

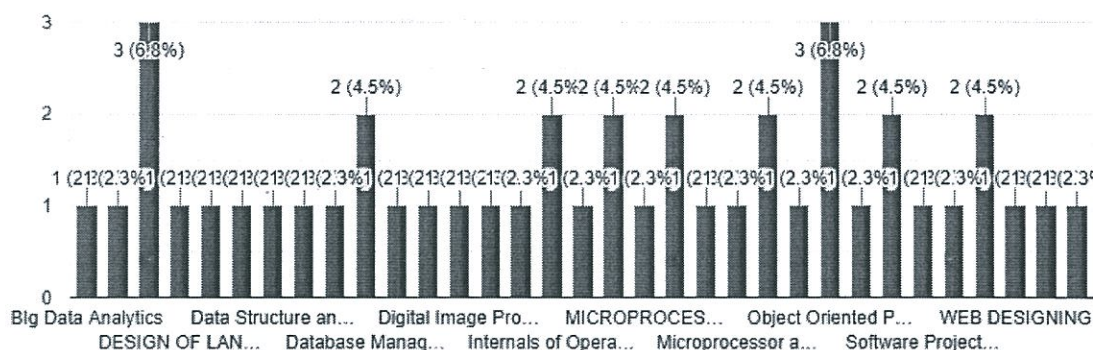
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**Faculty of Technology and Engineering**  
**U & P U. Patel Department of Computer Engineering**

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**Stockholder Analysis Report (A.Y 2017-18)**

The department has formal and informal mechanisms to obtain feedback from stakeholders through various committees, associations, organization, etc.

- Certain topics should be dropped from the course like Advanced Java or Advanced DBMS or can combine the course.
- Web technologies subject need to be introduced in Second year of Engineering.
- Digital Electronics, Web programming coursed are needed to be revised.
- Syllabus is designed according to the industry perspective, only thing is that course on big data should be introduced as separate track.
- Curriculum encompassed job oriented content that will help in getting a job. Also extended an opportunity to develop my personality, communication & leadership skills
- Alumni suggested that they may be invited to the campus to interact with the students in-order to update them about the difficulties being faced in the IT industry and about latest technologies
- Alumni expressed that they will extend their help to the students in doing training and also in placement



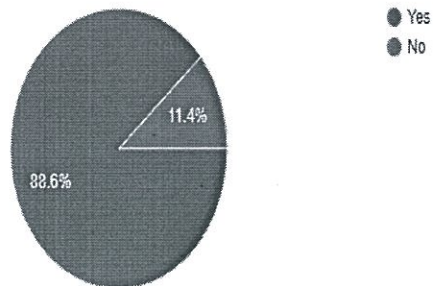
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*Dr.*

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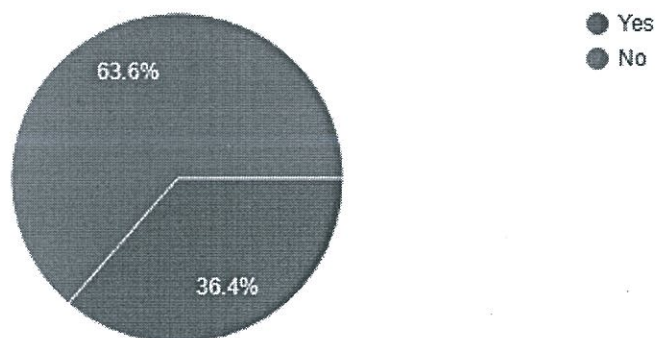
Does the syllabus reflect industry perception or competitive exams?

44 responses



Are there topics that should be dropped from the course?

44 responses



Dr. Ritesh Patel  
Head, CE Dept.

