apple Leaves
19IT125	SAVALIYA SUMIT ASHOKBHAI	Foliar Disease Classification in Apple Leaves
19IT126	SHAH AXAT DEVANGBHAI	Online Whiteboard
19IT127	SHAH AYUSH PRAGNESHKUMAR	Face Recognition System
19IT128	SHAH DHRUMILKUMAR JIGARKUMAR	Food management app
19IT129	SHAH DHARUVIL RAJABHAI	online voting app
19IT130	SHAH JHANVI SHAILESH	Handwritten Digit Recognition
19IT131	SHAH KAVYA JIGNESH	University Placement Website
19IT132	SHAH KIRTAN VIRALKUMAR	University Placement Website
19IT133	SHAH POOJAN SWETANGBHAI	Website for kids for sound correlation
19IT134	SHAH RAJ MINTUKUMAR	Inventory management system
19IT135	SHEKH MOHAMMAD MAHIR MUNIRBHAI	Event Management System

19IT136	SOJITRA VIYANSHI MUKESHBHAI	Xstream Fit Application
19IT137	SOLANKI ADITYASINH DIPAKKUMAR	Food management app
19IT138	SONAIYA DHAIRYA PARMANANDBHAI	Xstream Fit Application
19IT139	SONDAGAR DARSHAKKUMAR RAJESHBHAI	Gesture Control Using Arduino
19IT140	MALAV K SUKHADIA	Medical chatbot
19IT141	TANK PARIMAL KISHORBHAI	Object Measurment
19IT142	TARPARA VITAN BHASKARBHAI	Gesture Control Using Arduino
19IT143	TARSARIYA DARSHAN HARESHBHAI	Object Measurment
19IT144	TELI AYUSH NIKHILKUMAR	Tourist Guide Application
19IT145	THAKER KAUTILYA PARAG	online voting app
19IT146	THAKKAR MEET BHARATBHAI	Event Management System
19IT147	DARSHANKUMAR VANOL	Tourist Guide Application
19IT148	VAROTARIYA HARSH KHIMANANDBHAI	E waste management system
19IT149	VEKARIYA JAY NITESHBHAI	Face Recognition System
19IT150	VEKARIYA JEELKUMAR ARVINDBHAI	E waste management system
19IT151	VIRADIA HARSH CHANDULAL	Handwriiten Digit Recognition
19IT152	VIRADIYA RAJ ARVINDBHAI	Inventory management system

18IT001	AGHERA SHYAMKUMAR BHUPENDRAKUMAR	Building Serverless Web Application for Object detection using AWS
18IT002	AGRAWAL SUNNY SHAMBHUBHAI	Building Serverless Web Application for Object detection using AWS
18IT003	AJUDIYA JANVI HASMUKHBHAI	Online payment app using flutter
18IT004	AJUDIYA PRINCE BHIKHALAL	Deploy Cotton Disease Prediction using Deep learning & Flask
18IT005	AKRUVALA DEVANSH JITENDRA	Document scanner and Digital Locker app
18IT006	AMRE DARPAN KETAN	Hand Gestured vlc and smart CCTV using Machine learning
18IT007	AVAIYA PUJAN SURESHBHAI	Data Security using python
18IT008	NISARG BAKHAI	Origin - The warranty extender android app built using flutter
18IT009	BALDANIYA KRISHNA SURYAKANT	Plant Disease Prediction using Deep learning + Application
18IT010	BAVISHI YAGNIK GHANSHYAMBHAI	Deploy Cotton Disease Prediction using Deep learning & Flask
18IT012	BHATT BHOOMIBEN KIRITBHAI	ChatBot on aws for charusat admission inquiry

18IT013	BHATT VRAJ DIPAK	Password Manager and Password Generator Mobile + Desktop Application.
18IT014	BHAVANI KRUTARTH MAHESHBHAI	Bike and Car Servicing App using flutter
18IT015	BHAVSAR ANJALIBEN CHETANKUMAR	ERP system for stock management using .net framework c#
18IT016	NANDISH BHAYANI	Origin - The warranty extender android app built using flutter
18IT017	BHIKADIYA MANTHAN VALJIBHAI	Plant Disease Prediction using Deep learning + Application
18IT018	BHIMANI KRUPA HITESHBHAI	ERP system for stock management using .net framework c#
18IT019	CHAPADIA VANDITABEN HANISHKUMAR	BLOG APPLICATION USING FLUTTER.
18IT020	CHAUHAN YASH MAHESHBHAI	Blockchain based supply chain app
18IT021	CHAVDA HARNISH BHARATBHAI	Bike and Car Servicing App using flutter
18IT022	CHUDASAMA RUSHI ANAND	Java Autograding Project
18IT023	CHUDGAR SHAIL CHIRAGBHAI	Password Manager and Password Generator Mobile + Desktop Application.
18IT024	DABHI VEDANTSINH VIJAYSINH	chat application with end to end encryption
18IT025	DADHANIYA DHAVAL GIRISHBHAI	Task Scheduling using cloud computing
18IT026	DALSANIA DHRUV PRAKASH	AWS based Drone
18IT027	DALWADI DHRUMIL RAJAN	Insurance Application
18IT028	DAMOR MANOJ RAMESHBHAI	Traffic Signs Recognition
18IT029	DARJI VATSAL VIRENBHAI	Phishing Tool
18IT030	DESAI DHYEY HARIHAR	application for workers like electrician, plumbers, labor etc
18IT031	DESAI PRIYANSH JAYESHBHAI	application for workers like electrician, plumbers, labor etc
18IT032	DHANWANI VISHWAS SUBHASH	Auto Grading Project
18IT033	GAJJAR NIDHI NIRAVBHAI	Create a Jenkins CICD Pipeline to Build a Docker Image with Splunk Integration
18IT034	GANDHI DHRUVAL RITESHKUMAR	Taxi ride sharing application
18IT035	GANDHI MEETI SUSHIL	speed checker for moving vehicles
18IT036	GANDHI NIDHISH DIPENBHAI	Voice assistance and object detection for blind people
18IT037	GOHIL RUSHABH NAVINCHANDRA	Stock Price prediction
18IT038	JANI DISHANK JITENDRA	Text Summarization using Transformer
18IT039	JAVIYA NIHAR JITESHBHAI	Medical insurance premium prediction
18IT040	JINDAL MUSKAN	Create a Jenkins CICD Pipeline to Build a Docker Image with Splunk Integration

18IT041	JOSHI ABHISHEK DHARMESHBHAI	Evaluation based Attendance app
18IT042	JOSHI CHIRAYU AKSHAYBHAI	Encryption Based Secure Password Storage Vault
18IT043	KADIVAR NAND CHETANBHAI	Dairy product business platform
18IT044	KADIWALA JAYKUMAR MAHENDRAKUMAR	Expencc tracker app
18IT045	KAGATHARA BINAL RAJNIKANT	Saree App(e-shop)
18IT046	KALATHIYA JENIL ASHWINBHAI	AWS based Drone
18IT047	KANANI ARPAN PRAVIN	Real Estate Price Prediction
18IT048	KHATRI MANSI KETANKUMAR	Voice assistance and object detection for blind people
18IT049	KHER BRIJESH DINESHBHAI	OBJECT DETECTOR USING AI
18IT051	KHOKHARIYA SMITKUMAR ISHVARBHAI	KISAN HUB Application
18IT052	LALWANI ADITYA	sketch to face Tranformation
18IT053	LO POOJA AMRUTBHAI	Book Rental
18IT055	MAKADIYA HAPPY SANJAYKUMAR	Food Ordering Full Stack Cloud Based Flutter Application using AWS
18IT056	MAKHIJA AVINASH GOVINDBHAI	Drone Using AWS Services and Alexa
18IT059	MANANI BHAKTIBEN RAMESHBHAI	Smart Door-Lock
18IT060	MANIYA DHRUVIT JAGDISHBHAI	Social Media application using react native
18IT062	MANVAR MEET PIYUSHBHAI	Drone Using AWS Services and Alexa
18IT063	MEHTA KETUL SANJAY	Drone Using AWS Services and Alexa
18IT065	MODI KAAVIYA RAKESH	Real Estate Price Prediction using Machine Learning
18IT066	MODI SARJAK KETANKUMAR	Employee Management System
18IT067	MONAPARA PARAS VIJAYBHAI	OBJECT DETECTOR USING AI
18IT068	MORADIYA VAIBHAV GHANSHYAMBHAI	KISAN HUB Application
18IT070	PAN RUTVI RAMESHBHAI	Text recognition from an image using android and ML
18IT071	PANCHAL KRUNAL SHAILESH	sketch to face Tranformation
18IT072	PANCHAL VAIDIKKUMAR BHUPESHKUMAR	Evolution of Biometrics and Future
18IT073	PANJWANI DHWANI MANISHKUMAR	Text recognition from an image using android and ML
18IT074	PAREKH DHWANI HIRENBHAI	Creating realtime emoji using face recognition and emotions recognition
18IT075	PARIKH PREET MAYANKKUMAR	Charusat Social Club - An Intercollege application for sharing, connecting, interacting for recognition and collaboration
18IT076	PARMAR RAJ KIRITBHAI	Food Ordering app for CHARUSAT campus

