

**Department of Computer Engineering**  
**J.C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, Faridabad**

**Welcomes**



**NBA EXPERT COMMITTEE**  
**25<sup>th</sup> February, 2021**

# Outline

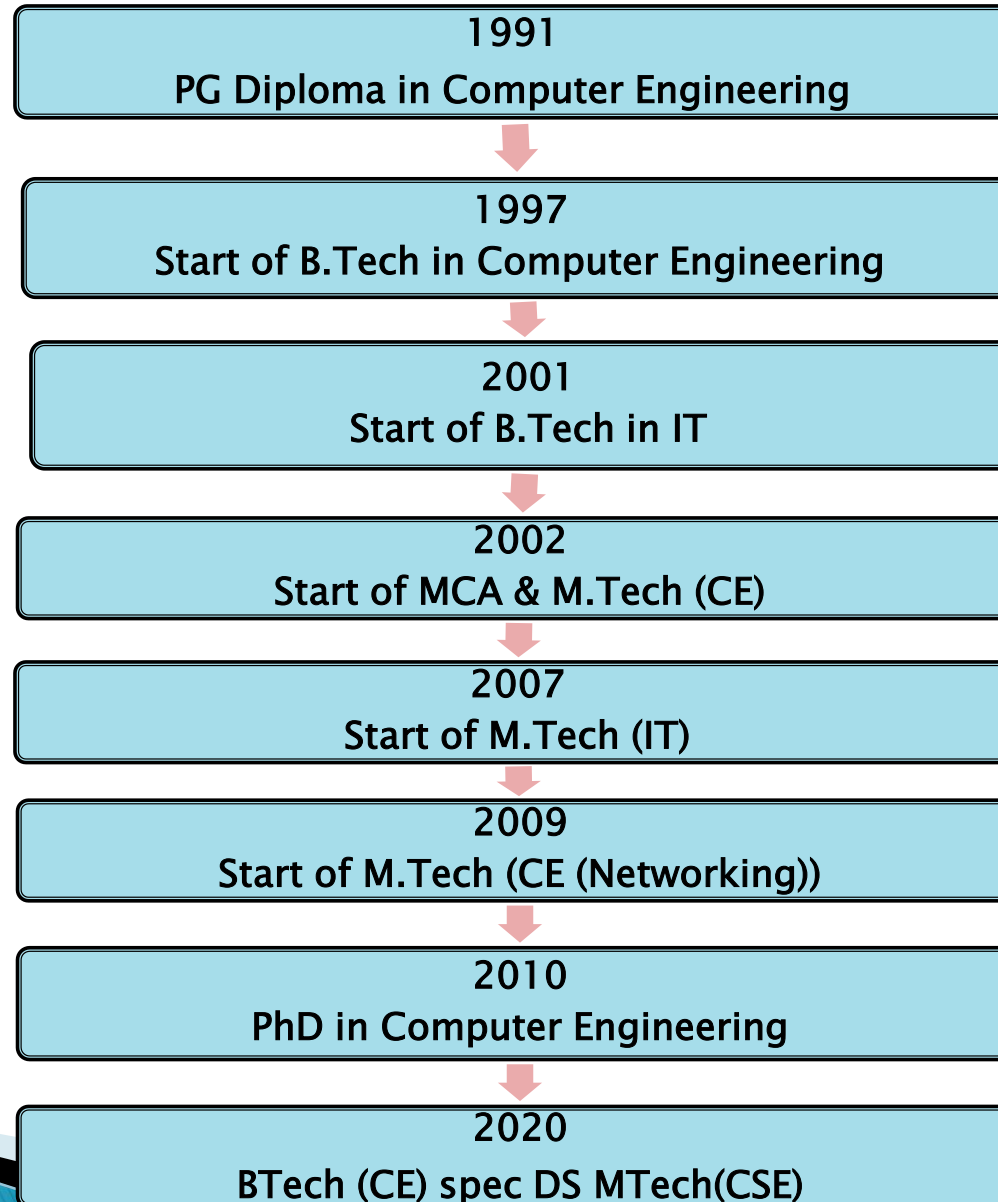


- Department-History & Growth
- Achievements
- Faculty Contribution
- Student Performance
- Training & Placement Activities
- Vision and Mission, PEOs
- Program Curriculum
- Teaching Learning Process
- Facilities and Technical Support
- Continuous Improvement
- Future plan
- Conclusion