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Date: 26/08/2017

**Feedback on Curriculum Design (A.Y 2017-18)**

**Feedback from Industry Expert**

- Java Programming subject need to be revised.
- Cloud computing and Data mining subject need to be revised.
- Peripherals components is removed and added more on computer architecture

**Action Taken:**

- CS743- Advanced Computer Networks need to be renamed as CS743-Foundation of Computer Networking.
- Subject Data Science need to be introduced in Elective Group.
- CS746- Internet of Things to be introduced in Semester-I and CS741- Machine Learning need to be introduced in Semester-II.
- Elective groups are required to keep all subjects according to the specialization on specific track.

**Feedback from Stakeholders**

The department has formal and informal mechanisms to obtain feedback from stakeholders through various committees, associations, organization, etc.

- Certain topics should be dropped from the course like Advanced Java or Advanced DBMS or can combine the course.
- Web technologies subject need to be introduced in Second year of Engineering.
- Digital Electronics, Web programming coursed are needed to be revised.
- Syllabus is designed according to the industry perspective, only thing is that course on big data should be introduced as separate track.

**Action Taken:**

- From the next Academic year Subject like DBMS and ADBMS combined and also introduced Big data as a separate compulsory subject instead of in Elective track.
- Subject Web Technologies is shifted from 5<sup>th</sup> to 4<sup>th</sup> semester.

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- Subjects like Digital Electronics, Web programming revised and incorporated in detail syllabus.

**Feedback through Parents Meet**

- Parents suggested that Tie-up to be made with the Canada & Australia for semester Program.
- Parents suggested that the students must be involved in the research carried out in the department
- Parents expressed that the in summer intensive training can be arranged from 3<sup>rd</sup> semester onwards.

**Action Taken:**

- Summer intensive training already incorporated in Next year teaching scheme but now that also been introduced for 3<sup>rd</sup> semester students.
- Students were involved in projects funded by DST and other external agencies

**Feedback from Alumni**

- Curriculum encompassed job oriented content that will help in getting a job. Also extended an opportunity to develop my personality, communication & leadership skills
- Alumni suggested that they may be invited to the campus to interact with the students in-order to update them about the difficulties being faced in the IT industry and about latest technologies
- Alumni expressed that they will extend their help to the students in doing training and also in placement

**Action Taken:**

- Alumni series of lecture planned so as to enable the students about the latest technologies and current scenario in IT field.

Few points were incorporated in BoS (Annexure I)

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# Annexure I

## 14<sup>th</sup> BOS

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DIRECTOR UNIVERSITY OF SCIENCE AND TECHNOLOGY  
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**CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY**  
**Faculty of Technology and Engineering (FTE)**  
**Minutes – 14<sup>th</sup> Meeting of Board of studies Meeting (BoS)**  
**U & P U. Patel Department of Computer Engineering**

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

**Time** : 11:00 am

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

The 14<sup>th</sup> meeting of the Board of studies, U & P U. Patel Department of Computer Engineering, FTE, Charotar University of Science & Technology (CHARUSAT) was held on 14<sup>th</sup> July, 2018 & 28<sup>th</sup> July, 2018 at 11:00 a.m. onwards at conference room (CE/IT), CSPIT, CHARUSAT campus.

Following BOS members were remained present:

1.	Dr. Amit Ganatra	Chairman	Dean, Faculty of Tech & Engg HOD, CE Dept.
2.	Prof. B V Buddhdev	External	Principal, GEC, Bhavnagar
3.	Dr. Sanjay Chaudhari	External	Professor, IICT, Ahmedabad University
4.	Mr. Nikuj Patel	External	Sr. Vice-President Capgemini, Ahmedabad
5.	Mr. Pankaj Shh	External	Director, GlobalTech, Ahmedabad
6.	Prof. Ritesh Patel	Member	Associate. Prof.
7.	Prof. Arpita Shah	Member	Asst. Prof.
8.	Prof. Ashwin Makwana	Member	Asst. Prof.
9.	Prof. Nikita Bhatt	Member	Asst. Prof.
10.	Prof. Dweepna Garg	Member	Asst. Prof., DEPSTAR – CE
<b>Special Invitees</b>			
1.	Dr. Ketan Kotecha	Director and Dean SIT, Pune	
2.	Prof. M. T. Savaliya	Head, Computer Dept, VGEC, Chandkheda	

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### Initiation:

Dr. Amit Ganatra (Chairman-BOS) greeted all the invited members of Board of Studies for 14<sup>th</sup> BOS meeting. He briefed the overall activities carried out by the department during last year.

