HOPE FOUNDATION'S

FINOLEX ACADEMY OF MANAGEMENT AND TECHNOLOGY

SECOND HALF 2022

e-Newsletter

DEPARTMENT OF INFORMATION TECHNOLOGY

PREPARED BY

ATIYA R KAZI



RECENT ADVANCEMENTS IN THE AREAS OF COMPUTERS, SOFTWARE, NETWORKS, INTERNET, COMMUNICATION TECHNOLOGY, BIG DATA, AND CLOUD COMPUTING, ETC. HAVE MADE A HUGE AMOUNT OF INFORMATION AVAILABLE TO US. IN THIS HIGH-TECH ERA, INFORMATION IS SOMETHING WITHOUT WHICH INDUSTRY, INDIVIDUALS CANNOT SURVIVE, AND THEIR SUCCESS DEPENDS ON THE ABILITY TO ACQUIRE ACCURATE AND TIMELY INFORMATION.

KEEPING THIS IN MIND FAMT STARTED THE BACHELOR OF ENGINEERING PROGRAM IN INFORMATION TECHNOLOGY (IT) FROM ACADEMIC SESSION 2001-2002. THE EMPHASIS OF B.E. IN INFORMATION TECHNOLOGY CURRICULUM IS ON COMPUTER SCIENCE, SOFTWARE DEVELOPMENT, NETWORKING, COMMUNICATION, WEB ENGINEERING, SECURITY, MULTIMEDIA PROCESSING, IOT, CLOUD COMPUTING, DATA ANALYTICS, AND SOFT COMPUTING. CURRENTLY, THE DEPARTMENT'S INFRASTRUCTURE CONTAINS THREE CLASSROOMS, SIX LABORATORIES, A STAFF ROOM, AND A SEMINAR HALL. OLE CLASSROOM IS ICT ENABLED WITH A WI-FI PROJECTION FACILITY. ALL FLOORS OF THE IT DEPARTMENT HAVE WI-FI CONNECTIVITY.

DEPARTMENT OF INFORMATION TECHNOLOGY

HOD's Message

Dear All,

It is my immense pleasure to present the e-newsletter of IT Department.

It is our honor to review and present the various activities undertaken by IT Department's faculty and students.

I thank the Graphics Designer for their effort and wish them best of luck for the future endeavors.



Dr. Vinayak Bharadi, Associate Professor, HOD IT

DEPARTMENT OF INFORMATION TECHNOLOGY

Editor's Message

Dear Readers,

It has been a great honor to work with IT department. The goal of this e-newsletter is to highlight the department's achievements and acknowledge the efforts of each and every student and faculty member who has had an impact in the department's success. Let us take a trip down the memory lane and we hope you can relive some of these moments with us.

Happy Reading!



Atiya R Kazi, Asst Professor, Dept of Info Tech.

VISION AND MISSION

VISION

TO PROVIDE EXCELLENT INFORMATION TECHNOLOGY EDUCATION AND ASPIRE TO NURTURE STUDENTS AS LEADERS WHO ARE IN TUNE WITH GLOBAL IT TRENDS.

M1

To Enrich students by rigorously implementing quality education (Knowledge)

M2

 To empower the students with the required skills to solve the complex problems of modern society by following collaborative, multidisciplinary and sustainable activities (Skills)

M3

• To imbibe professional ethics and social values in the students and make them responsible citizens (Attitude)

MISSIM



Program Educational Objectives

PEO1

TO PROVIDE LERNERS WITH CORE **COMPETENCE IN** MATHEMATICAL, SCIENTIFIC AND BASIC **ENGINEERING FUNDAMENTALS NECESSARY TO** FORMULATE, ANALYZE AND SOLVE HARDWARE/SOFTWARE ENGINEERING PROBLEMS AND/OR ALSO TO PURSUE ADVANCED STUDY OR RESEARCH.

PEO₂

TO PREPARE LEARNERS TO SOLVE BUSINESS-CENTERED PROBLEMS BY IDENTIFYING, ANALYZING, DEVELOPING, AND IMPLEMENTING INFORMATION SYSTEM BASED SOLUTIONS WITH MODERN PROGRAMMING TOOLS.

PEO3

TO PREPARE LEARNERS FOR SUCCESSFUL CAREER IN INDIAN AND **MULTINATIONAL** ORGANIZATIONS, IDENTIFY AND EVALUATE CURRENT AND EMERGING TECHNOLOGIES. TO PROVIDE OUR GRADUATES WITH LEARNING **ENVIRONMENT AWARENESS** OF THE LIFE-LONG **LEARNING .TO MOTIVATE** STUDENTS TO PURSUE IT THROUGHOUT THEIR CAREER AND HIGHER STUDIES.