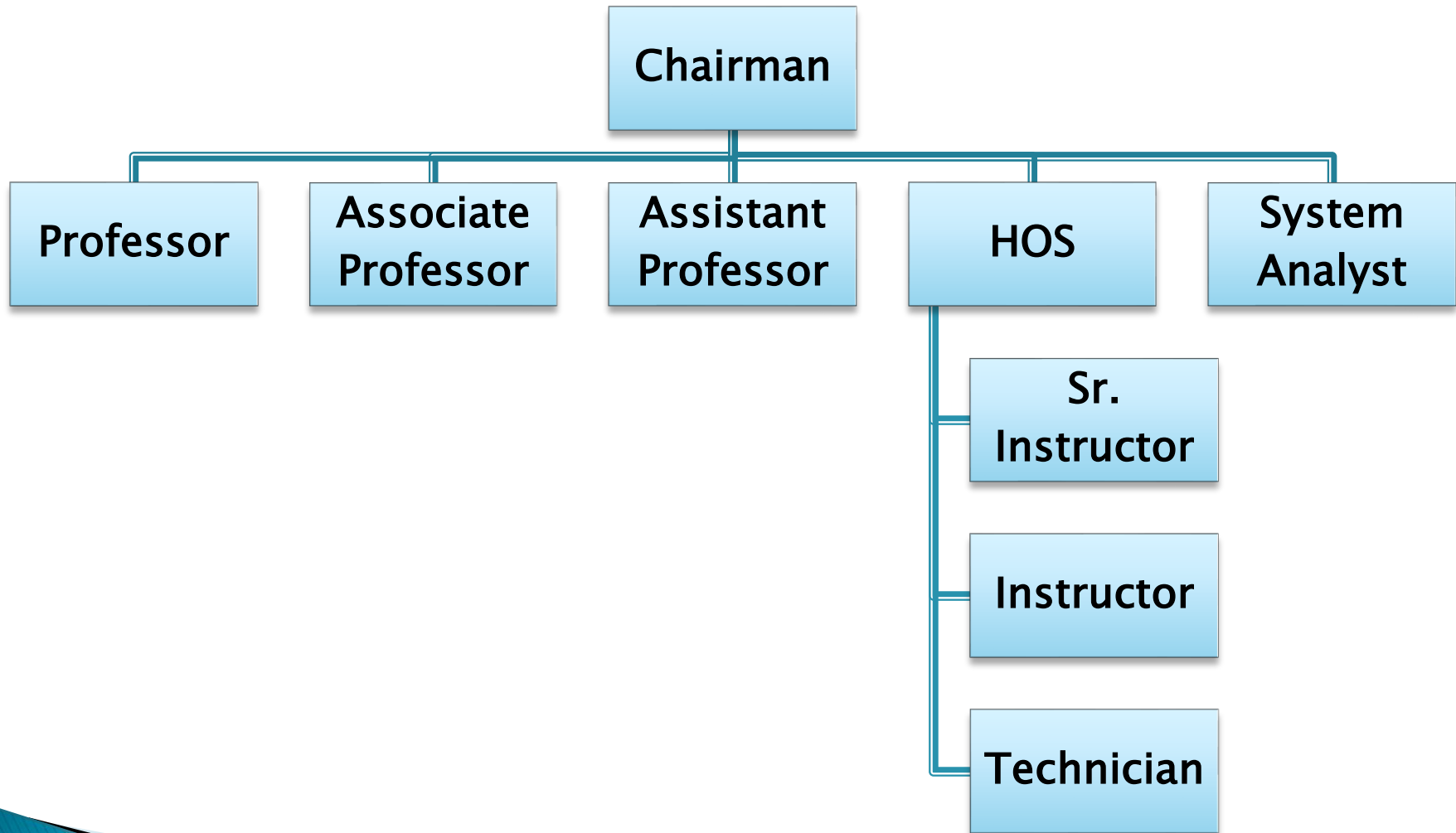


## Department – History and Growth

# Departmental Timeline



# Departmental Organizational Chart



# Departmental Activity Plan

**Chairman**

**Academic Activities**

**Theory Classes**

**Laboratory Classes**

**Academic  
Planning &  
Monitoring**

**Students Feedback**

**Result Analysis**

**University/Internal  
Exams**

**Guest Lectures**

**Students Mentoring**

**Time Table**

**Industrial Visits**

**Academic  
Support**

**Academic Audit**

**Student's Co-curricular  
Activities**

**Budget**

**Purchase Committee**

**Faculty Development  
& Staff Training**

**T & P Support**



# Achievements



# Departmental Achievements

- ▶ Department has adopted Choice Based Credit System and focuses on Outcome based Education
- ▶ Strong academic credentials of Faculty members of the department with 23 doctorates and others are on verge of obtaining their doctorates.
- ▶ The department has 14 national / international patents(granted/published) in last three years.
- ▶ The department has published 23 book chapter in last three years.
- ▶ The department has published 5 books in last three years
- ▶ The department has 5 consultancy and 5 research projects in last three years.
- ▶ Department has prepared its own Learning management system(DLMS) for students.
- ▶ Departments has organised more than 20 workshops/seminars funded by external agencies like DST/AICTE etc.
- ▶ 2 students projects have been shortlisted for finale round of Toycathon 2021 conducted by Ministry of Education(MoE)
- ▶ Department has organized 4 value added courses in last three years.



# Faculty of Eminence

- ▶ Faculty selected through standard AICTE, UGC norms as per Haryana state Government selection policy
- ▶ More than 296 (247+49) articles contributed in national and international Journals and conferences of repute (included in SCI Index, Scopus, DBLP, ACM library) in last three academic years
- ▶ More than 49 articles in Web of Science journals
- ▶ More than 274 FDP attended by the faculty members in last three academic years
- ▶ Reviewer in technical journals of repute both at national and International levels.
- ▶ Dr. Ashutosh Dixit and Dr. Preeti Sethi received a project grant of Rs. 6,55,686 from AICTE under RPS scheme.
- ▶ Department has received consultancies worth Rs7,13,143 From various agencies.

# Faculty of Eminence :Contd..



- members of BoS and other Universities of outstanding repute.
- Dr. Sapna Gambhir and Dr. Parul Tomar were shortlisted for AICTE UKIERI Programme and were awarded CMI level 3 certification.
- Dr. Komal Kumar Bhatia and Dr. Sapna Gambhir were awarded by district administration Faridabad for their contribution in teaching learning during COVID times
- The department has developed its own Digital Learning Management System to support online classes in these trying times of COVID-19.
- One of the project lead by Dr. Parul Tomar and Dr. Sapna Gambhir was ranked amongst top 20 at national level in an event “SAMADHAAN” organized by Ministry of Education



# Faculty Contribution



SNO	NAME	QUALIFICATION	SPECIALIZATION	DESIGNTION	DATE OF JOINING	NATURE OF ASSOCIATION
1	Dr. Komal Kumar Bhatia	ME/M. Tech and PhD	Information Retrieval, Hidden Web	Professor	1/3/2006	Regular
2	Dr. Atul Mishra	ME/M. Tech and PhD	Network Management/Cloud Computing	Professor	21/10/2008	Regular
3	Dr. C. K. Nagpal	ME/M. Tech and PhD	Soft Computing, MANETs, Automata Theory	Professor	24/02/1988	Regular
4	Dr Naresh Chauhan	ME/M. Tech and PhD	Software Engineering, Software testing ,Agile Software Development	Professor	4/1/2004	Regular
5	Dr Ashutosh Dixit	ME/M. Tech and PhD	Information Retrieval	Professor	25/06/2004	Regular
6	Dr. Jyoti	ME/M. Tech and PhD	Web Mining, Operating System	Associate Profe-ssor	22/06/2004	Regular
7	Dr. Harish	ME/M. Tech and PhD	Software Engineering, Software testing,Agile Software Development	Associate Profe-ssor	1/3/2006	Regular
8	Dr. Parul Tomar	ME/M. Tech and PhD	Mobile Ad-hoc Networks, Operating system	Associate Profe-ssor	1/3/2006	Regular
9	Dr. Neelam Duhan	ME/M. Tech and PhD	Databases, Data Mining and Web Information Retrieval	Associate Profe-ssor	1/6/2006	Regular
10	Dr. Sapna Gambhir	ME/M. Tech and PhD	wireless sensor network	Associate Profe-ssor	17/01/2006	Regular
11	Ms. Shruti Sharma	M.E/M.Tech	Internet & Web Technologies	Assistant Professor	1/10/2007	Regular
12	Dr. Parul Gupta	ME/M. Tech and PhD	Information Retrieval	Associate Profe-ssor	1/10/2007	Regular
13	Dr. Anuradha	ME/M. Tech and PhD	Web Technologies	Associate Profe-ssor	14/01/2008	Regular
14	Dr. Poonam	ME/M. Tech and PhD	MANETs	Assistant Professor	14/01/2008	Regular
15	Dr. Deepika	ME/M. Tech and PhD	Internet & Web Technologies	Assistant Professor	14/01/2008	Regular

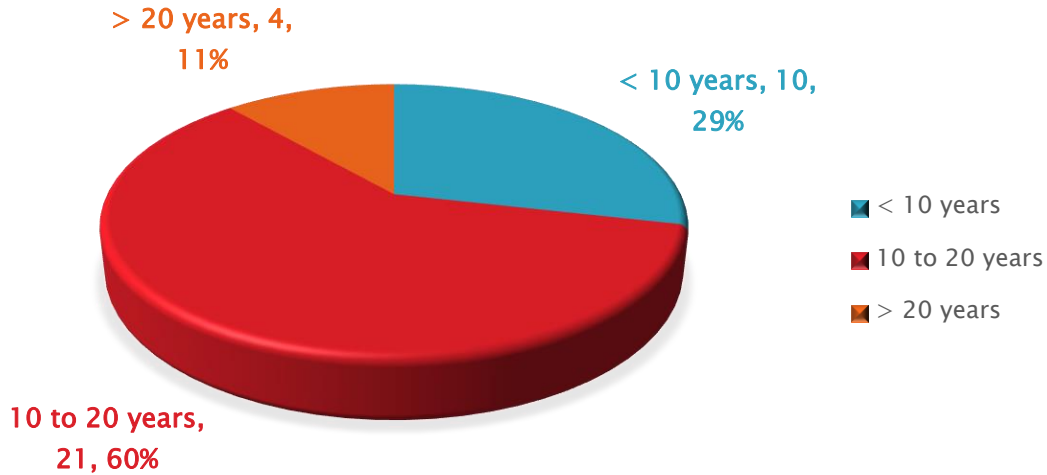
16	Dr. Payal Gulati	ME/M. Tech and PhD	Information Retrieval	Assistant Professor	14/01/2008	Regular
17	Dr. Amita Arora	ME/M. Tech and PhD	Information Retrieval	Assistant Professor	28/06/2008	Regular
18	Dr. Preeti Sethi	ME/M. Tech and PhD	Software Agents, Wireless Sensor Networks	Assistant Professor	9/10/2008	Regular
19	Dr. Ashlesha Gupta	ME/M. Tech and PhD	Internet & Web Technologies	Assistant Professor	9/10/2008	Regular
20	Dr. Rashmi Popli	ME/M. Tech and PhD	Software Engineering, Software testing, Agile Software Development	Assistant Professor	2/6/2009	Regular
21	Dr. Sonali Gupta	ME/M. Tech and PhD	Hidden Web, Information Retrieval	Assistant Professor	8/12/2009	Regular
22	Sh. Sushil Kumar	M.E/M.Tech	Information Retrieval	Assistant Professor	28/02/2011	Regular
23	Sh. Umesh Kumar	M.E/M.Tech	Wireless Security, Mobile agents	Assistant Professor	16/04/2012	Regular
24	Ms. Alka Chaudhary	M.E/M.Tech	Computer Vision, Image Processing	Assistant Professor	2/7/2017	Regular
25	Ms. Ayyu	M.E/M.Tech	Information Retrieval	Assistant Professor	13/02/2017	Regular
26	Ms. Shikha Gupta	M.E/M.Tech	Big Data, Information Retrieval Systems, Online Marketing	Assistant Professor	3/6/2017	Regular
27	Ms. Jyotsna Parmar	M.E/M.Tech	Information Retrieval	Assistant Professor	3/8/2017	Regular
28	Ms. Monika Gupta	M.E/M.Tech	opinion Mining, Big Data	Assistant Professor	15/09/2017	Regular
29	Ms. Aayushi Bansal	M.E/M.Tech	Soft Computing	Assistant Professor	30/07/2018	Regular
30	Ms. Shilpi	M.E/M.Tech	Software Engineering, System Engineering	Assistant Professor	8/2/2018	Regular
31	Ms. Raveena Aggarwal	M.E/M.Tech	Networking	Assistant Professor	8/2/2018	Regular
32	Sh. Piyush Gupta	M.E/M.Tech	Machine learning, BigData Analytics	Assistant Professor	25/09/2018	Regular
33	Dr. Lalit Mohan Goyal	ME/M. Tech and PhD	Data Mining	Assistant Professor	11/5/2018	Regular
34	Dr. Rewa Sharma	ME/M. Tech and PhD	Network Management/Cloud Computing	Assistant Professor	27/09/2018	Regular
35	Ms. Shivi Garg	M.E/M.Tech	Network Security	Assistant Professor	27/09/2018	Regular
36	Ms. Bhanu	M.E/M.Tech	Information Retrieval	Assistant Professor	15/09/2017	Contractual
37	Ms. Meenakshi	M.E/M.Tech	Information Security	Assistant Professor	15/09/2017	Contractual
38	Ms. Jyoti Sharma	M.E/M.Tech	opinion Mining	Assistant Professor	15/09/2017	Contractual