### Agenda Proceedings & Resolutions:-

#### **Item 14.01: For Discussion and Approval;**

To approve the teaching scheme and syllabus of B Tech 4th Year (7th and 8th Semesters) (E.F Batch-2016) CBCS Course.

#### **Proceedings 14.01:**

- Subject CE442- Design of Language Processors needs to be renamed as Design of Language Translator. In the subject CE442- Design of Language Translator, there is a need to introduce Hypervisor, Virtual Compiler, Virtual Monitor with addition of LEX, YACC Analyzers, Compiler Generator etc.
- Subject Artificial Intelligence is suggested to be added and need to be introduced along with the Distributed Computing in Elective Track.

#### **Resolutions 14.01:**

- Suggestions given by the members have been agreed and approved as per annexure I.
- Note: The changes suggested by the members are incorporated. Proposed CBCS Teaching and Examination Scheme along with syllabus of CBCS B.Tech (E.F A.Y 2019-20) (Batch-2016) is attached herewith as an Annexure-I.

#### **Item 14.02: For Discussion and Approval;**

To approve Teaching Scheme and Syllabus of M.Tech - CSE (Newly Introduced Programs) (E.F Batch 2018-19)

#### **Proceedings 14.02:**

- Members have suggested change in nomenclature of CS764-Web Services & Service Oriented Computing to C764-Service Oriented Computing in Elective Track.
- Members have suggested to offer one of the following subject as program cluster elective:

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- Information Security
- Cyber Security
- Data Analytics
- Data Science & Visualization
- Members have suggested offering Internet of Things (IoT) in semester-II and Machine Learning in semester-I.
- Foundation of Modern Networking and Advanced Algorithms subjects are to be introduced in Semester-I
- Members have suggested offering Microcontroller, Internet of Things (IoT) and Embedded as three separate courses.
- CS743- Advanced Computer Networks need to be renamed as CS743-Foundation of Computer Networking.
- Subject Data Science need to be introduced in Elective Group.
- CS746- Internet of Things to be introduced in Semester-I and CS741- Machine Learning need to be introduced in Semester-II.
- Elective groups are required to keep all subjects according to the specialization on specific track.

#### Resolutions 14.02:

- Based on the suggestions, in the Elective Group we have incorporated CS761- Language Processor, CS762-High Performance Computer Architecture and CS763-Computer Vision and Image Processing are in Elective-I track. CS764- Service Oriented Computing, CS765-Mobile and Wireless Computing and CS767-Data Science & are introduced in Elective-II track.
- CS768- Data Science is introduced in University Elective group.
- Remaining suggestions given by the members have been approved as per annexure II.
- **Note:** The changes suggested by the members are incorporated. Proposed CBCS Teaching and Examination Scheme M.Tech - CSE (E.F 2018-19) is attached herewith as an Annexure-II.

#### **Item 14.03: For Discussion and Approval;**

To approve Teaching Scheme and Syllabus of M.Tech - ICT (Newly Introduced Programs)

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#### Proceedings 14.03:

- To deal with M Tech in Information and Communication Technology (ICT), members have suggested Communication Systems, Foundation of Modern Networking, Applied Cryptography are to be kept in core subjects.
- Information Theory and Coding and Real Time System Programming need to be added in Cluster elective group.
- Subject like High Performance Computer Architecture, Advanced Algorithms, Data Science & Analytics need to be considered in Programme Elective group.

#### Resolutions 14.03:

- First point is resolved and incorporated in Teaching Scheme (E.F Batch 2018).
- Suggestions given by the members have been agreed and approved as per Annexure-III.