PEO4

TO ENCOURAGE AND MOTIVATE LEARNERS FOR RESEARCH & DEVELOPMENT AND ENTREPRENEURSHIP.

PEO5

TO INTRODUCE LERNERS
TO ETHICAL CODES AND
GUIDELINES INCLUDING
PROFESSIONAL,
ETHICAL, LEGAL AND
PUBLIC POLICY ISSUES
TO PERFORM
EXCELLENCE, SHOW
LEADERSHIP SKILLS AND
DEMONSTRATE GOOD
CITIZENSHIP



PO1 BO2

PROGRAM OUTCOMES (POs) ENGINEERING KNOWLEDGE
APPLY THE KNOWLEDGE OF
MATHEMATICS, SCIENCE
AND IT FUNDAMENTALS TO
THE SOLUTION OF
COMPLEX ENGINEERING
PROBLEMS.

PROBLEM ANALYSIS IDENTIFY,
FORMULATE, REVIEW RESEARCH
LITERATURE, AND ANALYSE
COMPLEX IT PROBLEMS
REACHING SUBSTANTIATED
CONCLUSIONS USING
PRINCIPLES OF MATHEMATICS,
NATURAL SCIENCES, AND
ENGINEERING.

PO3

DESIGN/DEVELOPMENT
OF SOLUTIONS USE
RESEARCH-BASED
KNOWLEDGE OF IT AND
RESEARCH METHODS
INCLUDING DESIGN OF
EXPERIMENTS, ANALYSIS
AND INTERPRETATION
OF DATA, AND
SYNTHESIS OF THE
INFORMATION TO
PROVIDE VALID
CONCLUSIONS.

PO4

INVESTIGATION OF USER
NEEDS ABILITY TO
INVESTIGATE, IDENTIFY AND
ANALYSE USER NEEDS, AND
TAKE THEM INTO ACCOUNT
IN SELECTION, CREATION,
EVALUATION,
ADMINISTRATION OF ITBASED SOLUTIONS INTO THE
USER ENVIRONMENT.

PO5

MODERN TOOL USAGE
CREATE, SELECT, AND
APPLY APPROPRIATE
TECHNIQUES, RESOURCES,
AND MODERN
ENGINEERING AND IT
TOOLS INCLUDING
PREDICTION AND
MODELLING TO COMPLEX
IT ACTIVITIES WITH AN
UNDERSTANDING OF THE
LIMITATIONS.

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
PROFESSIONAL
ENGINEERING PRACTICE IN
THE FIELD OF IT.

PO7

ENVIRONMENT AND SUSTAINABILITY UNDERSTAND THE IMPACT OF THE PROFESSIONAL IT 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
IT PRACTICE.
ATTITUDE



PROGRAM OUTCOMES (POs) **PO9**

INDIVIDUAL AND TEAM
WORK FUNCTION
EFFECTIVELY AS AN
INDIVIDUAL, AND AS A
MEMBER OR LEADER IN
DIVERSE TEAMS, AND
IN
MULTIDISCIPLINARY
SETTINGS. ATTITUDE

PO10

COMMUNICATION COMMUNICATE **EFFECTIVELY ON COMPLEX IT 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. **SKILLS**

PO11

PROJECT MANAGEMENT AND FINANCE DEMONSTRATE KNOWLEDGE AND UNDERSTANDING OF THE IT 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. ATTITUDE

PO12

LIFE-LONG LEARNING
RECOGNISE THE NEED FOR,
AND HAVE THE
PREPARATION AND ABILITY
TO ENGAGE IN
INDEPENDENT AND LIFELONG LEARNING IN THE
BROADEST CONTEXT OF
TECHNOLOGICAL CHANGE.
ATTITUDE

PROGRAM SPECIFIC OUTCOMES (PSO)

PS01

REALISTIC FREAMEWORK DESIGNING DESIGN AN ALGORITHM, COMPONENT, OR PROCESS TO MEET DESIRED NEEDS, WITHIN REALISTIC CONSTRAINTS THROUGH ANALYTICAL LOGICAL AND PROBLEM SOLVING.

SKILLS. SKILLS

PS02

IT Integration and Adaptability Effectively integrate IT-based solutions into the user environment and Adapt themselves easily to emerging trends in Information Technology.