• Faculty Count



Department	Designation	Total
<b>CE</b>	Professors	5
	Associate Professor	7
	Assistant Professor	23

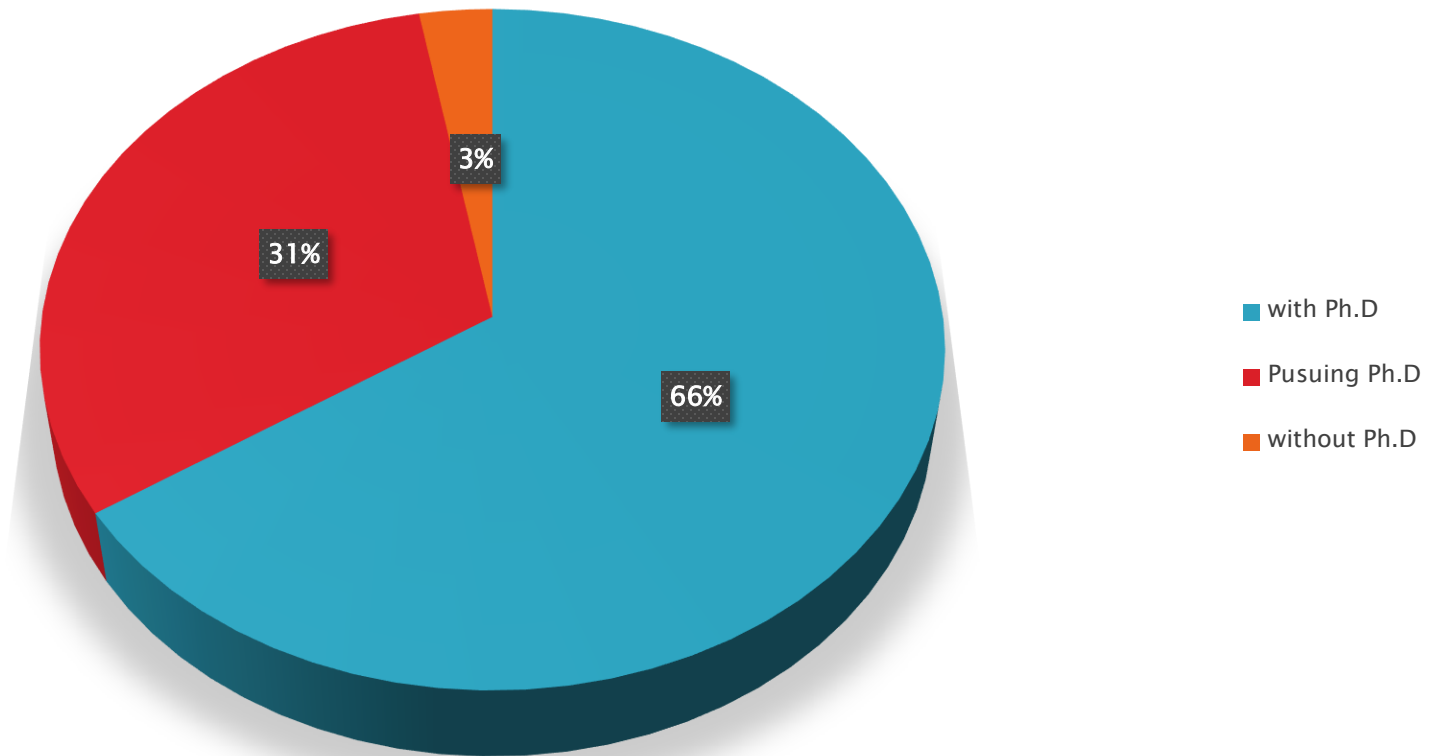
**YEARS OF EXPERIENCE**



# Enhanced Faculty Qualification



Faculty with Ph.D degree

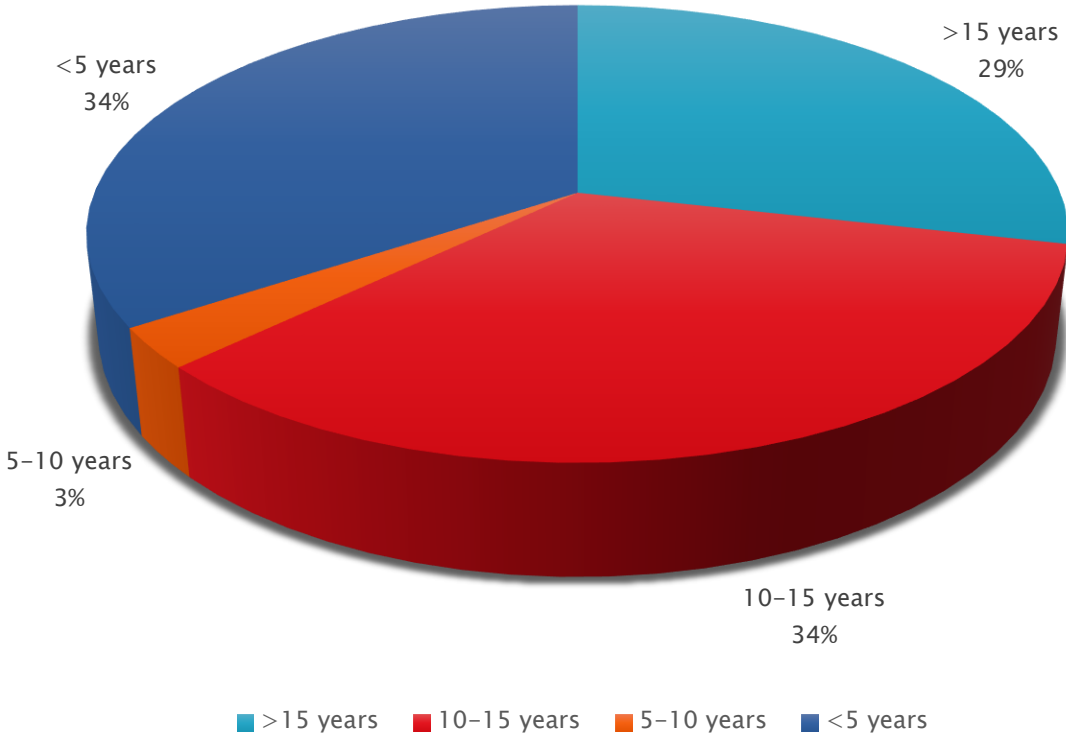




# Retention Ratio



## Faculty Retention



# SFR DETAILS



S.no.	Designation	CAYm1 2019-20			CAY 2020-21		
		With Ph.D.		Without Ph.D	With Ph.D.		Without Ph.D
		Regular	Contractual		Regular	Contractual	
1	Professors	5	0	0	5	0	0
2	Associate Professors	7	0	0	7	0	0
3	Assistant Professors	10	0	13	11	0	12
<b>Total number of Faculty in the Department</b>		<b>22</b>	<b>0</b>	<b>13</b>	<b>23</b>	<b>0</b>	<b>12</b>