18IT077	PARMAR RIDDHI ARVINDBHAI	Bank Note Authentication End To End With Dockers
18IT078	PATEL ARYAN DIPALBHAI	E-Crime Managment System
18IT079	PATEL DARSHANKUMAR ASHVINBHAI	Secured Medical Records Using Blockchain
18IT080	PATEL DARSHIL MITUL	Charusat Social Club - An Intercollege application for sharing, connecting, interacting for recognition and collaboration
18IT081	PATEL DARSHIL SANJAYKUMAR	WI-FI Jammer Using ESP8266
18IT082	PATEL DEVEN MANOJKUMAR	Bank application using block chain analysis
18IT083	PATEL DHRUVI HITESHBHAI	Cartoonify Image with Machine Learning
18IT084	PATEL DHRUVIL JIGNESH	Sport Ground Reservation App
18IT086	PATEL HARSHIL JAYESHBHAI	Sport Ground Reservation App
18IT087	PATEL HETVI VIPULKUMAR	Travel Guide
18IT088	PATEL JAYKUMAR SHAILESHBHAI	Secured Medical Records Using Blockchain
18IT089	PATEL KARAN KALPESHBHAI	Sign Language Interpreter using Machine Learning
18IT090	PATEL KRUPA JIGNESHKUMAR	Creating realtime emoji using face recognition and emotions recognition
18IT091	PATEL KRUSHIBEN ILESHBHAI	Travel Guide
18IT092	NEEL PATEL	Sign Language Interpreter using Machine Learning
18IT093	PATEL NIKUNJ DHANSUKHBHAI	Weather Prediction Using Machine Learning
18IT095	PATEL PAVAN JATINKUMAR	Bank application using block chain analysis
18IT096	PATEL PRINCE DINESHBHAI	E-Crime Managment System
18IT097	PATEL PRINCE UMESHBHAI	Weather Prediction Using Machine Learning
18IT098	PATEL RADHEY HITESHBHAI	Java Autograding
18IT099	PATEL RITIK HIMANSHU	Student Friendly Personal Assistant
18IT100	PATEL RIYABEN HITESHKUMAR	Market-Basket Analysis in ML
18IT101	PATEL RUSHI DHARMESHBHAI	Face Mask Detection
18IT102	PATEL RUTVIK BHARATBHAI	Student Friendly Personal Assistant
18IT103	PATEL SUJAY SURESHBHAI	Plant Disease Prediction & Get Cure App using Artificial Intelligence
18IT104	PATEL TAKSH HITESHKUMAR	Crowdfunding By Blockchain
18IT105	PATEL UMANGKUMAR JASHVANTBHAI	Plant Disease Prediction & Get Cure App using Artificial Intelligence
18IT106	PATEL YASH ALPESHBHAI	Face Mask Detection
18IT107	PATEL YASH JIGNESH	Traffic Signs Recognition
18IT109	RADADIYA DARSHAK BHUPATBHAI	Image caption generator using ML Algorithms

18IT110	RELIA MAHARSHI CHETAN	Smart Lock & Mobile Application for Electric Bicycle
18IT111	SABHAYA HARSH CHANDRESHBHA	Java Autograding
18IT112	SAHSANI YASH MAHESH	insurance app using hyperledger fabric
18IT113	SATHALIYA KHUZEMA NURUDDIN	Traffic Signs Recognition
18IT114	SAVAJ BRIJESH KAMLESHBHA	TextileApp - Mobile App for Textile Business
18IT115	SAVALIYA AMI RAMESHBHA	Market-Basket Analysis in ML
18IT116	SHAH ARCHI HIREN	Road Lane Line Detection using Artificial Intelligence
18IT117	DEEP SHAH	TextileApp - Mobile App for Textile Business
18IT118	DEVARSH SHAH	Food delivery App using Cloud Kitchen Concept
18IT119	SHAH DHYUV MITESHBHA	Smart Lock & Mobile Application for Electric Bicycle
18IT120	SHAH JIMIT PRAGNESH	Food delivery App using Cloud Kitchen Concept
18IT121	KAJAL SHAH	GUI Manipulation using gesture
18IT122	SHAH MEET ROOPENKUMAR	School Suppliers hub - A mobile app for needy students
18IT124	SHAH NEEL HETALKUMAR	Human emotion detection system
18IT125	SHAH PRACHI KALPESHBHA	Tutor app using flutter
18IT126	SHAH SHREYANSHI JATIN	Analysis and corelation between geography and air pollution using predivictive model
18IT127	SHAH TARAKKUMAR NARENDRAKUMAR	Stock Price Prediction using SVM and LSTM algorithm
18IT128	TRUSHA NIPUL SHAH	java autograding system using Junit
18IT129	SOLANKI KAMLESHKUMAR RAVJIBHA	Credit card fraud detection using ML
18IT130	SOLANKI YASH SHASHIKANT	Handwritten Character recognition using ML
18IT131	SONAVNI VARUN AJAYBHA	Size Runner 2, game.
18IT132	SUVARIYA MEET BHARATBHA	ERP system for society management using ASP.NET(framework) and C#
18IT133	THAKKAR JAYATI ANILKUMAR	java autograding system using Junit
18IT134	THAKKAR KRUNAL BALKRISHNA	human emotion detection system
18IT135	THAKKAR VEDANG DILIPBHA	Student Attendance system using Django Framework with a linear SVM
18IT136	THAKOR DHYUV SURSINH	Amazon type clone using MERN Stack Development
18IT137	TRADA ASHISHKUMAR KISHORBHA	recommendation system using ML and python
18IT138	VACHHANI KATHA DILIPKUMAR	Flower Recognition
18IT139	VAGHASIYA FENIL SURESHBHA	Video Transcoding Using AWS
18IT140	VAGHELA LAGDHIRSINH MAHENDRASINH	Voice Assistant Using Python
18IT141	VAGHELA RADHIKA AMRATBHA	online shopping application

18IT142	VAISHNANI PRASHIL DALPATBHAI	blockchain:evaluation of commercial system
18IT143	VASANI KRUSHI DEVENDRABHAI	Video Transcoding Using AWS
18IT144	VASANI RUSHABH BIPINBHAI	Serverless GST mismatch analyzer using Azure Functions
18IT146	VYAS MEET NILESHBHAI	Voice Assistant Using Python
D19IT147	THAKKAR PARTHIV HAREN	Food Delivery Application
D19IT148	SAKHIYA KEVIN MUKESHBHAI	Employee Ease
D19IT149	VYAS NILAY KEYURKUMAR	Fake News Detection App
D19IT150	MISHRA KUNAL ANILKUMAR	E-commerce android application
D19IT151	PATEL DHRU MANISHKUMAR	watering app for farmers
D19IT152	PATEL VAIBHAV DEEPAK	Private club's event booking (Dynamic Website)
D19IT153	GHUNJARIYA ABHISHEK HARESHBHAI	Employee Ease
D19IT154	PATEL DHARA VISHNUBHAI	Patel's Furniture (website)
D19IT155	CHAUDHARY DARSHIL YOGESHBHAI	Desktop Voice Assistant
D19IT156	SHAH SHIVANI JITENDRAKUMAR	Desktop Voice Assistant
D19IT157	PATEL MIHIR PANKAJBHAI	Private club's event booking (Dynamic Website)
D19IT159	PUROHIT DARSHAN RAKESHBHAI	watering app for farmers
D19IT160	PUROHIT SHIVAM DIPESHKUMAR	Music Player App
D19IT161	SHETH AAKASH KETANBHAI	Video Streaming Application

Selected Project for Round 2

1	Social Distancing(Covid'19 based application)	19IT001,1 9IT002	AKBARI JAY JAYNTIBHAI,AMADAVADI PRAGNENKUMAR MINISHBHAI
2	Crypt-It	19IT010,1 9IT020	BHATTI MAYUR AJAYBHAI,CARPENTER KHUSHI AMBERISH
3	PhotoCode : A Cross platform Code Editor which fetches handwritten code from paper	19IT013,1 9IT015	BHEDA RAJ SNEHAL,BHUVA PINAK MITESHKUMAR
4	Indian Sign Language Detection and speech conversion	19IT031, 19IT032,1 9IT037	DESAI AMAN HARISHKUMAR, DESAI MANSI JAGDISHKUMAR, GANDHI HARDIK MEHULKUMAR
5	Musically Mine (Dating application based on music taste)	19IT025, 19IT038	CHAUHAN RUDRA PRAMODBHAI,GANDHI SHRUTI PARESH
6	identification of diseases from pathology report	19IT029, 19IT036	DARJI UTSAVKUMAR HASMUKHKUMAR, GAJERA RAJKUMAR CHANDULAL
7	Vacation place recommendation using Twitter trends	19IT028, 19IT039	DADHANIYA RAJ DILIPBHAI, GHADIYA AYUSH HARESH
8	Weather forecasting	19IT045	Megha Goriya
9	Portfolio Managment	19IT058	Radhni Tejas
10	ReadReactReview	19IT073,1 9IT077	NAVADIA SHREY ASHVIN, PARIKH KHUSHI SANDIPBHAI
11	Collage Extension For Charusat	19IT070.1 9IT081	NAGAR DHRUVKUMAR DINESHKUMAR, PARVADIYA RAVIKUMAR VINODBHAI
12	Mobile App for Tiffin Service Provider	19IT098, 19IT103	Manan Patel, Hirak Patel
13	Krushni Bazar (Online Crop Selling Platform)	19IT095,1 9IT098	Dhruv Patel, Charmi Patel
14	Bus Booking App	19IT087	Breeze Patel
15	On-Board	19IT126	SHAH AXAT DEVANGBHAI
16	Medical ChatBot	19IT117, 19IT140	PATVA VIRAJ KAMLESHBHAI, MALAV K SUKHADIA
18	Website for kids for sound correlation	19IT133	SHAH POOJAN SWETANGBHAI