EVENTS

IT DEPARTMENT HELD DRAWING EXHIBITION



A Drawing Exhibition on Program Outcomes (PO), Program Specific Outcomes (PSOs), Program Education Objectives (PEOs), and Department and Institute Mission Vision Statements was organized by the Department of Information Technology, Finolex Academy of Management and Technology in association with ACM Student Chapter on October 15th, 2022 at 02:30 pm.

AN INDUSTRY EXPERT SESSION BY BENCHMARK IT SOLUTIONS, PUNE

An Industry Expert Session was arranged by the Department of Information technology for BEIT students on 13th September 2022. Mr Sachin Surve (Delivery Manager, Benchmark IT Solutions, Pune) and Mr Mangesh Wagh (Director, Benchmark IT Solutions, Pune) were the resource persons. This session was arranged for Final Year students of the IT Department.

A total of 63 Students participated in this session.

EVENTS

A WEBINAR ON DETECTING CYBER THREATS WITH UNSUPERVISED LEARNING

A Webinar on Detecting Cyber Threats with Unsupervised Learning was organized by the Department of Information Technology on 11th August 2022.

The sessions gave a comprehensive overview of detecting Cyber Threats with Unsupervised Learning. This webinar was organized under the "NVIDIA Developer Center" of the Department of Information Technology. This webinar will enable students to apply their knowledge of AIDS I, II and Cyber Security and Laws for the real-life research case study.

ISTE APPROVED TWO WEEK STTP ON ADVANCEMENTS IN CRYPTOGRAPHY, BLOCKCHAIN AND CRYPTOCURRENCY

The department of Information technology, FAMT conducted ISTE approved Two-week STTP on Advancements in Cryptography, Blockchain and Cryptocurrency from 05/12/2022 to 16/12/2022. This STTP provided a forum for discussions on theoretical and practical aspects of advancements in Cryptography, Cryptocurrency and Blockchain, exchanging research ideas and challenges, and exploring possible solutions and future directions. A total of 25 faculty members from the Information Technology, Computer Science and Engineering, Electronics and Telecommunication, Mechanical, Science and Humanity and MCA Departments participated in this STTP. Hands-on sessions on Blockchain were conducted by the experts during STTP.



A Seminar on 'Microsoft Azure Virtual Training Day: DevOps with GitHub' was organized by the Information Technology department in association with Microsoft virtual academy on 06 and 07 October 2022. Azure Technical Trainer-Microsoft, delivered a session for T.E IT students through a web-based platform.

The students learnt the importance of DevOps with GitHub using the Microsoft Azure platform. This seminar was registered and attended by 71 IT students. The students learnt about Integrating security and quality controls into automation, continuous integration and continuous delivery (CI/CD) pipelines.

A Seminar on 'Microsoft Azure Virtual Training Day: Fundamentals' was organized by the Information Technology department in association with Microsoft on 03 and 04 October 2022. Azure Technical Trainer-Microsoft, delivered a session for S.E IT students through a web-based platform. The students were made aware of the importance of data and its processing tools with help of the Microsoft Azure platform.

This seminar was registered and attended by 18 SE IT students.

A seminar on "Advances in Accelerated Data Science" was organized by the Information Technology department for TEIT students on 22nd September 2022. This program covered the following key aspects of Data Science:

Workload Optimization Tool

Accelerated Dask Overview

Accelerated Arrays with CuPy

Recent advancements in Machine Learning and Graph Analytics

A Seminar by an Industry Expert on Cyber Security was organized by the Information Technology department on 29-09-2022. Mr Viren Chaudhari, Senior Engineer in Threat Research from Qualys Software delivered the seminar for BE IT students at IT seminar Hall.

This seminar was attended by 65 students.

A Seminar by an Industry Expert on SAP Programming and its Industry Applications was organized by the Information Technology department on 30-09-2022. Mr Sitesh Sawant (FAMT Alumni), currently working as SAP ABAP Developer & Graphics Web Designer at Gadre Infotech Pvt. Ltd. delivered the seminar at IT seminar Hall.

This seminar was attended by 29 TE IT students

A Seminar on How to be a Deep Learning Engineer was organized by the Information Technology department for SEIT students on 23rd September 2022. The seminar covered an important discussion on how to get expertise as a deep learning engineer. The speakers shared valuable knowledge regarding the prerequisites of deep learning and how to acquire them. A discussion also involved key insights into what is deep learning and what are the key application areas of deep learning, future trends and research opportunities in deep learning, platforms to learn deep learning

concepts and techniques etc.