Sno	Parameter	Calculations	2018-19	2019-20	2020-21
1	Total number of sanctioned intake at UG + Actual admitted lateral entry students+ PG level for the previous three academic years including current academic year	Total No. of Students in the Department	576	636	661
2	SFR	$SFR = S/F$	16	18.17	18.88

**Avg SFR = 17.7**



# Faculty Development Initiatives

## Faculty members are encouraged

- To attend
  - QIP (Summer & Winter Schools)
  - Seminars/Conferences/Workshops
  - FDPs/STCs
- To publish
  - Research Papers in reputed Journals
  - Technical Articles
  - Books/Book chapters
- To organize workshops/FDPs/Expert Lectures



# Faculty Contributions

- ▶ Departmental Responsibilities
- ▶ 23 Books Chapter Authored
- ▶ Seminars/Conferences/Workshops organized
- ▶ Research Publications ( WoS / SCOPUS / UGC indexed)
- ▶ FDP / STTP / SDP attended
- ▶ Administrative Responsibilities
- ▶ Club Coordinators
- ▶ Patent granted / published
- ▶ Research Projects / Consultancies



# Student Performance

# Academic Performance



• Success Rate (Without Backlog) BTech(CE)

Item	Latest Year of Graduation, LYG(19-20)	Latest Year of Graduation, LYG m1 (18-19)	Latest Year of Graduation minus 2, LYG m2 (17-18)	Latest Year of Graduation minus 3, LYGm3 (16-17)
Number of students admitted in the corresponding FirstYear + admitted in 2nd year via lateral entry and separate division, if applicable	$60+19=79$	$53+19=72$	$62+15=77$	$58+15=73$
Number of students who have graduated without backlogs in the stipulated period	48	46	56	52
Success Index(SI)	0.61	0.64	0.73	0.71
Average Success Index	0.67			

# Academic Performance



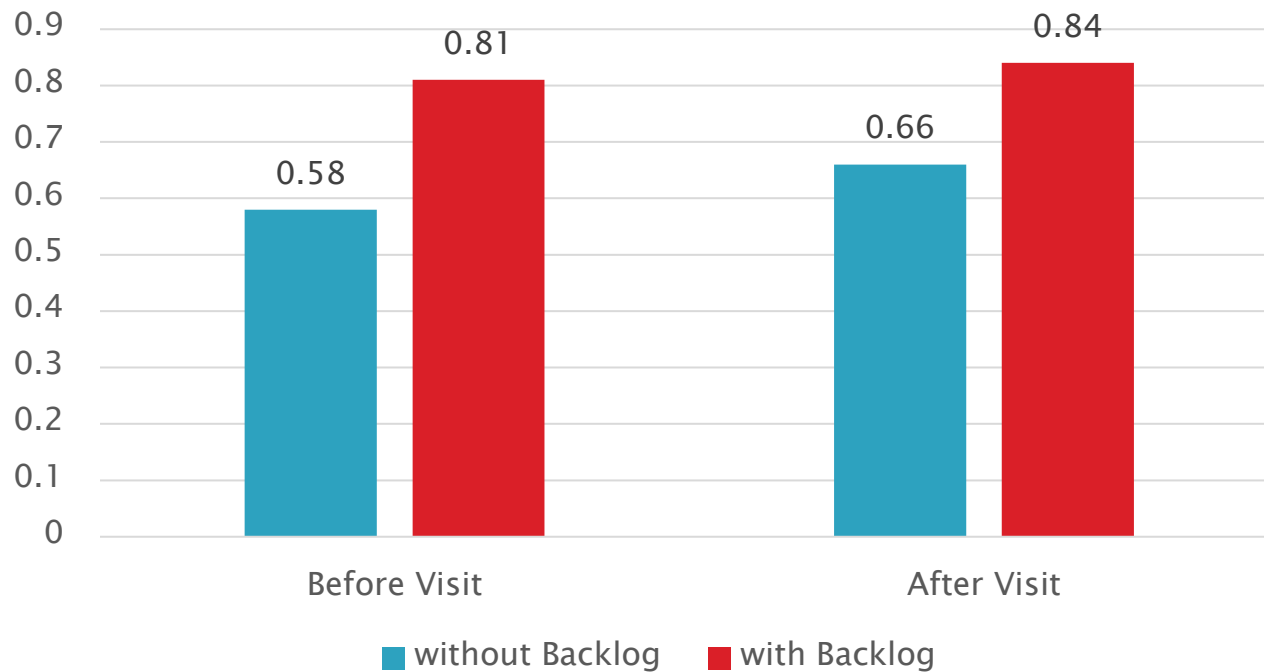
## • Success Rate (With Backlog) BTech(CE)

Item	Latest Year of Graduation, LYG(19-20)	Latest Year of Graduation, LYG m1 (18-19)	Latest Year of Graduation minus 2, LYG m2 (17-18)	Latest Year of Graduation minus3, LYGm3 (16-17)
Number of students admitted in the corresponding FirstYear+admitted in2nd year via lateral entry and separate division, ifapplicable	60+19=79	53+19=72	62+15=77	58+15=73
Number of students who have graduated with backlogs in the stipulated period	63	61	68	64
Success Index(SI)	0.80	0.85	0.88	0.88
Average Success Index	0.85			

# Improved Success Rate



Academic Performance of the Students



# Students Contributions



- ▶ Two teams of our department are shortlisted for the final round of TOYCATHON, 2021
- ▶ A Team of students participated in the final round of SIH, 2020
- ▶ 6 teams were awarded for presenting best ideas in Ideathon 1.0, 2019



**BTech  
(CE)**

## • Placement

Item	Year of Graduation, (20-21)	Latest Year of Graduation, LYG (19-20)	Latest Year of Graduation, LYG m1 (18-19)	Latest Year of Graduation minus 2, LYG m2 (17-18)
Total no of Final Year Students	74	74	72	76
No of students placed in companies or govt. sector	32	55	48	56
Students admitted to higher studies	Nil Nil	2	2	4
Placement Index	In process	0.77	0.69	0.79
Average Placement		0.75		

# Student Professional Activities conducted by the Department



- ❑ Events organised / Technical Contests / Activities organised and participated
- ❑ Expert Lecture organised
- ❑ Publication of technical magazines, newsletters
- ❑ Student projects



# Training & Placement Activities

## OUR RECRUITERS



### A

Adobe India  
Advisor Logistics  
Amazon  
Ambit Switch Gear  
Andritz Hydro  
ARTech.  
Assu Soft Ltd.  
Avant Grade

### B

Beryl Systems  
Bits Bridge Ltd.  
Blue Star Ltd.  
Bony Polymers  
BookMyShow

### C

Cap-Gemini  
Carrier Midea (China)  
Code Brew Lab  
Compro Tech.  
Connect2

### D

Daffodil Ltd.  
Daikin  
Danfoss  
Danfoss Group  
Delphi Automotive  
Desoo Haryana

### E

E-Care Solution  
E-Clers Services  
Eicher  
EMC Corporation  
ETA General Ltd.

### F

Falcon Autotech

### G

Gemalto  
GKN Drive Line Ltd  
Green Apple Solutions

### H

HCL  
HDFC Bank  
Hero Motocorp  
Hitachi Consulting  
Honda Cars Ltd.

### I

IBM  
Idea Cellular  
IDMC Ltd.  
India Forge  
Indian Army  
Indian Navy  
ITC

### J

Jacobs Engg  
Jindal Steel  
JK Techno Soft  
Johnson Hitachi  
Josh Technology

### K

KPMG

### L

LG Electronics  
LIBSYS  
LLOYD Electric  
Lybrate

### M

Maharani Paints  
Mahindra Defence  
Maruti Suzuki  
Mediatek  
MPHRX

### N

Nagarro  
NBC Bearings  
NCR Corporation  
Newgen

### P

Panasonic  
Payu Payments Ltd.  
Posist

### R

Reliance Communicaitons

### S

Samsung  
Sapient  
Smart Prix  
Snapdeal  
SNP Capital IQ  
ST Microelectronics  
Steria Ltd.