19	Crypt-It	19IT010,1 9IT020	BHATTI MAYUR AJAYBHAI,CARPENTER KHUSHI AMBERISH
20	PhotoCode : A Cross platform Code Editor which fetches handwritten code from paper	19IT013,1 9IT015	BHEDA RAJ SNEHAL,BHUVA PINAK MITESHKUMAR
21	Plant Disease Prediction using Deep learning + Application	18IT009, 18IT017	BALDANIYA KRISHNA SURYAKANT,BHIKADIYA MANTHAN VALJIBHAI
22	ChatBot on aws for charusat admission inquiry	18IT012	BHATT BHOOMIBEN KIRITBHAI
23	Bike and Car Servicing App using flutter	18IT021, 18IT014	CHAVDA HARNISH BHARATBHAI,BHAVANI KRUTARTH MAHESHBHAI
24	kids vaccination application	18IT033	GANDHI MEETI SUSHIL
25	Android application for Labours	18IT030, 18IT031	DESAI DHYEY HARIHAR, DESAI PRIYANSH JAYESHBHAI
26	Dairy product business platform	18IT043	KADIVAR NAND CHETANBHAI
27	Vision Helper for visually impaired people application	18IT036,1 8IT048	GANDHI NIDHISH DIPENBHAI, KHATRI MANSI KETANKUMAR
28	Campus Jam Application	18IT060	MANIYA DHRUVIT JAGDISHBHAI
29	Food Ordering Full Stack Cloud Based Flutter Application using AWS	18IT055	MAKADIYA HAPPY SANJAYKUMAR
30	Coding test cases evaluation platform	18IT050	KHETAN AADITYA SUDHAKAR
31	Text Recognition from an image using android and ML	18IT073 & 18IT070	PANJWANI DHWANI MANISHKUMAR & PAN RUTVI RAMESHBHAI
32	Charusat Social Club - An Intercollege application for sharing, connecting, interacting for recognition and collaboration	18IT075 & 18IT080	PARIKH PREET MAYANKKUMAR & PATEL DARSHIL MITUL
33	Creating emoji using face recognition and emotions recognition	18IT074 & 18IT090	PAREKH DHWANI HIRENBHAI & PATEL KRUPA JIGNESHKUMAR
34	Sign Language Interpreter using Machine Learning	18IT092 & 18IT089	NEEL PATEL & PATEL KARAN KALPESHBHAI
35	E-bicycle Ride application	18IT110 & 18IT119	RELIA MAHARSHI CHETAN, SHAH DHRUV MITESHBHAI

36	An automated and Serverless GST reconciliation system	18IT144	VASANI RUSHABH BIPINBHAI
37	Size Runner 2 Game.	18IT131	SONAVNI VARUN AJAYBHAI
38	CodeHat- An Auto grading Web Application	18IT128,1 8IT133	TRUSHA NIPUL SHAH, THAKKAR JAYATI ANILKUMAR
39	Private club's event booking Website	D19IT152, D19IT157	Vaibhav D. Patel, Mihir Patel

Round 3 Project List

Sr No	Project Name	Student Roll no	Students
1	Krushni Bazar (Online Crop Selling Platform)	19IT095, 19IT088	Dhruv Patel, Charmi Patel
2	On-Board	19IT126	SHAH AXAT DEVANGBHAI
3	Indian Sign Language Detection and speech conversion	19IT031, 19IT032, 19IT037	DESAI AMAN HARISHKUMAR, DESAI MANSI JAGDISHKUMAR, GANDHI HARDIK MEHULKUMAR
4	Musically Mine (Dating application based on music taste)	19IT025, 19IT038	CHAUHAN RUDRA PRAMODBHAI,GANDHI SHRUTI PARESH
5	Vacation place recommendation using Twitter trends	19IT028, 19IT039	DADHANIYA RAJ DILIPBHAI, GHADIYA AYUSH HARESH
6	ReadReactReview	19IT073, 19IT077	NAVADIA SHREY ASHVIN, PARIKH KHUSHI SANDIPBHAI
7	Bus Booking App	19IT087	Breeze Patel
8	Bike and Car Servicing App using flutter	18IT021, 18IT014	CHAVDA HARNISH BHARATBHAI,BHAVANI KRUTARTH MAHESHBHAI
9	Android application for Labours	18IT030, 18IT031	DESAI DHYEY HARIHAR, DESAI PRIYANSH JAYESHBHAI
10	Plant Disease Prediction using Deep learning + Application	18IT009, 18IT017	BALDANIYA KRISHNA SURYAKANT,BHIKADIYA MANTHAN VALJIBHAI
11	Dairy product business platform	18IT043	KADIVAR NAND CHETANBHAI
12	E-bicycle Ride application	18IT110 &	RELIA MAHARSHI CHETAN, SHAH DHRUV MITESHBHAI

		18IT119	
13	kids vaccination application	18IT035	GANDHI MEETI SUSHIL
14	An automated and Serverless GST reconciliation system	18IT144	VASANI RUSHABH BIPINBHAI

Winner of Competition

1st Place winner: An automated and Serverless GST reconciliation system

By VASANI RUSHABH BIPINBHAI (18IT144)

Mentor: Prof. Nishat A Shaikh

2nd Place Winner: On-Board

By SHAH AXAT DEVANGBHAI (19IT126)

Mentor: Prof. Pritesh P Prajapati

3rd Place Winner-1: E-bicycle Ride application

By: RELIA MAHARSHI CHETAN(18IT110) &

SHAH DHRUV MITESHBHAI(18IT119)

Mentor: Prof. Sandip Patel

3rd Place Winner-2: Plant Disease Prediction using Deep learning

By: BALDANIYA KRISHNA SURYAKANT(18IT009) &

BHIKADIYA MANTHAN VALJIBHAI (18IT017)

Mentor: Prof. Mikin R Patel



CHARUSAT
CSPIT
*Department of Information
Technology*



Summary and Action Taken Report of Feedback on Curriculum
AY: 2018-19

Category	Comments	Action Taken
Alumni	Some new courses need to be introduced to make it aligned with industry.	- Department has introduced courses like Data Science, Cloud Computing, IoT to match with industry standards. - Considered in 14th BoS 14-July-2018
	Some subjects must introduce real time practice for the knowledge they've gained.	Practical lists were updated by incorporating new real-world scenarios like practical.
	Need to incorporate new courses on Machine Learning and automation.	- Department has Introduced machine Learning as a course in our curriculum. - Considered in 14th BoS 14-July-2018
Parent	Maybe there is a gap between industry needs to the academia, try to take into consideration to reduce the gap.	- Department has introduced student internships every summer vacation. - Syllabus is aligned with industry needs.
	Give more practical exposure to the real world.	- Department has initiated a Group Project in every semester to get more practical exposure to the real-world problem. - Considered in 14th BoS 14-July-2018
Student	Better courses can be included according to the new emerging technologies.	- Department started offering all the latest areas relevant to the branch as an elective course in final and pre-final year. - Considered in 14th BoS 14-July-2018
	Number of lab sessions should be increased and internal exam is preferred over unit test.	- Department have increased the practical credits of courses which requires more practical exposure. - As the Department wants to focus on continuous learning, unit test has not been replaced against internal exams.
Teacher	Modification in, - Teaching scheme, - Theory contents, - Practical contents of few courses	Department has considered suggested changes by the teachers into BOS and incorporated it into the new teaching scheme.

[Signature]

Minutes – 14th Meeting of Board of studies of Department of Information Technology

Date : July 14, 2018 & July 28, 2018, Saturday

Time : 11:00 am

Venue : Conference Room, Building-II, CSPIT, CHARUSAT Campus

The 14th meeting of the Board of studies, Department of Information Technology, FTE, Charotar University of Science & Technology (CHARUSAT) was held on 14th July, 2018 & 28th July, 2018 at 10:00 a.m. onwards at conference room (CE/IT), CSPIT, CHARUSAT campus.

Following BOS members were remained present:

1.	Dr. Parth Shah	Chairman, BoS	HOD, IT Dept
2.	Dr. Amit Ganatra	Member	Dean, Faculty of Tech & Engg, FTE
3.	Dr. Ketan Kotecha	External	Director and Dean, SIT, Pune
4.	Prof. M T Savaliya	External	Head, CE Dept., VGEC, Chandkheda
5.	Dr. Sanjay Chaudhary	External	Dean, School of Engineering and Applied Science, Ahmedabad University
6.	Mr. Manish Patel	External	Delivery Manager, eInfochips, Ahmedabad
7.	Mr. Roshan Shah	External	Technical Evangelist, Cybage, Pune
8.	Prof. B. V. Buddhdev	External	GEC, Gandhinagar
9.	Mr. Nikunj Patel	External	Director, TechSmith, Ahmedabad
10.	Mr. Pankaj Shah	External	Director, GlobalTech, Ahmedabad
11.	Dr. Amit Thakkar	Member	Asso. Prof., CSPIT
12.	Mr. Amit Nayak	Member	Asst. Prof., DEPSTAR

13.	Mr. Nirav Bhatt	Member	Asst. Prof., CSPIT
14.	Ms. Purvi Prajapati	Member	Asst. Prof., CSPIT
15.	Ms. Ayesha Shaikh	Member	Asst. Prof., CSPIT
16.	Mr. Bimal Patel	Member	Asst. Prof., CSPIT
17.	Mr. Hardik Jayswal	Member	Asst. Prof., DEPSTAR

Initiation:

Head of the Department of Information Technology, Parth Shah welcomed all the members of Board of Studies to the 14th meeting. He briefed the proposed teaching and examination schemes along with the overall activities carried out by the department during last academic year.