**Note:** The changes suggested by the members are incorporated. Final Teaching and Examination Scheme M Tech-ICT (E.F 2018-19) is attached herewith as an Annexure-III

#### Item 14.04: For Discussion and Approval;

To approve the teaching scheme and syllabus of B. Tech 3<sup>rd</sup> Year effective from 2018-19 (Admission Year) Batch 2017 (New syllabus) with overall 192 credits.

#### Proceedings 14.04:

- In subject CE249-Computer Organization practical component need to be removed.
- Members have suggested adding Software Group Project component in 4<sup>th</sup> semester.
- CE347-Internals of Operating System to be kept in Elective Track – II and subject Artificial Intelligence need to be replaced with CE347.
- CE350-Data Warehousing & Data Mining to be removed and introduced Data Science & Analytics.
- Subject Modern Networks to be introduced in 6<sup>th</sup> semester and Information Security to be added in Elective track.

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- Information Security and Augmented Reality need to be introduced in Elective Track – II subject Image Processing to be renamed as Digital Image Processing and introduced in Elective Track – III.
- Suggested to add Programming in Python in Seventh semester.

#### Resolutions 14.04:

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

**Note:** The changes suggested by the members have been incorporated. Final Teaching and Examination Scheme B. Tech (E.F 2018-19 – Admission Batch 2018-19) is attached herewith as an Annexure-IV

#### **Item 14.05: For Discussion and Approval;**

To incorporate the revised syllabus of Computer Concepts (E.F 2019-20) (Batch 2019),  
Mathematics and Physics in first year (E.F 2018-19) Batch- 2018

#### Proceedings 14.05:

- CE141 - Computer Concepts & Programming and CE142 - Object Oriented Programming with C++ are revised with addition of few contents).
- MA141.01 - Engineering Mathematics-I and MA142.01 - Engineering Mathematics-II are revised with addition of few content(s).
- PY141- Engineering Physics is revised with addition of Quantum Mechanics, Acoustics and Ultrasonic, Physics of Laser.

#### Resolutions 14.05:

- Board has approved the revised syllabus of CE141 and CE142. New subject codes CE143 and CE144 are incorporated with 5 credits.
- Board has approved the revised syllabus of MA141 and MA142. New subject codes MA143 and MA144 are incorporated.
- Board has approved the revised syllabus of PY141. New subject code PY141.01 is incorporated.

#### **Item 14.06: For Discussion and Approval;**

To approve the teaching scheme and syllabus of B. Tech (3<sup>rd</sup> and 4<sup>th</sup> Semester) effective from Batch 2018

#### Proceedings 14.06:

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- Looking to the current market scenario suggested to remove Advanced Programming using .NET Framework and suggested to introduced R Programming in Elective Track - I.

#### Resolutions 14.06:

- Suggestions are incorporated as per Annexure-V.

#### Item 14.07: For Discussion and Approval;

To approve the Panel of Reviewers, for Ph D and Panel of Examiners, Synopsis Approval

#### Proceedings 14.07:

- To review and approve PhD synopsis of Ashwin Makawana, Amit Nayak and Hetal Chudasama Research Scholar at U & P. U Patel Department of Computer Engineering, FTE - CHARUSAT along with the panel of referees for the PhD examination.

#### Resolutions 14.07:

- The PhD synopsis of Ashwin Makawana, Amit Nayak and Hetal Chudasama have been approved and members have also approved the panel of referees for the PhD thesis examination.

#### Item 14.08: 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, Innovative Project works, Panel of Ph. D Supervisors, Synopsis submission and its Approval, Approval of Reviewer's (Examiners) Panel, Feedback from Students, Identification of Slow Learners, Students Counseling, Quality of Inputs (Admission Scenario), Remedial Coaching, Quality of M Tech Dissertations, Industry Exposure, Responsible University etc. or any other additional items.