### T

Tata Consultancy Services  
Tata Steel Ltd.  
Techperscept  
Thoughtworks

### U

United Health Group

### V

Voith Fabrics  
Voltas Ltd.

### W

Wipro

### Y

Yamaha Motors

### Z

ZIA Semiconductors



INDIAN NAVY



snapdeal



EMC<sup>2</sup>



amazon

HCL



HITACHI  
Air conditioning solutions



TATA STEEL



HONDA



ITC Limited

KPMG

TATA CONSULTANCY SERVICES



BLUE STAR



STMicroelectronics



BLUE STAR

YAMAHA

UnitedHealth Group



GKN DRIVELINE

Panasonic



DAIKIN



payu



LIBSYS



# Vision, Mission & PEO's

# Vision

## • University

J C Bose University of Science and Technology, YMCA aspires to be a nationally and internationally acclaimed leader in technical and higher education in all spheres which transforms the life of students through integration of teaching, research and character building.



# Vision

## • Department

The department aims to make a place at both national and international level by producing high quality ethically rich computer engineers conversant with the state-of-the-art technology with the ability to adapt the upcoming technologies to cater to the ever changing industrial demands and societal needs. It endeavors to establish itself as a centre of excellence by contributing to research areas having IT impact on the people's life and nation's growth

## Mission

### • University



To contribute to the development of science and technology by synthesizing teaching, research and creative activities. To provide an enviable research environment and state-of-the-art technological exposure to its scholars. To develop human potential to its fullest extent and make them emerge as world class leaders in their professions and enthuse them towards their social responsibilities.

## Mission

### • Department

- ❑ To provide the future leaders in the area of computer engineering and information technology through the development of human intellectual potential to its fullest extent.
- ❑ To enable the students to acquire global competence through problem solving skills and exposure to latest developments in IT related technologies.
- ❑ To educate the students about their professional and ethical responsibilities.
- ❑ To ensure continuous interaction with the industry and academia through collaborative research projects.

# Programme Educational Objectives

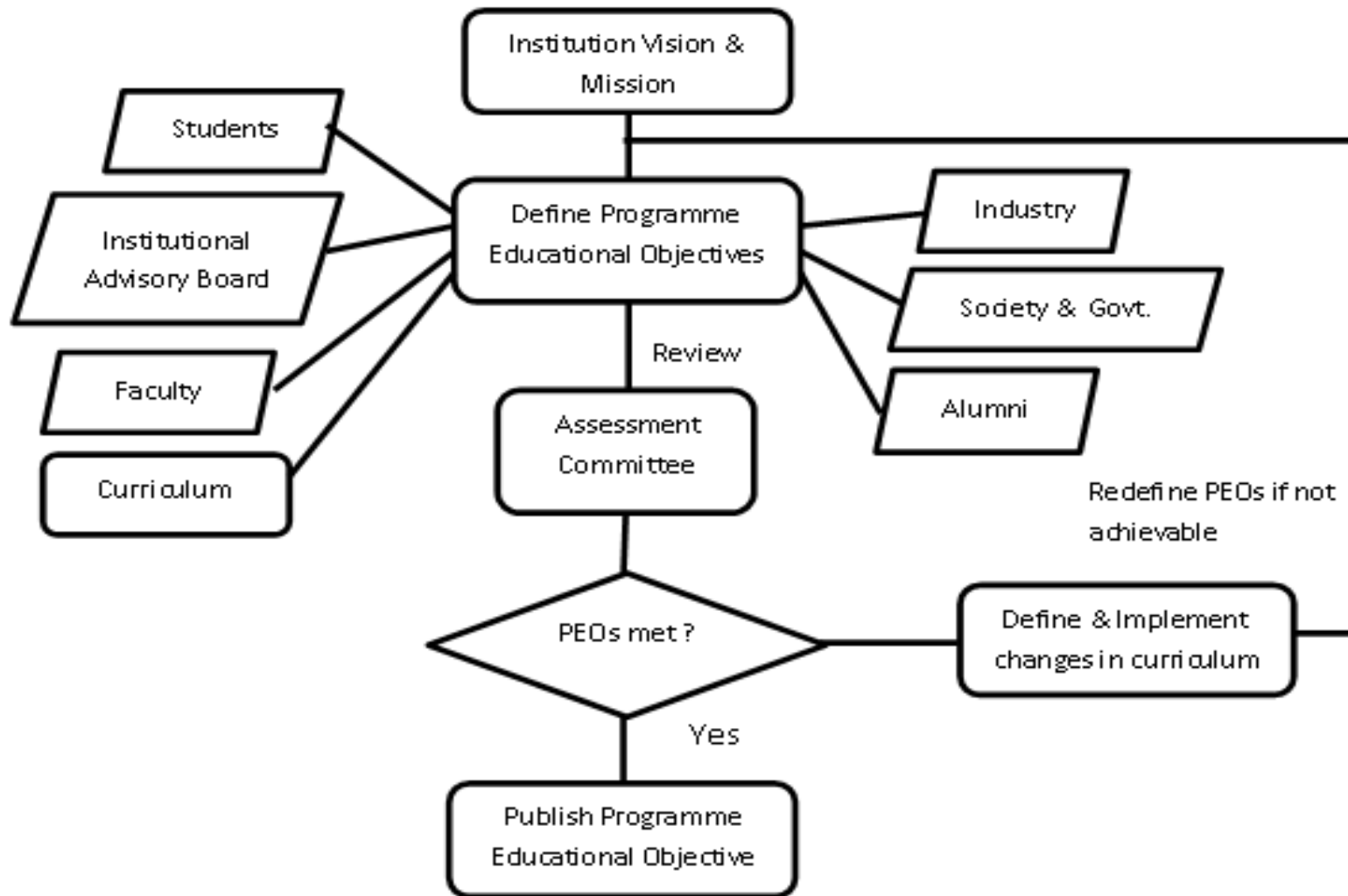


PEO's

• BTECH (CE)

PEO1	To create knowledge about core areas related to the field of computer engineering.
PEO2	To enable students to apply mathematics, science and computer engineering principles to model, design and implement software projects to meet customers' business objectives.
PEO3	To develop the ability to evaluate the computing systems from view point of quality, security, privacy, cost effectiveness, utility and ethics.
PEO4	To inculcate lifelong learning by introducing principles of group dynamics, public policies, environmental and societal context.