Agenda Proceedings & Resolutions:-

Item 14.01: For Discussion and Approval;

To approve the teaching & examination scheme and syllabus of B Tech 4th Year (7th and 8th Semesters) CBCS courses (2016 and 2017 Admission Batch).

Proceedings 14.01:

- Following is Compulsory Subject added

IT446	Summer Internship-II
-------	----------------------

- Based on placement scenarios and current industry needs, the members have suggested to include following courses as compulsory courses for the 7th semester students:

Course Code	Course Title
IT441	Data Science
IT442	Advanced Computing

IT443	Language Processors
IT444	Internet of Things

- To provide the flexibility to choose the course based on the students capability and interest following course have been suggested as electives. The courses are chosen based on the placement as well as further study perspective:

Course Code	Programme Elective - III
IT471	Foundation of Modern Networking
IT472	High Performance Computer Architecture
IT473	Artificial Intelligence

Resolutions 14.01:

- Suggestions given by the members have been approved and incorporated.
- The existing and proposed teaching scheme and revised teaching scheme of 7th and 8th semesters are attached at annexure I and annexure II respectively.
- The existing and proposed teaching scheme and revised teaching scheme of 1st and 2nd semesters are attached at annexure I and annexure II respectively.

Item 14.02: For Discussion and Approval;

To approve the syllabus of B Tech effective from 2018-19 Admitted Batch

Proceedings 14.02:

- Members have advised to reduce number of theory hours for the following courses of the 4th semester, as teachers are able to complete the syllabus within the particular period.

Course Code	Course Title
IT245	Computer Organization & Microprocessor Interfacing
IT247	Data Structures & Algorithms
IT248	Database Management System

- “For CE/IT students, Project development should be the mandatory component for all the semester.” Commented by the experts from the industry.
- As the python, programming language is booming in the field of IT, Members have suggested offering it to earlier semesters.
- Expert have suggested to pointed out to revise group of program elective of the semester 6th as follows:

Course Code	Programme Elective - II
IT375	Service Oriented Computing
IT376	Image Processing
IT377	Machine Learning & Applications

Resolutions 14.02:

- Theory hours have been reduced to three from four for the following courses. In addition, the course codes have been revised accordingly.

Course Code	Course Title
IT245.01	Computer Organization & Microprocessor Interfacing
IT247.01	Data Structures & Algorithms
IT248.01	Database Management System

- IT249: Software Group Project of credit 2 has been introduced in 4th semester.
- Python programming has been introduced as a part of electives in 5th semester as below:

Old structure		New Structure	
Course Code	Programme Elective - I	Course Code	Programme Elective - I
IT371	Advanced Java programming	IT371	Advanced Java programming
IT372	Programming using .NET Framework	IT374	Python Programming
IT373	Embedded Systems	IT373	Embedded Systems

- Group of program electives has been changes as per the recommendations of the members.
- The proposed teaching scheme and revised teaching scheme are attached at annexure III and annexure IV respectively.

Item 14.03: For Discussion and Approval;

Additional item(s) other than syllabus to be reviewed during BOS:

Review of University Exam Question Papers (Quality of Question Papers), Experiment Lists, Examiners' Panel, Placement Records and Result Analysis of Academic Year plus Analysis of Semester Results, Reg. Innovation in Pedagogy, World Class Universities, Outcome Based Education (OBE), Research (Publications, Proposals and Grants), Funding Agencies, Reg. NBA Accreditation Status, NAAC Accreditation of the University, Going for International Accreditation, Project works, Panel of PhD Supervisors, Synopsis submission if any and its Approval, Approval of Reviewer's (Examiners) Panel, Feedback from Students, Identification of Slow Learners, Students Counselling, Quality of Inputs (Admission Scenario), Remedial Coaching, Quality of M Tech Dissertations, Industry Exposure, Responsible University etc. or any other additional items.

Proceedings 14.03:

- Members have reviewed the information and data related to the Item.
- Members had suggested that M. Tech dissertation students should explore their research work with industry live projects.
- Even members have suggested that faculty members should have experience of industry live projects, consultancy work and R & D projects.
- Members had suggested that after 12th science drop out ration is more so we need to think some way to mitigate this issue.
- Members had suggested that faculty members should follow learning while doing approach so students may have more attentiveness in classroom.

Resolutions 14.03:

- The department has prepared the guidelines and strategy to carry out above mentioned points raised by the expert. We have discussed thoroughly with the members that how the things are being taken care.

Annexure I

Existing Teaching & Examination Schemes

for

**B Tech 7th and 8th semesters
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

\	Course Code	Course Title	Teaching Scheme					Examination Scheme				
			Contact Hours				Credit	Theory		Practical		Total
			Theory	Practical	Tutorial	Total		Internal	External	Internal	External	
Final Year Sem-7	IT415	Data Warehousing & Data Mining	4	2	0	6	5	30	70	25	25	150
	IT409	High Performance Computer Architecture	3	2	1	6	4	30	70	25	25	150
	IT402.01	Wireless Communication & Mobile Computing	4	4	1	9	6	30	70	50	50	200
	IT410	Enterprise Resource Planning & E-Commerce	3	0	0	3	3	30	70	0	0	100
		Elective III	4	2	0	6	5	30	70	25	25	150
	IT414	Software Group Project-V	0	2	0	2	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	2	0	0	0	0	0	0
			18	14	2	34	24	150	350	150	150	800
Final Year Sem-8	IT407	Software Project Major	0	36	0	36	20	0	0	250	350	600
			0	36	0	36	20	0	0	250	350	600

Code	Programme Elective - III
IT405.01	Advanced Computing
IT412	Image Processing & Multimedia System
IT404.01	Language Processor

Sem	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
FY Sem -1	MA141	Engineering Mathematics-I	4	0	1	0	4	0	30	70	0	0	100
	CE141	Computer Concepts & Programming	4	4	0	0	4	2	30	70	50	50	200
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	4	1	30	70	25	25	150
	CL142	Environmental Sciences	2	0	0	0	2	0	30	70	0	0	100
	HS101 A - HS106 A	A Course from Liberal Arts	2			0	0	2			50	50	100
	IT142	ICT Workshop	0	4	0	0	0	2			50	50	100
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular & cocurricular											
			14	12	1		14	7	120	280	175	175	750
FY Sem -2	MA142	Engineering Mathematics-II	4	0	1	0	4	0	30	70	0	0	100
	CE142	Object Oriented Programming with C++	4	4	0	0	4	2	30	70	50	50	200
	ME144	Elements of Engineering	4	2	1	0	4	1	30	70	25	25	150
	PY141	Engineering Physics	3	2	0	0	3	1	30	70	25	25	150
	HS121 A	English Language & Literature	2			0	2	0	25	25	25	25	100
		Assignment Practices/Student Counseling/Remedial				0							

	Classes/Library/Sports/Extra curricular & cocurricular											
		16	9	2	0	17	4	145	305	125	125	700

	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theor y	Practica l	Tutoria l	Projec t	Theor y	Practica l	Interna l	Externa l	Interna l	Externa l	
SY Sem -3	MA242	Discrete Mathematics	4	0	0	0	4	0	30	70	0	0	100
	IT241	Digital Electronics	4	2	0	0	4	1	30	70	25	25	150
	IT242	Java Programming	4	4	0	0	4	2	30	70	50	50	200
	XXXX X	University Elective-I	2	0	0	0	2	0	30	70	0	0	100
	IT243	Data Communication	4	2	0	0	4	1	30	70	25	25	150
	HS122A	Values and Ethics	2	0	0	0	2	0	30	70	0	0	100
	IT244	Software Group Project-I	0	0	0	4	0	2	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0			0	0	0	0	0
			20	14	0	4	20	6	180	420	150	150	900
SY Sem -4	MA244	Probability and Numerical Techniques	4	0	0	0	4	0	30	70	0	0	100
	IT245	Computer Organization & Microprocessor Interfacing	4	2	0	0	4	1	30	70	25	25	150
	IT246	Web Engineering	2	4	0	0	2	2	30	70	50	50	200
	IT247	Data Structures & Algorithms	4	2	0	0	4	1	30	70	25	25	150

IT248	Database Management System	4	2	0	0	4	1	30	70	25	25	150
HS123	Critical Thinking and Logic	2	0	0	0	2	0	50	50	0	0	100
XXXX X	University Elective-II	2	0	0	0	2	0	30	70	0	0	100
	Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0			0	0	0	0	0
		22	16	0	0	22	5	230	470	125	125	950