#### Proceedings 14.08:

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- Members have reviewed the information and data related to the Items.
- The university question paper analysis was discussed by the board members.
- Bloom's Taxonomy based paper analysis is carried out by department staff members during internal as well as external examination. The teaching objectives are narrow and specific and concerned with classroom teaching.
- How Matrix attainment as a form of Mapping of Course Outcomes (CO) & Programme Outcomes (PO) and Programme Educational Objectives (PEOs) were carried out during course delivery and question paper drawing. The educational objectives achieved by each teacher. The educational objectives are achieved with the help of teaching or learning objectives.
- Member were agreed to have quality of publications in general and those part of PhD in particular and with impact factor 0.5 journal (Thomson Reuters /SJR Listed/Scopus Listed).
- Members have appreciated blended teaching learning in classroom using alternative learning platforms like COURSERA, MOOCs etc.
- Members have also appreciated the innovation in pedagogy bring in by the department and efforts that the department is putting in enhancing the soft skills of the students.
- Members have also appreciated the introducing Summer Internship after 4<sup>th</sup> and 6<sup>th</sup> Semesters of B Tech.
- Members have appreciated the input quality of the students and merit marks as it has been improved YoY.
- Members have also appreciated the improvements in students Results, 100% Students' Placements, Students joining various certifications (Academies) and Students clearing various Competitive Examinations with good scores.

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*[Signature]*

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Resolutions 14.08:

- A sample analysis of university question paper is attached along with CO-POs as an Annexure VI and course content mapping as an Annexure VII.

Dr. Amit Ganatra,  
Chairman BoS and Dean, Faculty of Technology & Engineering (FTE)  
CHARUSAT  
Date: 28/07/2018.

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Ashwin Makwana (12DRCE008)

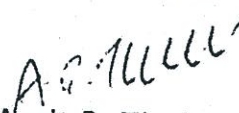
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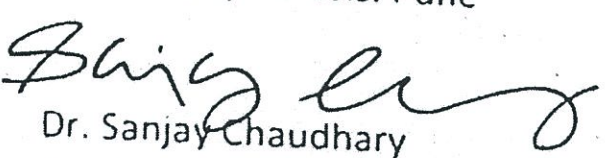
Synopsis of research scholar(s) are placed before Board of Studies on 14/07/2018. members approved the synopsis & panel of referees of Research Scholar(s). This perusal & further necessary actions please.

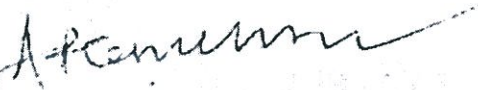
  
Dr. Ketan Kotecha  
Director, Symbiosis. Pune

  
Dr. Parth Shah  
IT Dept, CSPIT, CHARUSAT

  
Dr. Amit R. Thakkar  
IT Dept, CSPIT, CHARUSAT

  
Dr. Ritesh Patel  
CE Dept, CSPIT, CHARUSAT

  
Dr. Sanjay Chaudhary  
Associate Dean, Ahmedabad University


  
Dean  
Dr. Amit Ganatra  
FTE, CHARUSAT

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**Chairman - BOS**

  
Dr. A P Ganatra  
Dean- Faculty of Technology  
CHARUSAT

**External Experts**

Prof. B V Buddhdev  
Government Engineering  
College,  
Bhavnagar.

Dr. Sanjay Chaudhary  
Dean  
School of Engineering and  
Applied Science

**Special Invitees**

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


Dr. Ketan Kotecha  
Director and Dean  
SIT, Pune

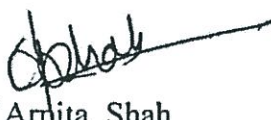
**Industry Experts**

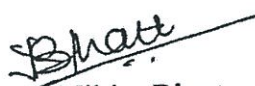
  
Rinkesh Arora  
Vice President & Country Lead  
BITSCAPE

**BoS Members**

  
Prof. Ashwin Makawana  
CSPIT - CHARUSAT

  
Dr. Ritesh Patel  
Head of Department of  
Computer Engineering  
CSPIT - CHARUSAT

  
Prof. Arpita Shah  
CSPIT - CHARUSAT

  
Prof. Nikita Bhatt  
CSPIT - CHARUSAT

  
Prof. Dweepna Garg  
DEPSTAR - CE -  
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