# PEO's Definition & Attainment Process



# Course Outline

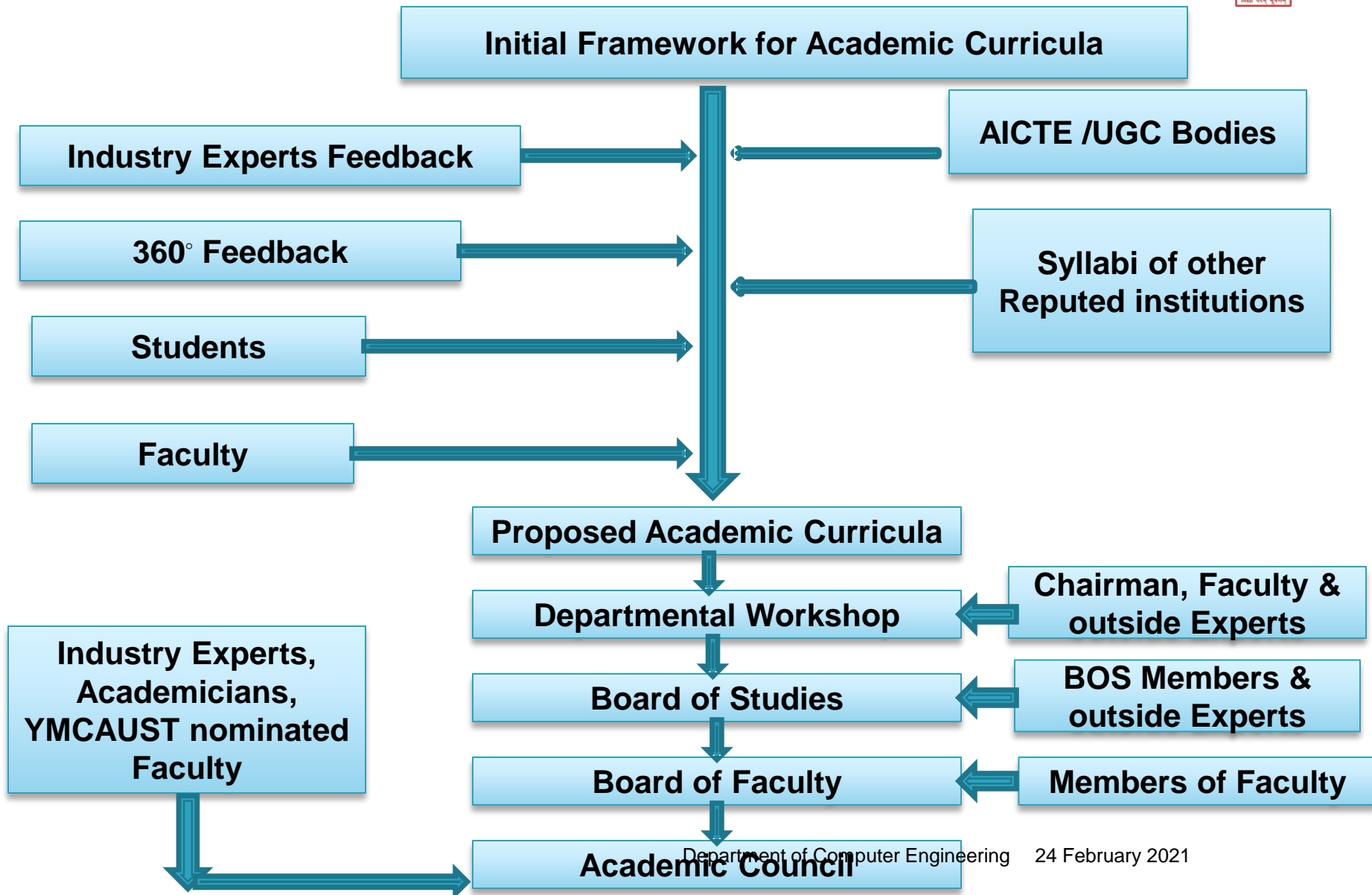


Name of the Programme	Admission Criteria	Intake	Batches Passed Out
B.Tech. (CE)	JEE Rank	120+ 12 (LEET)	22
B.Tech. (CE) with spec in Data Science	JEE Rank	60 + 6 (LEET)	Started in 2020
B.Tech. (IT)	JEE Rank	60+6(LEET)	16
M.Tech. (CE)	GATE & Merit	18	18
M.Tech. (CSE)	GATE & Merit	18	Started in 2020
Ph.D.	GATE, NET & Entrance Test conducted by University	As Per Availability of supervisors	Enrolled: 93 Awarded: 21 Submitted: 3



# Program Curriculum

# Design & Development of Curriculum



# Details of Curriculum Review Workshops



S.No.	Industry Expert/Academic Expert	Designation	Date of meeting in YMCAUST regarding curricula
1	Mr Rajesh Popli	Senior Quality Manager, Nagarro Softwares, Gurgaon	July, 2020
2	Mr Vishal Goyal	Sr. Project Manager, Dell Ltd., Noida	
3	Mr Sutrender Kajala	IT Head, Yamma Ltd. Faridabad	
4	Mr Rahul Narang	COD, Lyrabata Ltd. Faridabad	
5	Mr Rajesh Popli	Senior Quality Manager, Nagarro Softwares, Gurgaon	Jan, 2019
6	Mr Vishal Goyal	Sr. Project Manager, Dell Ltd., Noida	
7	Mr Sutrender Kajala	IT Head, Yamma Ltd. Faridabad	
8	Mr Rahul Narang	COD, Lyrabata Ltd. Faridabad	
9	Mr Rajesh Popli	Senior Quality Manager, Nagarro Softwares, Gurgaon	June, 2017
10	Mr Vishal Goyal	Sr. Project Manager, Dell Ltd., Noida	
11	Mr Sutrender Kajala	IT Head, Yamma Ltd. Faridabad	
12	Mr Rahul Narang	COD, Lyrabata Ltd. Faridabad	
13	Mr Rajesh Popli	Senior Quality Manager, Nagarro Softwares, Gurgaon	May, 2016
14	D Dr. M N Hoda	Director, Bharati Vidhyapeeth Institute of Computer Applications and Management (BVICAM), New Delhi	

# Structure of Curriculum



## Itemized Break-up

### Total Teaching Schedule

Lectures	Tutorial	Practical	Total
95	5	64	164

### Total Marks

Sessionals	End Term	Total
1315	3435	4750

Name	No.	Hours	Marks	Credits
Theory Subjects	32	95	3200	85
Labs	11	44	550	22
Projects	5	20	500	10
Industrial Training	1	1 Sem	500	10
MOOC	4	-	-	12
<b>Total</b>			<b>4750</b>	<b>139</b>

# Curriculum Component



Course Component	Curriculum Content (% of total number of credits of the program)	Total number of Contact Hours	Total number of Credits
Humanities and Social Sciences including Management	6.7	13	12
Basic Science Clourses	14.12	28	25
Engineering Science Courses	16.38	40	29
Professional Core Courses	27.68	67	49
Professional Elective Courses	10.17	18	18
Open Elective Courses	6.7	12	12
Value Added Courses	-	3	0
Audit Courses	-	3	0
Massive Open Online Courses (MOOCs)	6.7	-	12
Project Work / Seminar/ Internship in Industry or elsewhere	11.29	-	20
Total Number of Credits			177

# Continuous Assessment Procedure of Industrial Training



## (A) Annual Exams Marks

1. Project Evaluation	50Marks
2. Project Seminar	50Marks
3. Project Viva	100marks

## (B) Continuous Assessment Marks

1. Assessment by Institute faculty	100Marks
2. Assessment by Industrial Guide	150Marks
3. Conduct Marks	50Marks

<b>Total</b>	<b>500Marks</b>
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# Grading Scheme



Marks %	Grade	Grade points	Category
90-100	O	10	Outstanding
80<marks<90	A+	9	Excellent
70<marks< 80	A	8	Very good
60<marks< 70	B+	7	Good
50<marks< 60	B	6	Above average
45<marks< 50	C	5	Average
40<marks< 45	P	4	Pass
<40	F	0	Fail
	Ab	0	Absent



# Teaching Learning Process

# Program Outcomes



PO's

• BTECH (CE)

PO	Engineering Graduates will be able to:
PO1	Engineering knowledge: Apply the knowledge of mathematics, science, Engineering fundamentals, and computer engineering to the solution of engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze computer engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for engineering problems related to computer engineering and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

# PO's

## • Contd...



PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the computer engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological changes in Computer Engineering.



# PSO's

• Contd...

PSO

Engineering Graduates will be able to:

PSO1

Ability to design and develop computing systems using concepts of Mathematics, Computer Engineering and other related disciplines to meet customers' business objectives.

PSO2

Ability to test and analyze the quality of various subsystems and to integrate them in order to evolve a larger computing system.