Annexure II

Approved Teaching & Examination Schemes

for

**B Tech 7th and 8th semesters
Information technology**

**Effective From
(CHARUSAT 2016 Admitted Batch)**

	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
Final Year Sem-7	IT441	Data Science	4	2	0	0	4	1	30	70	25	25	150
	IT442	Advanced Computing	3	2	0	0	3	1	30	70	25	25	150
	IT443	Language Processors	4	2	0	0	4	1	30	70	25	25	150
	IT444	Internet of Things	3	2	0	0	3	1	30	70	25	25	150
		Elective III	4	2	0	0	4	1	30	70	25	25	150
	IT445	Software Group Project-IV	0	0	0	4	0	2	0	0	50	50	100
	IT446	Summer Internship-II	0	0	0	3	0	3	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0			0	0	0	0	0
			18	16	0	7	18	10	150	350	225	225	950
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	0	20	0	0	250	350	600
			0	36	0	0	0	20	0	0	250	350	600

Code	Programme Elective - III
IT471	Python Programming
IT472	Image Processing
IT473	Big Data Analytics

Sem	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theor y	Practica l	Tutoria l	Projec t	Theor y	Practica l	Interna l	Externa l	Interna l	Externa l	
FY Sem -1	MA141.01	Engineering Mathematics-I	4	0	1	0	4	0	30	70	0	0	100
	CE141	Computer Concepts & Programming	4	4	0	0	4	2	30	70	50	50	200
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	4	1	30	70	25	25	150
	CL142	Environmental Sciences	2	0	0	0	2	0	30	70	0	0	100
		HS Elective-I	2			0	0	2			30	70	100
	IT142	ICT Workshop	0	4	0	0	0	2			50	50	100
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular & cocurricular											
			14	12	1		14	7	120	280	155	195	750
FY Sem -2	MA142.01	Engineering Mathematics-II	4	0	1	0	4	0	30	70	0	0	100
	CE142	Object Oriented Programming with C++	4	4	0	0	4	2	30	70	50	50	200
	ME144	Elements of Engineering	4	2	1	0	4	1	30	70	25	25	150
	PY141.01	Engineering Physics	3	2	0	0	3	1	30	70	25	25	150
	HS126.01A	Communication Skills – I	2			0	2	0	30	70	0	0	100
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular & cocurricular				0							
			16	9	2	0	17	4	150	350	100	100	700

	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
SY Sem -3	MA245	Discrete Mathematics	4	0	0	0	4	0	30	70	0	0	100
	IT241	Digital Electronics	4	2	0	0	4	1	30	70	25	25	150
	IT242	Java Programming	4	4	0	0	4	2	30	70	50	50	200
	XXXXX	University Elective-I	2				2		100				100
	IT243	Data Communication	4	2	0	0	4	1	30	70	25	25	150
		HS Elective-II	2	0	0	0	2	0	30	70	0	0	100
	IT244	Software Group Project-I	0	0	0	4	0	2	0	0	50	50	100
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0			0	0	0	0	0
			20	14	0	4	20	6	250	350	150	150	900
SY Sem -4	MA244	Probability and Numerical Techniques	3	0	0	0	3	0	30	70	0	0	100
	IT245.01	Computer Organization & Microprocessor Interfacing	3	2	0	0	3	1	30	70	25	25	150
	IT246	Web Engineering	2	4	0	0	2	2	30	70	50	50	200
	IT247.01	Data Structures & Algorithms	3	2	0	0	3	1	30	70	25	25	150
	IT248.01	Database Management System	3	2	0	0	3	1	30	70	25	25	150
	IT249	Software Group Project	0	0	0	4	0	2	0	0	50	50	100

		HS Elective-III	2	0	0	0	2	0	30	70	0	0	100
	XXXXX	University Elective-II	2				2		100				100
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0			0	0	0	0	0
			18	14	0	4	18	7	280	420	175	175	1050

Annexure III

Existing Teaching & Examination Schemes

for

**B Tech All Semesters
Information technology**

**Effective From
(CHARUSAT 2018 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

Sem	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141.01	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
		HS Elective-I	2				0	2	2			30	70	100		
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
		14	12	1		36	14	7	21	120	280	155	195	750		
FY Sem-2	MA142.01	Engineering Mathematics-II	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE142	Object Oriented Programming with C++	4	4	0	0	8	4	2	6	30	70	50	50	200	
	ME144	Elements of Engineering	4	2	1	0	7	4	1	5	30	70	25	25	150	
	PY141.01	Engineering Physics	3	2	0	0	5	3	1	4	30	70	25	25	150	
	HS126.01 A	Communication Skills – I	2				0	2	2	0	2	30	70	0	0	100
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0	9									
			16	9	2	0	36	17	4	21	150	350	100	100	700	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
SY Sem-3	MA245	Discrete Mathematics	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT241	Digital Electronics	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT242	Java Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	XXXXX	University Elective- I	2				2	2		2	100				100	
	IT243	Data Communication	4	2	0	0	6	4	1	5	30	70	25	25	150	
		HS Elective-II	2	0	0	0	2	2	0	2	30	70	0	0	100	
	IT244	Software Group Project-I	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT249	Summer Internship	0	0	0	3	3	0	3	3	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
		20	14	0	7	39	20	9	29	250	350	200	200	1000		
SY Sem-4	MA244	Probability and Numerical Techniques	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT245	Computer Organization & Microprocessor Interfacing	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT246	Web Engineering	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT247	Data Structures & Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT248	Database Management System	4	2	0	0	6	4	1	5	30	70	25	25	150	
		HS Elective-III	2	0	0	0	2	2	0	2	30	70	0	0	100	
	XXXXX	University Elective- II	2				2	2		2	100				100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
			22	16	0	0	36	22	5	27	280	420	125	125	950	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
TV Sem-5	IT341	Design & Analysis of Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150	
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150	
	HS124.01A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100	
		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT346	Summer Internship-I	0	0	0	3	3	0	3	3	0	0	75	75	150	
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0	
		16	18	0	7	39	16	12	28	150	350	305	345	1150		
TV Sem-6	IT347	Software Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT349	Wireless Communication & Mobile Computing	4	4	0	0	8	4	2	6	30	70	50	50	200	
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100	
		HS Elective-IV	0	2	0	0	2	0	1	1	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
		16	18	0	4	36	16	8	24	150	350	175	175	850		

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
Final Year Sem-7	IT441	Big Data Analytics	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	High Performance Computer Architecture	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT443	Service Oriented Architecture	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1			0	0	0	0	0	0	
			18	16	0	7	36	18	10	28	160	360	225	225	950	
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
Total			122	139	3	25	294	123	75	198	1250	2450	1535	1715	6950	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
	IT371	Advanced Java programming	IT375	Advanced Computing	IT471	Python Programming
	IT372	Programming using .NET Framework	IT376	Language Processors	IT472	Image Processing
	IT373	Embedded Systems	IT377	Intelligent System	IT473	Cyber Security & Laws