ALUMNI INTERACTION

ALUMNI INTERACTION ON DIGITAL MARKETING

The Department of Information Technology organized an Alumni Interaction on Digital Marketing for TE IT students on 20th September 2022.

Mr Abhishek Kamble, SEO Manager from Mumbai, was the resource person.

The expert talked about the performance analysis capabilities across multiple marketing channels, and how it connects a business with its customers when they are online, and is effective in all industries.

He explained Affordability, Mobile Access, Flexibility, Expansion, Multimedia, Interactivity, Tracking, and Authority used to brands improve their customer relationships.

The event was initiated by HOD IT, Dr Vinayak A. Bharadi. The interaction was successfully coordinated by Prof. S. Sankareswari. This session was attended by 33 students of T.E. IT classes.

The sessions gave a comprehensive overview of detecting Cyber Threats with Unsupervised Learning. This webinar was organized under the "NVIDIA Developer Center" of the Department of Information Technology.

This webinar will enable students to apply their knowledge of AIDS I, II and Cyber Security and Laws for the real-life research case study.



DR. YOGESH M. GAJMAL PUBLISHED A PATENT ENTITLED "AI-BASED PLOUGHING MACHINE"

DR. YOGESH M. GAJMAL,
ASSOCIATE PROFESSOR IT
DEPARTMENT PUBLISHED A
PATENT ENTITLED "AI-BASED
PLOUGHING MACHINE".
PATENT DETAILS AS FOLLOWS:



TITLE OF THE INVENTION:
AI-BASED PLOUGHING MACHINE



STATUS: PUBLISHED

JOURNAL NUMBER: 39/2022

APPLICATION NO.: 202221052923

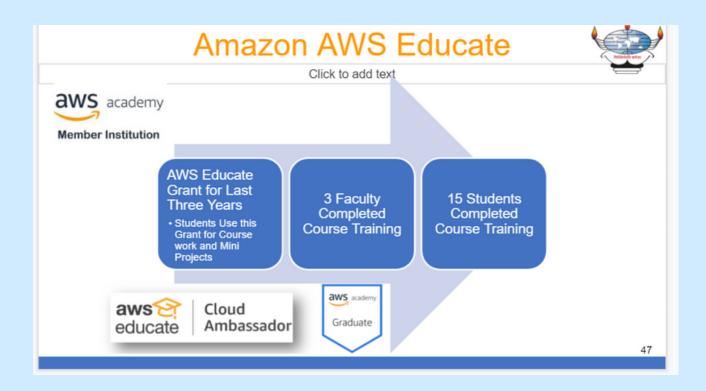
DATE OF FILING OF APPLICATION: 16/09/2022





INFORMATION
TECHNOLOGY
DEPARTMENT HAS
BECOME A MEMBER
BECOME A MEMBER
AMAZON WEB
AMAZON WEB
ACADEMY TO
PROMOTE FACULTY
PROMOTE FACULTY
AND STUDENT AWS
TRAINING SKILLS
THROUGH AWS
EDUCATE PROGRAM







Dr. Vinayak Ashok Bharadi received following Grants

Amazon \$3850

March

2020

AWS Access

Big Data Analytics and IoE

Amazon AWS Educators Grant

For the course of IoE and BDA

Amazon

\$3450

Jai

021

AWS Access

Internet of Everything Mini Projects

Amazon AWS Educators Grant

For the course of IoE



AWS BIG DATA SOLUTION







Achievements: Research Grants Received

Dr. Vinayak Ashok Bharadi received following Grants

\$1600

Feb

2017

INR 1.07Lacs

NVIDIA Titan X Pascal GPU

NVIDIA Developer Program

Improving performance of Weber Local Descriptor based feature Vector Extraction of Multimodal Biometric System consisting of Iris and Online Handwritten Signature. Microsoft Azure

\$5000

March

2017

INR 3L worth Azure Cloud Access

Cloud Computing

Microsoft Azure Educator Grant

Biometric based SaaS Cloud architecture for online signature recognition on Windows Tablet PC using REST API Amazon