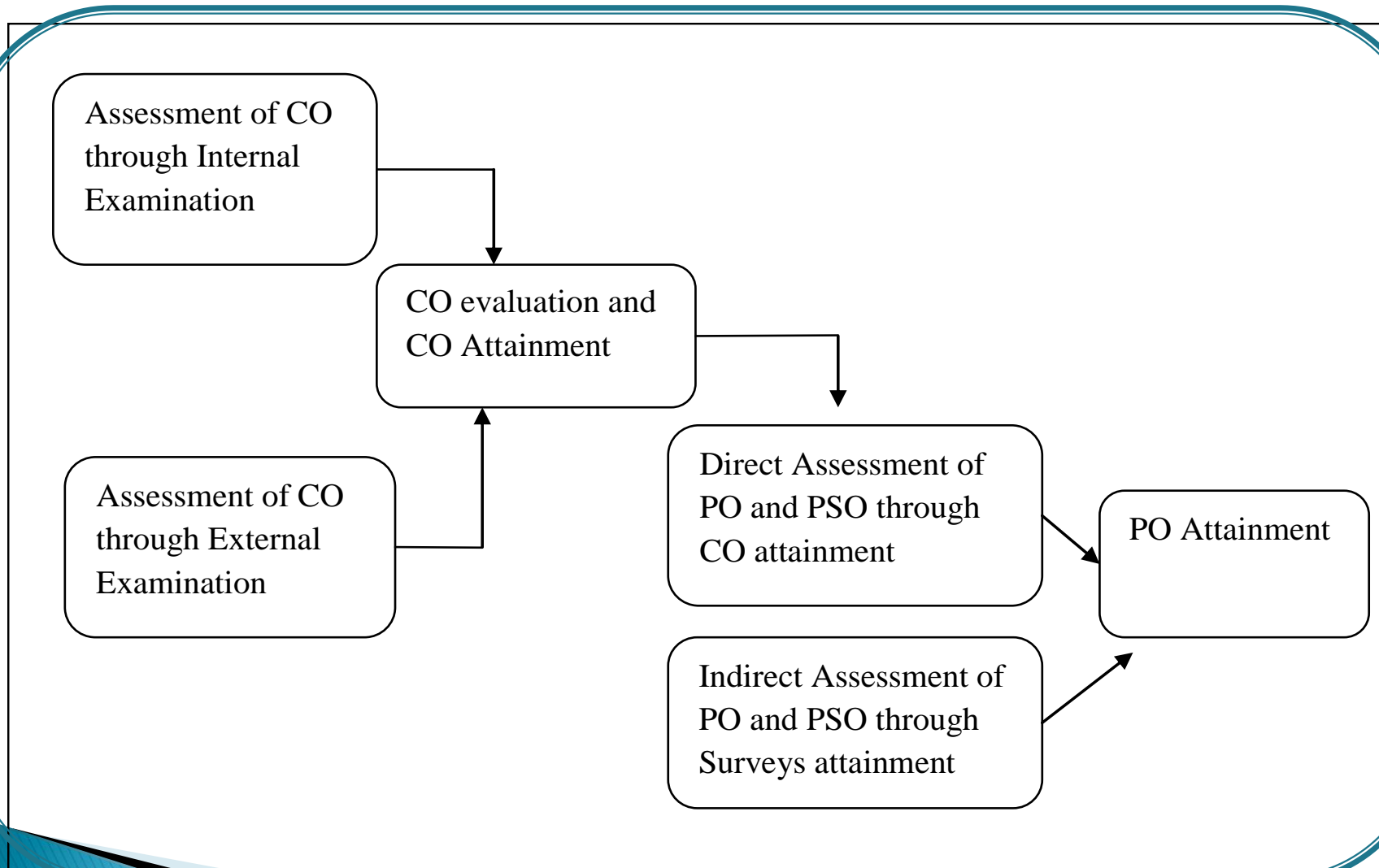
# Methodology to calculate CO, PO and PSO attainment



- ▶ Define CO for a course
- ▶ Mapping of CO with PO & PSO (On a scale of 1,2 & 3)
- ▶ Aligning of each CO with questions of class tests and end semester exam
- ▶ Preparation of CO alignment sheets



# PO Attainment Process



# PO Attainment

(Formal Languages, Automata and Compiler Design)



- ▶ For defined CO of a course, mapping of CO with PO (on a scale of 1,2 & 3) is done.
- ▶ CO's are align with questions of class tests, assignments and end semester exams
- ▶ CO alignment sheet is prepared and grades are assigned

			CO1					CO2		
S.NO	University Roll No	STUDENT NAME	Total Marks Obtained	Total marks Attempted	≥60%	Score (3,2,1)	Y/N	Total Marks Obtained	Total marks Attempted	≥60%
1	17001003001	Aayush Bangroo	31.5	43	73.26	3	y	41	43	95.35

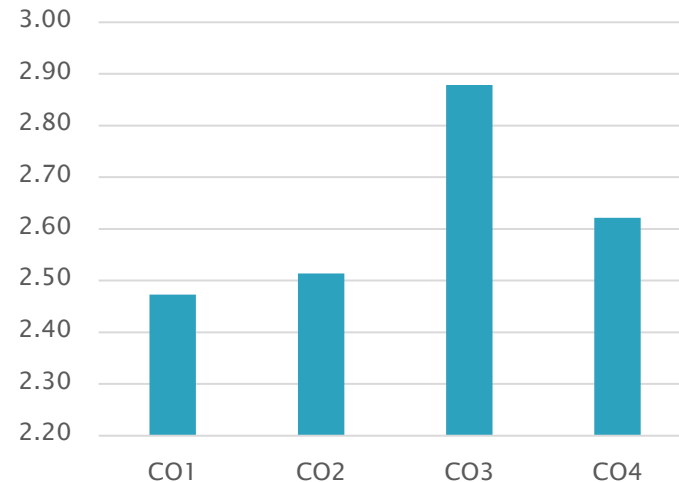


# CO Distribution tables

Total No Of Students			N	
Co	Average Score	Distribution % Age		
		3.00	2.00	1.00
CO1	2.47	56.76	33.78	9.46
CO2	2.51	67.57	16.22	16.22
CO3	2.88	89.19	9.46	1.35
CO4	2.62	74.32	13.51	12.16

No of students scoring >= 60 %				
CO	CO1	CO2	CO3	CO4
% AGE STUDENTS ACHIEVED CO	56.76	67.57	89.19	74.32
CO RESULT	n	y	y	y

Avg Course Outcomes grading





# PO Attainment

Course Name	CO	% AGE STUDENTS ACHIEVED CO	CO RESULT	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Formal Languages, Automata and Compiler Design	CO1	56.76	n														
	CO2	67.57	y	67.57	45.05	67.57	67.57	67.57	45.05	45.05	45.05	67.57	45.05	45.05	45.05	45.05	67.57
	CO3	89.19	y	89.19	89.19	89.19	89.19	89.19	59.46	59.46	59.46	89.19	59.46	59.46	59.46	89.19	59.46
	CO4	74.32	y	74.32	74.32	74.32	74.32	74.32	49.55	24.77	49.55	74.32	49.55	49.55	49.55	74.32	74.32
<b>Average</b>				52.25	44.74	52.25	52.25	52.25	30.81	25.86	30.81	46.22	30.81	30.81	30.81	41.71	40.27



# Assessment

## Direct Assessment

- Internal Examination
- External Examination
- Project Evaluation
- Seminars

## Indirect Assessment

- Feedback from Employers
- Feedback from in-plant Training Supervisors
- Alumni Survey
- Rubrics

# Overview of Teaching Learning Process



- ❑ **Academic calendar**
  - ❑ Prepared at central level by academic Department of University and available on website
- ❑ **Subjects allocation** in consultation with the faculty members depending upon their field of specialization.
- ❑ **Time Table preparation**
- ❑ **Course planning**
  - ❑ Lecture plan/notes
  - ❑ Assignments
  - ❑ Previous years University papers
- ❑ **Evaluation and Assessment of Internal and External Sheets**
- ❑ **Support to weak and Encouraging bright students**
- ❑ **Enhancing Learning through Labs and Workshops**
- ❑ **Faculty Development Programmes**
- ❑ **360° Feedback System**
- ❑ **Expert Lectures** and workshops for students
- ❑ **E-Learning**
- ❑ **Continuous updation of Labs/Workshops**
- ❑ **Counseling of Students**



# Delivery of Syllabus Content

- ❑ **Academic Delivery:**
  - ❑ As per academic calendar and course structure
    - Content delivered using white boards/LCD/video Lectures.
    - Interactive teaching approach by taking real world example
    - Previous class contents are recapitulated.
- ❑ **Assignments and Tests**
- ❑ **Syllabus Coverage**
  - 95–100% course coverage is ensured through regular monitoring by Class coordinators & Chairman.
  - Remedial/Extra Classes are conducted for any deficiencies.
- ❑ **One Semester In-Plant Training in Industries as part of B.Tech CE, CSE, IT and MCA course.**



## • Quality Enhancement Measures

- Curriculum Enhancement and Academic Flexibility
- Industry Academia Relationship  
MOUs National and International
- Academic Audit
- Remedial Classes to support weak students
- Scholarships to encourage bright students
- Expert Lectures
- E-learning
- Video lectures, assignments and tests on University website (DLMS)
- Wifi Enabled campus
- Feedback System
- Information Access Facilities