HS Elective - I

HS101.01 A - Painting

HS102.01 A - Photography

HS103.01 A - Sculpting

HS104.01 A - Pottery and Ceramic Arts

HS105.01 A - Media and Graphic Design

HS106.01 A - Art and Craft

HS107.01 A - Fashion Designing

HS108.01 A - Interior Designing

HS109.01 A - Dramatics

HS110.01 A - Contemporary Dance

HS132 A - Academic English

HS Elective - II

HS122 A - Values and Ethics

HS131 A - Philosophy

HS Elective - III

HS123.01 A - Critical Thinking and Logic

HS127.01 A - Communication Skills - II

HS133 A - Creativity, Problem Solving and Innovation

HS Elective - IV

HS125.01 A - Society, Governance and International Studies

HS130 A - Law & Justice

HS134 A - Contributor Personality Development

Annexure IV

Approved Teaching & Examination Schemes

for

**B Tech All Semesters
Information technology**

**Effective From
(CHARUSAT 2018 Admitted Batch)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

Sem	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
FY Sem-1	MA141.01	Engineering Mathematics-I	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE141	Computer Concepts & Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	EE141	Basics of Electronics & Electrical Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	CL142	Environmental Sciences	2	0	0	0	2	2	0	2	30	70	0	0	100	
		HS Elective-I	2			0	2	0	2	2			30	70	100	
	IT142	ICT Workshop	0	4	0	0	4	0	2	2			50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &					9									
		14	12	1		36	14	7	21	120	280	155	195	750		
FY Sem-2	MA142.01	Engineering Mathematics-II	4	0	1	0	5	4	0	4	30	70	0	0	100	
	CE142	Object Oriented Programming with C++	4	4	0	0	8	4	2	6	30	70	50	50	200	
	ME144	Elements of Engineering	4	2	1	0	7	4	1	5	30	70	25	25	150	
	PY141.01	Engineering Physics	3	2	0	0	5	3	1	4	30	70	25	25	150	
	HS126.01 A	Communication Skills – I	2			0	2	2	0	2	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0	9									
			16	9	2	0	36	17	4	21	150	350	100	100	700	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
SY Sem 3	MA245	Discrete Mathematics	4	0	0	0	4	4	0	4	30	70	0	0	100	
	IT241	Digital Electronics	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT242	Java Programming	4	4	0	0	8	4	2	6	30	70	50	50	200	
	XXXXX	University Elective- I	2				2	2		2	100				100	
	IT243	Data Communication	4	2	0	0	6	4	1	5	30	70	25	25	150	
		HS Elective-II	2	0	0	0	2	2	0	2	30	70	0	0	100	
	IT244	Software Group Project-I	0	0	0	4	4	0	2	2	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
			20	14	0	4	36	20	6	26	250	350	150	150	900	
SY Sem 4	MA244	Probability and Numerical Techniques	3	0	0	0	3	3	0	3	30	70	0	0	100	
	IT245.01	Computer Organization & Microprocessor Interfacing	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT246	Web Engineering	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT247.01	Data Structures & Algorithms	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT248.01	Database Management System	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT249	Software Group Project	0	0	0	4	4	0	2	2	0	0	50	50	100	
		HS Elective-III	2	0	0	0	2	2	0	2	30	70	0	0	100	
	XXXXX	University Elective- II	2				2	2		2	100				100	
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	4			0	0	0	0	0	0	
			18	14	0	4	36	18	7	25	280	420	175	175	1050	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
TY Sem-5	IT341	Design & Analysis of Algorithms	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT342	Advanced Web Technologies	2	2	0	0	4	2	1	3	30	70	25	25	150	
	IT343	Operating System	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT344	Computer Networks	4	2	0	0	6	4	1	5	30	70	25	25	150	
	HS124.01A	Professional Communication	0	2	0	0	2	0	1	1	0	0	30	70	100	
		Elective-I	2	4	0	0	6	2	2	4	30	70	50	50	200	
	IT345	Software Group Project-II	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT346	Summer Internship-I	0	0	0	3	3	0	3	3	0	0	75	75	150	
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0	2			0	0	0	0	0	0	
			16	18	0	7	39	16	12	28	150	350	305	345	1150	
TY Sem-6	IT347	Software Engineering	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT348	Cryptography & Network Security	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT349	Wireless Communication & Mobile Computing	3	4	0	0	7	3	2	5	30	70	50	50	200	
		Elective-II	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT350	Software Group Project-III	0	0	0	4	4	0	2	2	0	0	50	50	100	
		HS Elective-IV	0	2	0	0	2	0	1	1	30	70	0	0	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	4			0	0	0	0	0	0	
			15	18	0	4	35	15	8	23	150	350	175	175	850	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

	Course Code	Course Title	Teaching Scheme									Examination Scheme				
			Contact Hours					Credit			Theory		Practical/Project		Total	
			Theory	Practical	Tutorial	Project	Total	Theory	Practical	Total	Internal	External	Internal	External		
Final Year Sem-7	IT441	Data Science	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT442	Advanced Computing	3	2	0	0	5	3	1	4	30	70	25	25	150	
	IT443	Language Processors	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT444	Internet of Things	3	2	0	0	5	3	1	4	30	70	25	25	150	
		Elective III	4	2	0	0	6	4	1	5	30	70	25	25	150	
	IT445	Software Group Project-IV	0	0	0	4	4	0	2	2	0	0	50	50	100	
	IT446	Summer Internship-II	0	0	0	3	3	0	3	3	0	0	50	50	100	
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0	1			0	0	0	0	0	0	
			18	16	0	7	36	18	10	28	150	350	225	225	950	
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	36	0	20	20	0	0	250	350	600	
			0	36	0	0	36	0	20	20	0	0	250	350	600	
Total			117	137	3	26	290	118	74	192	1250	2450	1535	1715	6950	

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY (CHARUSAT 2018-2019)

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT

LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT

ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
	IT371	Advanced Java programming	IT375	Service Oriented Computing	IT471	Foundation of Modern Networking
	IT374	Python Programming	IT376	Image Processing	IT472	High Performance Computer Architecture
	IT373	Embedded Systems	IT377	Machine Learning & Applications	IT473	Artificial Intelligence

HS Elective - I

HS101.01 A - Painting

HS102.01 A - Photography

HS103.01 A - Sculpting

HS104.01 A - Pottery and Ceramic Arts

HS105.01 A - Media and Graphic Design

HS106.01 A - Art and Craft

HS107.01 A - Fashion Designing

HS108.01 A - Interior Designing

HS109.01 A - Dramatics

HS110.01 A - Contemporary Dance

HS132 A - Academic English

HS Elective - II

HS122 A - Values and Ethics

HS131 A - Philosophy

HS Elective - III

HS123.01 A - Critical Thinking and Logic

HS127.01 A - Communication Skills – II

HS133 A - Creativity, Problem Solving and Innovation

HS Elective - IV

HS125.01 A - Society, Governance and International Studies

HS130 A - Law & Justice

HS134 A - Contributor Personality Development



CHARUSAT
CSPIT
Department of Information Technology



Summary and Action Taken Report of Feedback on Curriculum

AY: 2019-20

Category	Comments	Action Taken
Alumni	Suggestion to incorporate Lab/Practical Session tasks are more connected to the real world rather than just theoretical concepts.	Practical lists prepared were more aligned to real world problems.
	More weightage to Software Group Projects and real time problems.	In each semester SGP is included as a part of curriculum and project definitions are more real-world.
	More practical credits required for courses like Web Engineering/Data Science	- Web Engineering course is offered as practical mode only. Giving more importance to Practical/Web Development. - Considered in the 15th BOS 31st Aug,2019.
Employer	Add NodeJS and AngularJS as a frontend framework in Web Technologies subject.	Talk with faculty members and decide to incorporate it into the next BoS Meeting-2021.
	Practical sessions should be more for a few subjects.	Some courses pedagogy has been changed to give more focus on Practical.
	If required funds should be provided to the students for Projects, start-ups, resources etc.	Funds have already been provided and also the university is giving seed money for the projects.
Student	Latest technologies can be offered as an elective course.	- Department started offering all the latest areas relevant to the branch as an elective course in final and pre-final year. - Considered in 15th BOS 31st Aug,2019.
	Some latest framework must be included in Web Engineering	- Entire course is conducted in practical mode only and some frameworks like NodeJS/ ES6 will be included after getting a nod from BoS. - Considered in 15th BOS 31st Aug,2019.
	Number of lab sessions should be increased.	- Department has increased the practical credits of courses which require more practical exposure. - Considered in 15th BOS 31st Aug,2019.
Teacher	Modification in, - Teaching scheme, - Theory contents, - Practical contents of few courses	Department has considered suggested changes by the teachers into BOS and incorporated it into the new teaching scheme.

Minutes – 15th Meeting of Board of studies of Department of Information Technology

Date : August 31, 2019

Time : 10:00 am

Venue : Conference Room, Building-II, DEPSTAR, CHARUSAT Campus

The 15th meeting of the Board of studies, Department of Information Technology, FTE, Charotar University of Science & Technology (CHARUSAT) was held on 31st August, 2019 at 10:00 a.m. onwards at conference room, DEPSTAR, CHARUSAT campus.

Following members were remained present:

1.	Dr. Parth Shah	Chairman, BoS	HOD, IT Dept
2.	Dr. Amit Ganatra	Member	Dean, Faculty of Tech & Engg, FTE
3.	Mr. Nikunj Patel	External	Director, TechSmith, Ahmedabad
4.	Mr. Rinkesh Arora	External	Vice President, BITSCAPE, Ahmedabad
5.	Mr. Hasteen Patel	External	Delivery Manager, eInfochips, Ahmedabad
6.	Mr. Dipak Patel	Member	Director, Charley Computers, ahmedabad
7.	Dr. Amit Thakkar	Member	Asso. Prof., CSPIT
8.	Mr. Amit Nayak	Member	Asst. Prof., DEPSTAR
9.	Mr. Nirav Bhatt	Member	Asst. Prof., CSPIT
10.	Ms. Purvi Prajapati	Member	Asst. Prof., CSPIT
11.	Mr. Bimal Patel	Member	Asst. Prof., CSPIT

Initiation:

Head of the Department of Information Technology, Prof. Parth Shah welcomed all the members of Board of Studies to the 15th meeting. He briefed the proposed teaching and examination schemes along with the overall activities carried out by the department during last academic year.

Agenda Proceedings & Resolutions:-

Item 15.01: For Discussion and Approval;

To approve the Teaching & Examination Scheme (TES) and syllabus of B Tech 3rd Year (5th and 6th Semesters) and 4th year (7th and 8th Semesters) CBCS courses (2018 Admission Batch).

Proceedings 15.01:

- Existing TES and syllabus of B Tech 3rd Year and 4th Year has been presented to the experts.

Resolutions 15.01:

- As Experts have found existing TES is appropriate for the upcoming batch of 2018 admitted batch. Hence the TES and syllabus has been approved. (Annexure I)

Item 15.02: For Discussion and Approval;

To approve the syllabus and TES of B Tech effective from 2019-20 Admitted Batch.

Proceedings 15.02.01:

- As per the directive of honorable provost and dean FTE, total credits for the B Tech program should be reduced to 176 from 195. This decision has been taken from the feedback of the students and various stakeholders. The motto behind this decision is to keep free slots for the students and teachers so that they can utilize slots for some extra work and research activities. Hence, to reduce the total credits (approved TES of 2018 batch), Members have found the following courses of the 4th & 6th semesters, credits may be reduced. The courses are selected because teachers are able to complete the syllabus within less time compared to given time.

Suggested Courses
Web Engineering (4th Sem)
Wireless Communication & Mobile Computing(6 th sem)
Elective II (6 th sem)

Resolutions 15.02.01:

- As per the expert's suggestions, credits of the mentioned courses have been reduced (Annexure II).

Proceedings 15.02.02:

- After reviewing the existing TES, Members have suggested to change the title of the following courses of the 3rd, 4th, 5th and 6th semester based on the detailed syllabus offered (Annexure II). Course equivalence and detailed contents relevancy are the reasons for changing the names.