\$17

2018

AWS Access

Aug

Cloud Computing

Amazon AWS Educators Grant

For the course of Cloud Computing

Amazon

\$3850

2019

March

AWS Access

Cloud Computing

Amazon AWS Educators Grant

For the course of Big Data Analytics

Amazon

\$3600

2019

AWS Access

Jan

Cloud

Computing

Amazon AWS

Educators

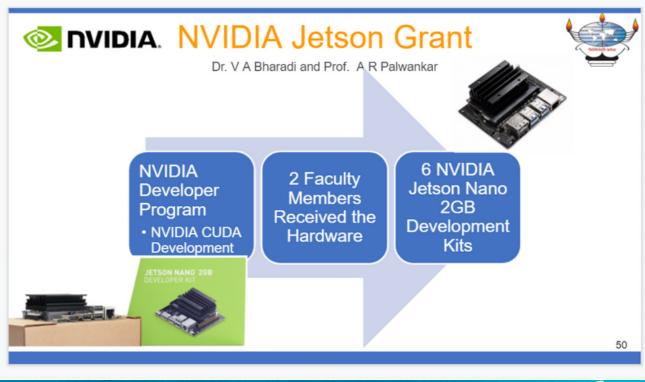
Grant

For the course of IoE and BDA

. . .

IT faculty members Dr. Vinayak Bharadi and Prof. Amar Palwankar acquired the prestigious NVIDIA Jetson Grant









PLACEMENT BUZZ

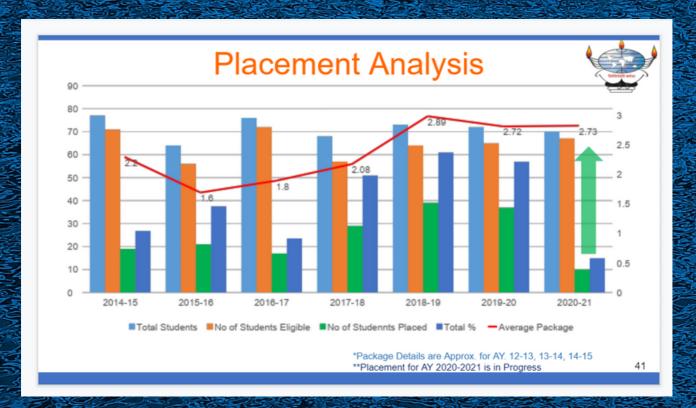
Placement Analysis



Improvement in Placement Quality

AY 2017-18				AY 2018 2019			AY 2019 2020			AY 2020-21		
Sr.	Company	Package		Sr.	Company	Package	Sr.	Company	Package	Sr.	Company	Packag
1	Syntel	3.2		1	BYJUS	7	1	TCS	3.6	1	Infocenter	3.7
2	Quinnox	3.2		2	Demand Farm	5	2	Infosys	3.6	2	TCS	3.6
3	Mphasis	2.4		3	RSL	4	3	Coditas	3.6	3	Softlink	2.8
4	Make Mi Holidays	2.4		4	TCS	3.6	4	Eternus Solutions	3.6	4	WebTeck Soln.	2.3
5	Mind Tree Consultancy.	2.4		5	L&T Infotech	3.2	5	Acty System	2.4	5	Quinnox	2.2
6	Seed Infotech Mumbai	2.2		6	WIPRO	3	6	Clover Infotech	2.2	6	Global Spaces	2.2
7	Vyom Labs	2.2		7	Jocata	3	7	Network Labs	2.2	7	Infomatics	1.8
8	CMS IT Services	2.2		8	Epic Research	2.6	8	Webtech	2.2		Average	2.65
9	Globenet Solutions	2.2		9	NUCSOFT	2.4	9	Greyatom (HTD)	2.2			
10	RAA Technocrats Mumbai	2.2		10	BridgeLabz	2.2	10	Aegis Health Solution	1.9			
11	Qspiders	2.2		11	Qspider	2.2	11	Infocenter	1.9			
12	Bhilwara Info. Tech. Ltd	2.2		12	Pleximus	2		Average	2.67			
13	Amazon	2.2		13	RK Infosystem	1.9						
	Average	2.4		14	Ripple Advisory	1.8						
					Average	2.43						

42



Teaching Learning process



Major Aspects of TLP at IT Department



Based, Multidisciplinary Projects for grant & funding Publication

Self and Collaborative Learning

Case Studies, Group Discussion, Think-Pair-Share, Open Book and Open Notebook Assignments



Technology Based Learning

Bridge Course Add-on Courses Hackathons

Activity Based Learning

Professional/ Personality Development(PPD Slow and Fast Learners, Extension and Outreach