# • Students Co-Curricular Activities at University level



## Cultural

- VIVEKANANDA MANCH
- VIVIDHA
- TARANNUM
- JHALAK
- NATARAJA
- SRIJAN
- ANANYA

## Technical

- MANAN
- MECHNEXT
- MICROBIRD
- SAMARPAN
- IEEE



# Magazine and Newsletters



## University Magazine

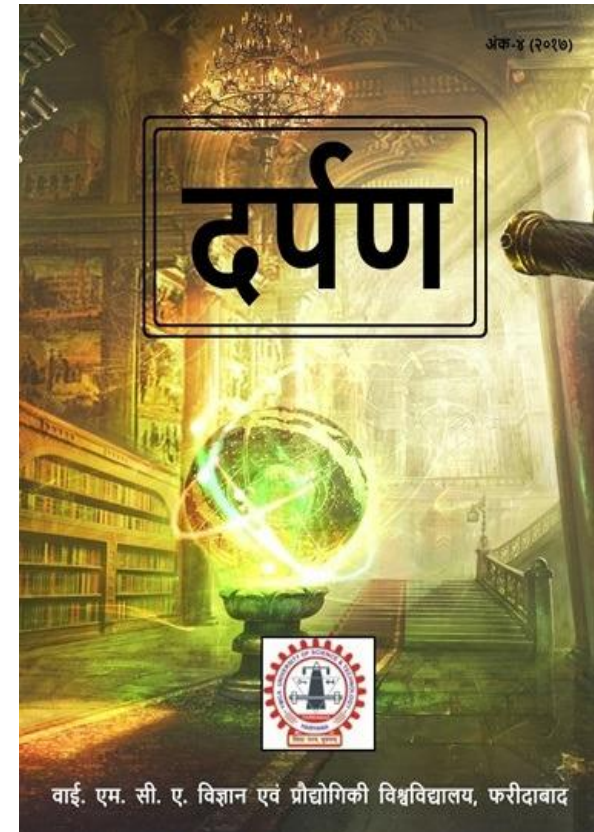
Darpan– high quality magazine  
A real page turner.

Frequency : Annually

## E-Newsletter

Keeps students and employees  
up to date on the latest university news.

Frequency : Bi-annually





# Institutional Support, Technical Support & Financial resources

# Infrastructure



Rooms Description	Usage	Capacity	Rooms equipped with
12 Classrooms (including 5 smart classrooms)	B.Tech, M.Tech	11 (70) 1(36)	White Board, Duster, Marker, Desks etc
12 Labs	B.Tech, M.Tech	35-40	White Board, Duster, Marker, Computer Stations (6 labs with projectors)
1 Seminar Room	Presentation, Seminar, Project PPTs, Guest Lecturers	40-50	Projector, White Board, Duster, Marker, Desks etc
1 Conference rooms	Department Conference, Staff Meetings	30	Projector, Notice Board etc.
No. of Faculty rooms -	Faculty Room, Counselling Discussion	12	Laptop, PC, Printer, Scanner, WiFi, Notice Board, Book Racks, Internet facility, Marker, Table, Chairs, Visitor Chairs etc

# Class Room



# Smart Class Room



# Conference Room





# Outline of Laboratories

Sr. No.	Name of Laboratory
1	Networking Lab cum project lab (CC - 01)
2	Fundamentals Of Computer Programming Lab (CC - 02)
3	Digital System Design Lab (CC-04)
4	Internet and Web Technology Lab (CC - 06)
5	Operating System Lab (CC - 07)
6	Database Management System Lab (CC - 03)
7	.Net Lab (CC - 05)
8	Matlab (CC - 08)
9	Intelligent System Lab (CC - 09)
10	Research Lab
11	SPD Lab
12	Computer Centre
13	High Performance Computing Lab



# Project Laboratories

Sr. No.	Name of Laboratory
1	Research Lab
2	Networking cum project lab(CC01)
3	Skill Enhancement Lab (Multimedia and Animation Lab)

# Labs





# Licensed Software

S.No	Name of the Software	No of User Licenses
1	Silk Central-130(Software Testing Tool)	30
2	SPSS Modeler 17.0 with Text Mining	10
3	SPSS Modeler 17.0 Client	25
4	SPSS Modeler 17.0 Server	1
5	Xilinx University Vivado System Edition	50
6	Coral Draw graphics suite X8 Education	36
7	MATLAB	6
8	MATLAB Neural Tools	36
9	MATLAB with Fuzzy Logic	6
10	Adobe Creative Cloud for team	40
11	Illustrator 2018	40
12	Adobe Photoshop 2018	40

# Technical Support Staff



S.No	Role	Count
1	Head of Section (HoS)	1
2	System Manager	1
3	System Analyst-cum-programmer	1
4	Senior Instructor	1
5	Instructor	2
6	IT Technician	2



## • Safety Norms & Checks

- ▶ Fire Extinguisher
- ▶ Electrical MCBs
- ▶ First Aid Kit
- ▶ Proper earthing of all Electrical Equipments.

## Counselling and Emergency Medical Care and First-Aid

- ▶ Health Care Centre in University Campus
- ▶ Availability of doctors during college hours
- ▶ Career Counseling Cell is there for physical and mental well-beings of students



# Continuous Improvement



# Continuous Improvement

- ▶ Rise in Faculty Cadre Ratio
- ▶ Improved Faculty Qualification Index
- ▶ Improved Academic Performance Index
- ▶ Improved Success Index
- ▶ Upgraded Departmental Infrastructure
- ▶ Increased research publication, h-index and i-10 index
- ▶ Started B.Tech.(CE with specialization in Data Science in 2020)
- ▶ Improved student participation at various national level competitions

# Enriched SFR...



Faculty Details of the Department (UG+PG)							
S.no.	Designation	CAYm1 2019-20			CAY 2020-21		
		With Ph.D		without Ph.D	With Ph.D		without Ph.D
		Regular	Contra-ctual		Regular	Contra-ctual	
1	Professors	5	0	0	5	0	0
2	Associate Professors	7	0	0	7	0	0
3	Assistant Professors	10	0	13	11	0	12
4	Total number of Faculty in the Department (UG+PG)	22	0	13	23	0	12

	2018-19	2019-20	2020-21
SFR	16	18.17	18.88

# Enriched Faculty Research Profile



	Before Visit	After Visit
<b>No of Publications in SCI, E-SCI and SCI-E</b>	2	44
<b>No of Publications in International / National Journals</b>	221	264
<b>No of Reseach Projects funded outside university</b>	0	1
<b>No of Consultancies</b>	0	3
<b>No of National Patents (granted / published)</b>	1	
<b>No of International Patents (granted / published)</b>	1	4

	Google Scholar Citation	h-index	I10-index
Prof Naresh Chauhan	615	13	20
Prof Komal Kumar Bhatia	527	10	13
Dr. Neelam Duhan	508	10	10

	Scopus Citations	h-index
Dr. Lalit Mohan Goyal	176	7
Prof Komal Kumar Bhatia	168	5
Prof Naresh Chauhan	167	7

# Self Assessment Status



S.N.	Pre Visit Qualifiers (Average of Assessment years)	Requirement for 3 years	YES/NO	Requirement for 6 years	YES/NO
1	Admissions in the under graduate programs under consideration including students admitted through lateral entry (average of the previous three academic years CAYm1,CAYm2,CAYm3)	60%	Yes	75%	Yes (98.12%)
2	Faculty student ratio in the department under consideration (Averaged over previous three Academic years including Current Academic Year.)	1:25	Yes	1:20	Yes (1:17.7)
3	At least two Professors or one Professor and one Associate Professor on regular basis with Ph.D. degree should be available in the respective Department for previous two years (including Current Academic Year).	YES	Yes	YES	Yes (5 Professors) (7 Associate Professors)
4	Number of available Ph.Ds. in the department (Averaged for previous two academic years including Current Academic Year.)	20%	yes	30%	Yes (65%)
5	Whether HODs possess Ph.D. degrees for the programs under consideration	YES	YES	YES	Yes



# Future Focus

- ❑ **To get more DST/SAP/AICTE and FIST projects for which the Department has already submitted the proposal to various funding agencies.**
- ❑ **To foster entrepreneurial and start-up skills in the students.**
- ❑ **To enhance the quality of research work and improve scholarly publications by UG students.**
- ❑ **To set up new labs in the thrust areas like Cloud Computing, IoT, Big Data etc.**
- ❑ **To promote and execute national and international Exchange programmes.**
- ❑ **Department has already sent a proposal to establish Centre of Excellence to the Centre Govt.**



# Thank You