Proposed Name of Course	Suggestion by Expert
Data Communication (3 rd Sem)	Data Communication & Networking
Web Engineering (4 th Sem)	Web Technologies
Machine Learning & Application (6 th Sem)	Machine Learning
Image Processing(6 th sem)	Computer Vision
Embedded System(5 th sem)	Embedded Programming

Resolutions 15.02.02:

- As per the expert's suggestions, Names of the courses have been changed accordingly.

Proceedings 15.02.03:

- Members have advised to increase the credit for the following courses of the 4th, 5th, 6th and 7th semester, as courses are more important and in demand for the branch.

Suggested Courses
Computer Architecture & Microprocessor Interfacing(4 th sem)
Data Structures & Algorithms(4 th sem)
Operating System(5 th sem)
Machine Learning(6 th sem)
Language Processor(7 th sem)

Resolutions 15.02.03:

- As per the expert's suggestions, credit of the mentioned courses have been increased accordingly (Annexure II).

Proceedings 15.02.04:

- Experts have suggested to offer the courses Machine Learning, Internet of Thing as regular courses instead of Elective in 6th and 7th semesters respectively. The course Wireless Communication & Mobile Computing may be offered as an Elective in 6th semester.

Resolutions 15.02.04:

- The suggestions have been accepted (Annexure II).

Proceedings 15.02.05:

- Cybersecurity has slowly transformed into an evergreen industry. Like air pollution was a by-product of the industrial revolution, cyber-attacks are a similar by-product of the digital revolution. Keeping this situation in mind, and looking at the advances, expert have suggested to introduce the course on Cyber Security.

Resolutions 15.02.05:

- As per the expert's suggestions, Cyber Security has been introduced in 6th semester elective (Annexure II).
- First Year teaching scheme has been circulated through email and prior approval was taken from the members of BoS.

Item 15.03: For Discussion and Approval;

Preparation, Discussion, and approval of the Elective Courses (University, Institute, and Program Electives) effective from 2019-20 Admitted Batch.

Proceedings 15.03.01:

- Following groups of electives has been presented before the experts. Experts have suggested to arrange the electives in such a way that they should look like a group of specialization.

ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
	IT371	Advanced Java programming	IT375	Service Oriented Computing	IT471	Internet of Things
	IT374	Python Programming	IT376	Image Processing	IT474	Blockchain Technologies
	IT373	Embedded Systems	IT377	--	IT473	Artificial Intelligence

Resolutions 15.03.01:

- As per the suggestion of experts, three groups of specialization has been decided based in the current need of the market.
 - Computer Networking
 - Computational Intelligence
 - Information Security

- Final group structure is as follows:

ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
	IT371	Embedded Programming	IT378	Wireless Communication & Mobile Computing	IT471	Foundation of Modern Networking
	IT374	Python Programming	IT379	Computer Vision	IT473	Artificial Intelligence
	IT373	Advanced Java Programming	IT380	Cyber Security	IT474	Blockchain Technologies

Item 15.04: For Discussion and suggestions;

Discussion on effective implementation of Outcome Based Education (OBE) and utilization of Smart Class Room (ICT) based Teaching Learning.

Proceedings 15.04.01:

- It is very essential to opt the OBE, to understand the impact of learning the course as well to get the idea for effective transaction of the course.

Resolutions 15.04.01:

- Experts have suggested to assess the course based on the OBE mapping from the next BOS onwards.

Item 15.05: For Discussion and suggestions;**Proceedings 15.05.01:**

Discussion on the preparation of NBA and NAAC done by all the departments. Experts are requested to provide their views to improve it further.

- University is applying for NAAC accreditation (second cycle), for which the survey conducted by IQAC, which shows that department is lacking at certain points as mentioned below:
 - Sponsored/Funded project allotted to the department by other organization
 - Research Paper publication in reputed journals
 - Chapter/Book publication
 - Usage of Learning management system
 - Improvement in teaching-learning methodology

Resolution 15.05.01:

- Teachers had a discussion about the funding for research projects and make area-wise research clubs, so that innovative research projects can be developed. In the same regard, Prof. Parth Shah, Prof. Amit Thakkar, Prof. Bimal Patel, Prof. Nirav Bhatt, Prof. Purvi Prajapati, Prof. Hemant Yadav are requested to prepare and submit the research proposal on or before 30th August'2019.
- All the PhD pursuing teachers are encouraged to write the research papers in reputed journals. Remaining faculty members are informed to prepare at least 1 paper to publish in the conference for A.Y 2019-20.
- Mr. Mrudang Pandya is asked to share the knowledge about how to write the book chapter.
- All the teachers are extensively using varied LMS (Learning Management System) which helps to do course administration, skill gap analysis, tracking progress, and reporting.

- All the teachers are requested to encourage the students for NPTEL registration and undergo online learning for skill enhancement.
- Faculty members are requested to review the NAAC Criterion wise Key Indicators, which will be shared by Ms. Purvi Prajapati and work accordingly in the same direction.

Item 15.06: For Discussion and suggestions;

Evaluating the Quality of the Question papers.

Proceedings 15.06.01:

- Expert have found the quality of the question papers good. However, they have suggested to keep more questions based on the problem solving to inculcate students overall skill level.

Resolution 15.06.01:

- Teachers of the department are requested to ask such kind of the problems in the unit test(s).

Item 15.07: For Discussion and suggestions;

Analysis and discussion on the semester end results of the students and steps taken for the remedial actions. Suggestions for adopting new teaching, learning and examination pedagogies or any update in the existing pedagogies. Analysis and discussion on the semester end results of the students and steps taken for the remedial actions. Introducing MOOC for the students.

Proceedings 15.07.01:

- Discussion regarding pedagogy and planning of Unit test/Internal examination for the current semesters.
- As per the current need, to make students acquainted with online competitive examinations, ICT-based examination should be conducted.
- Focus on weak students who are unable to clear the internal evaluation scheme and have below 12 marks, a strategic planning must be initiated.
- Discussion about a research slot in the academic time-table for all the teachers.
- Expert have suggested to introduce coursera, NPTEL (swayam) etc in the regular curriculum.
- Experts have found the average results of the students good (Annexure III). However remedial actions to be taken for the weaker students.

Resolution 15.07.01:

- For each course, two unit tests have been scheduled on every Monday as per Annexure-I. Each unit test would be of 30 marks. The pedagogy of the internal examination is as follows:
 - 15 Marks (Marks of two unit tests)
 - 10 Marks Assignments (Students require to enroll the MOOC and submit the assignment given by the instructor)
 - 5 Marks of Attendance

100-90%	05 marks
85-89%	04 marks
80-84%	03 marks
75-79%	02 marks
70-74%	01 mark
< 69%	00 marks

- Teachers, who are taking the subjects, are requested to conduct one of the ICT-based unit tests.
- All the faculty members are requested to identify the students, having marks less than 12 in certain subjects. As a remedy measure, students have to solve the question paper (of past two years unit test papers) and submit it as a part of the assignment. Student must submit the assignment before appearing for the second unit test. Once the student submits the assignment, his/her marks can be scaled to 12. Same strategy can be applied for the second unit test also.
- Additionally, Prof. Kamlesh Makwana is asked to make proactive arrangement of remedial classes for slow learners and inform to students about the same, in order to improve academics effectively.
- An extra unit test will be arranged for the genuine students who fail to appear in the either unit tests at the end of the semester.
- Unit test supervisions and academic teaching load will be as per the faculty research slots, causing no hindrance to their research schedule.
- Introduction of MOOC as a credit courses in the regular curriculum needs approval from the governing body and board of management. Hence, that will be decided based on the discussion in governing body and board of management discussion.

Item 15.08: For Discussion and suggestions;

Analysis of campus placement and related activities to enhance them further.

Proceedings 15.08.01:

- Experts have reviewed the placement of the current academic year (Annexure IV). However, they have suggested to invite the more MNC from Bengaluru, Pune, and Hyderabad. This will attract more students at the time of placement and provide more satisfaction to existing students.

Resolution 15.08.01:

- Department has planned to visit Bengaluru, with due permission of university. Objective of visit is to invite them for campus placement. If they will not be agreed to visit then we will try to convince them to conduct placement at their premises for the group of students.