Innovative Teaching Learning Practices



- Cloud Based Moodle (Edmodo)
- Crosswords for Teaching Learning Process
- Group based Assignments, Open book, ope n notebook and Online Quiz Assignments
- Certification Training Microsoft Virtual Aca demy
- Outcome Based Education

- Project Based Learning
- Lab Assessment by Online Quiz-Testyou, Drupal, Goog le Classrooms etc.
- Hackathon Java, Python
- Using Amazon Web Services Educate

Classroom, IBM Academic Alliance

























OUR GRAND UNIVERSITY TOPPERS

Rank Holder at University Level



Insert the title of your subtitle Here

Ms. Arusa Mukadam AY 2017-2018, Secured 9th Rank in University of Mumbai



Ms. Arusa Mukadam, 9th Rank in Mumbai University, AY 2017-2018, CGPA 9.52



Rank Holder at University Level



Insert the title of your subtitle Here





Ms. Rameeza Lambey AY 2018-2019, Secured 3rd Rank in University of Mumbai

Student Development Activities



Students Skills Development for Better Employability







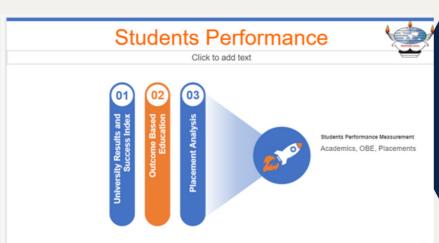
02 faculty and 25 Students have completed the courses



02 Courses By ARK

1

RESULTS FOR FIRST HALF 2021



Our results highlight how we

- Celebrate achievements
- Give motivation
- Highlight accomplishments
- Provide support
- provide Interview and placement training

IT Department Results

120

100

60

40

20

May 2014

May 2015

May 2016

May 2017

May 2018

May 2019

May 2020

May 204

May 205

May 205

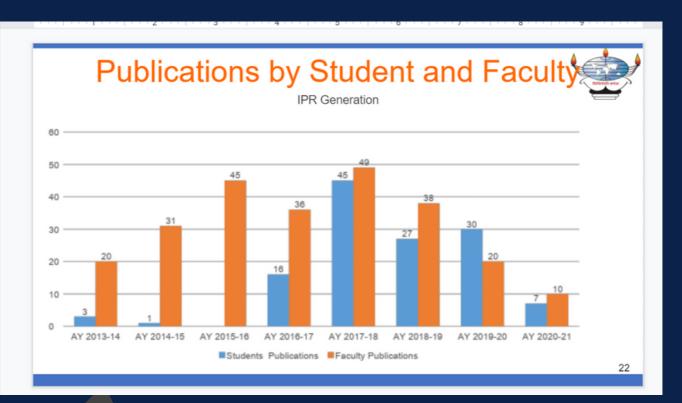
May 206

May 207

May 208

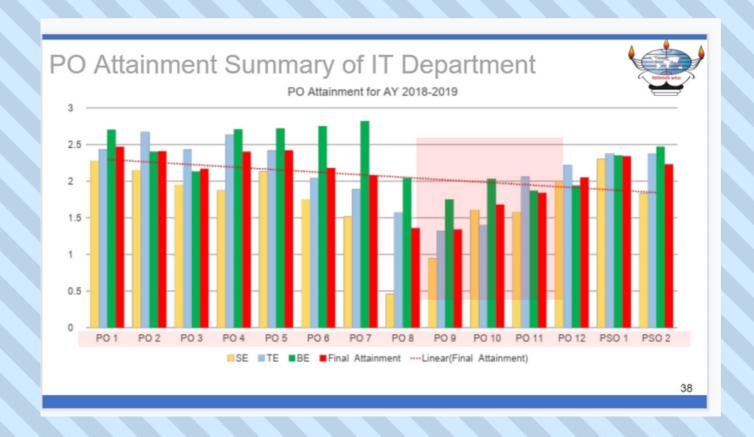
May 209

May 2





PO ATTAINMENT SUMMARY





Projections - Future Plans



Application for Grants (2020-2023)

Funding by various government and private agencies for Research and Infrastructure Upgradation



Academio Excellence

In alignment with MVS

Appreditation by NBA (2021-2022)

Strengthening the department infra and overall performance improvement



AW8 Educate Academy (2020-2021)

Complete the Faculty members Certifications in ACF and Start the batches

IBM Academic Alliance (2020-2021)

Activities under the MoU



ACM Collaboration (2019-2020)

Professional Chapter collaboration with ACM