ANNEXURE I

**EXISTING TEACHING & EXAMINATION
SCHEMES**

FOR

**B TECH 5TH TO 8TH SEMESTERS
INFORMATION TECHNOLOGY**

**EFFECTIVE FROM
(CHARUSAT 2018 ADMITTED BATCH)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY													
TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective for 2018 Admitted Batch)													
	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
TY Sem-5	IT341	Design & Analysis of Algorithms	4	2	0	0	4	1	30	70	25	25	150
	IT342	Advanced Web Technologies	2	2	0	0	2	1	30	70	25	25	150
	IT343	Operating System	4	2	0	0	4	1	30	70	25	25	150
	IT344	Computer Networks	4	2	0	0	4	1	30	70	25	25	150
	HS124.01A	Professional Communication	0	2	0	0	0	2	0	0	30	70	100
		Elective-I	2	4	0	0	2	2	30	70	50	50	200
	IT345	Software Group Project-II	0	0	0	4	0	2	0	0	50	50	100
	IT346	Summer Internship-I	0	0	0	3	0	3	0	0	75	75	150
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	0			0	0	0	0	0
			16	16	0	7	16	13	150	350	305	345	1150
TY Sem-6	IT347	Software Engineering	4	2	0	0	4	1	30	70	25	25	150
	IT348	Cryptography & Network Security	4	2	0	0	4	1	30	70	25	25	150
	IT349	Wireless Communication & Mobile Computing	4	4	0	0	4	2	30	70	50	50	200
		Elective-II	4	2	0	0	4	1	30	70	25	25	150
	IT350	Software Group Project-III	0	0	0	4	0	2	0	0	50	50	100
		HS Elective-IV	0	2	0	0	0	2	30	70	0	0	100
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0			0	0	0	0	0
			16	16	0	4	16	9	150	350	175	175	850

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective for 2018 Admitted Batch)

	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
Final Year Sem-7	IT441	Data Science	3	2	0	0	3	1	30	70	25	25	150
	IT442	Advanced Computing	3	2	0	0	3	1	30	70	25	25	150
	IT443	Language Processors	4	2	0	0	4	1	30	70	25	25	150
	IT444	Internet of Things	3	2	0	0	3	1	30	70	25	25	150
		Elective III	3	2	0	0	3	1	30	70	25	25	150
	IT445	Software Group Project-IV	0	0	0	4	0	2	0	0	50	50	100
	IT446	Summer Internship-II	0	0	0	3	0	3	0	0	75	75	150
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0			0	0	0	0	0
			16	16	0	7	16	10	150	350	250	250	1000
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	0	20	0	0	250	350	600
			0	36	0	0	0	20	0	0	250	350	600
Total			115	135	3	26	116	78	1250	2450	1560	1740	7000

—

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY						
TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective for 2018 Admitted Batch)						
LIST OF ELECTIVE SUBJECTS FOR B TECH IN IT						
ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
	IT371	Advanced Java programming	IT375	Service Oriented Computing	IT471	Foundation of Modern Networking
	IT374	Python Programming	IT376	Image Processing	IT472	High Performance Computer Architecture
	IT373	Embedded Systems	IT377	Machine Learning & Applications	IT473	Artificial Intelligence

ANNEXURE II

**APPROVED TEACHING & EXAMINATION
SCHEMES**

FOR

**B TECH ALL SEMESTERS
INFORMATION TECHNOLOGY**

**EFFECTIVE FROM
(CHARUSAT 2019 ADMITTED BATCH)**

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective From 2019 Batch)

Sem	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
FY Sem-1	MA143	Engineering Mathematics-I	4	0	1	0	4	0	30	70	0	0	100
	CE143	Computer Concepts & Programming	3	4	0	0	3	2	30	70	50	50	200
	EE145	Basics of Electronics & Electrical Engineering	3	2	0	0	3	1	30	70	25	25	150
	CL142.01	Environmental Sciences	2			0	0	2			30	70	100
	HSXXX	HS Elective-I	2			0	0	2			30	70	100
	IT144	ICT Workshop	0	2	0	0	0	1			25	25	50
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &											
			14	12	1		10	8	90	210	160	240	700
FY Sem-2	MA144	Engineering Mathematics-II	4	0	1	0	4	0	30	70	0	0	100
	CE144	Object Oriented Programming with C++	3	4	0	0	3	2	30	70	50	50	200
	ME145	Elements of Engineering	3	2	1	0	3	1	30	70	25	25	150
	PY141.01	Engineering Physics	3	2	0	0	3	1	30	70	25	25	150
	HS126.01 A	Communication Skills – I	2			0	2	0	30	70			100
		Assignment Practices/Student Counseling/Remedial Classes/Library/Sports/Extra curricular &				0							
			15	10	1	0	15	4	150	350	100	100	700

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective From 2019 Batch)

	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
SY Sem-3	MA245	Discrete Mathematics	4	0	0	0	4	0	30	70	0	0	100
	IT250	Digital Electronics	3	2	0	0	3	1	30	70	25	25	150
	IT251	Java Programming	3	4	0	0	3	2	30	70	50	50	200
	XXXXX	University Elective- I	2				2		100				100
	IT252	Data Communication & Networking	3	2	0	0	3	1	30	70	25	25	150
		HS Elective-II	2	0	0	0	2	0	30	70	0	0	100
	IT253	Software Group Project-I	0	0	0	2	0	1	0	0	25	25	50
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0			0	0	0	0	0
			17	14	0	2	17	5	250	350	125	125	850
SY Sem-4	MA244	Probability and Numerical Techniques	4	0	0	0	4	0	30	70	0	0	100
	IT254	Computer Architecture & Microprocessor Interfacing	4	2	0	0	4	1	30	70	25	25	150
	IT255	Web Technologies	0	2	0	0	0	1	0	0	25	25	50
	IT256	Data Structures & Algorithms	4	2	0	0	4	1	30	70	25	25	150
	IT257	Database Management System	4	2	0	0	4	1	30	70	25	25	150
	IT258	Software Group Project	0	0	0	2	0	1	0	0	25	25	50
		HS Elective-III	0	2	0	0	0	2	30	70	0	0	100
	XXXXX	University Elective- II	2				2		100				100
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0			0	0	0	0	0
			18	14	0	2	18	7	250	350	125	125	850

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective From 2019 Batch)

	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
TY Sem-5	IT351	Design & Analysis of Algorithms	3	2	0	0	3	1	30	70	25	25	150
	IT342	Advanced Web Technologies	2	2	0	0	2	1	30	70	25	25	150
	IT343	Operating System	4	2	0	0	4	1	30	70	25	25	150
	IT352	Computer Networks	3	2	0	0	3	1	30	70	25	25	150
	HS124.01A	Professional Communication	0	2	0	0	0	2	0	0	30	70	100
		Elective-I	2	4	0	0	2	2	30	70	50	50	200
	IT353	Software Group Project-II	0	0	0	2	0	1	0	0	25	25	50
	IT346	Summer Internship-I	0	0	0	3	0	3	0	0	75	75	150
		Assignment Practices/Student Counseling/Remedial Classes	0	2	0	0			0	0	0	0	0
			14	16	0	5	14	12	150	350	280	320	1100
TY Sem-6	IT354	Machine Learning	4	4	0	0	4	2	30	70	50	50	200
	IT348	Cryptography & Network Security	4	2	0	0	4	1	30	70	25	25	150
	IT355	Software Engineering	3	2	0	0	3	1	30	70	25	25	150
		Elective-II	3	2	0	0	3	1	30	70	25	25	150
	IT356	Software Group Project-III	0	0	0	2	0	1	0	0	25	25	50
		HS Elective-IV	0	2	0	0	0	2	30	70	0	0	100
		Assignment Practices/Student Counseling/Remedial Classes	0	4	0	0			0	0	0	0	0
			14	16	0	2	14	8	150	350	150	150	800

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective From 2019 Batch)

	Course Code	Course Title	Teaching Scheme						Examination Scheme				
			Contact Hours				Credit		Theory		Practical/Project		Total
			Theory	Practical	Tutorial	Project	Theory	Practical	Internal	External	Internal	External	
Final Year Sem-7	IT448	Data Science	4	2	0	0	4	1	30	70	25	25	150
	IT449	Cloud Computing	3	2	0	0	3	1	30	70	25	25	150
	IT443	Language Processors	4	2	0	0	4	1	30	70	25	25	150
	IT444	Internet of Things	3	2	0	0	3	1	30	70	25	25	150
		Elective III	3	2	0	0	3	1	30	70	25	25	150
	IT450	Software Group Project-IV	0	0	0	2	0	1	0	0	25	25	50
	IT446	Summer Internship-II	0	0	0	3	0	3	0	0	75	75	150
		Assignment Practices/Student Counseling/Remedial Classes	0	6	0	0			0	0	0	0	0
			17	16	0	5	17	9	150	350	225	225	950
Final Year Sem-8	IT447	Software Project Major	0	36	0	0	0	18	0	0	250	350	600
			0	36	0	0	0	18	0	0	250	350	600
Total			109	134	2	16	105	71	1190	2310	1415	1635	6550

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY						
TEACHING & EXAMINATION SCHEME FOR B TECH (CBCS) PROGRAMME IN IT (Effective From 2019 Batch)						
LIST OF ELECTIVE COURSES FOR B TECH IN IT						
ELECTIVES	Code	Programme Elective - I	Code	Programme Elective - II	Code	Programme Elective - III
	IT371	Embedded Programming	IT378	Wireless Communication & Mobile Computing	IT471	Foundation of Modern Networking
	IT374	Python Programming	IT379	Computer Vision	IT473	Artificial Intelligence
	IT373	Advanced Java Programming	IT380	Cyber Security	IT474	Blockchain Technologies

HS Elective - I
HS101.01 A - Painting
HS102.01 A - Photography
HS103.01 A - Sculpting
HS104.01 A - Pottery and Ceramic Arts
HS105.01 A - Media and Graphic Design
HS106.01 A - Art and Craft
HS107.01 A - Fashion Designing
HS108.01 A - Interior Designing
HS109.01 A - Dramatics
HS110.01 A - Contemporary Dance
HS132 A - Academic English

HS Elective - II
HS122 A - Values and Ethics
HS131 A - Philosophy

HS Elective - III
HS123.01 A - Critical Thinking and Logic
HS127.01 A - Communication Skills – II
HS133 A - Creativity, Problem Solving and Innovation

HS Elective - IV
HS125.01 A - Society, Governance and International Studies
HS130 A - Law & Justice
HS134 A - Contributor Personality Development