

2021-2022

IQAC Annual Report



Internal Quality Assurance Cell

The Internal Quality Assurance Cell (IQAC) is an important facet of the Federal Institute of Science and Technology, and it aids the institute in achieving its goals. Its actions fall into two categories: quality enhancement and quality maintenance. Since 2016, when the Institute was granted NAAC accreditation (with an "A" grade) for the first time, the role played by IQAC has become increasingly important. The Cell brings together the institute's different initiatives to ensure that the institute's many healthy practices are disseminated among all stakeholders.

- Assisting the Institute with decision-making processes relating to the Institute's operations
- Organizing workshops and seminars on quality-related issues and themes to foster a quality culture across the Institute's many departments and operations.

Vision

To develop a framework of quality sustenance and enhancement measures to enable the institution

to achieve the levels of excellence envisaged in its vision and mission

Mission

- To organize and steer the academic and administrative activities of the institution to achieve academic excellence
- To become a driving force for quality by devising intervention strategies to eliminate shortcomings and enhance quality.

Goals

1. To develop a quality system for conscious, consistent and catalytic programmed action to improve

the academic and administrative performance of the institute

2. To promote measures for institutional functioning towards quality enhancement through the internationalization of quality culture and institutionalization of best practices

Objectives of IQAC

The IQAC in FISAT functions with the following objectives which comply with those envisaged by the National Assessment and Accreditation Council.

- To improve quality, accountability, and transparency by conducting departmental internal and external Academic Audits.
- Develop an organized communication and documentation mechanism to coordinate quality-related operations.
- Creating and maintaining a system for collecting and responding to stakeholder feedback on the Institute's processes and policies.
- Coordinating programs for the enhancement of quality culture in the institution
- Integrating the Institute's efforts to ensure that best practices are adopted and disseminated
- AQAR (Annual Quality Assurance Report) preparation and submission in accordance with NAAC criteria

Functions of IQAC

- Developing documentation and internal communication framework to coordinate quality-related operations.
- Integrating the Institute's operations to ensure the dissemination of best practices
- To promote quality, accountability, and openness by spearheading the conduct of internal and external Academic Audits of departments.
- Establishing and sustaining a system of stakeholder feedback on the Institutes processes and policies.
- Initiating and coordinating Outcome-Based Education.
- Coordinating programmes designed to enhance faculty members career prospects.
- Monitoring of all accreditation and assessment activities.
- Organizing workshops and seminars on quality-related issues and themes to foster a quality culture across the Institutes many departments and operations.
- Establishing and implementing quality benchmarks/parameters for the Institutes different academic and administrative operations
- Assisting in the construction of a learner-centered environment conducive to high-quality education and faculty development in terms of knowledge and technology adoption for participatory teaching and learning;
- Development of the Annual Quality Assurance Report (AQAR) of the Institute based on the quality parameters/assessment criteria
- Development and maintenance of institutional database through MIS for the purpose of maintaining/enhancing institutional quality.
- Serving as the college's nodal agency for quality-related initiatives, such as the adoption and dissemination of best practices.
- Documentation of the Institutes' numerous programs/activities, contributing to quality improvement.

- Sustaining the quality measures already in place

The Team

1. Dr. Anitha P (Chairman, FISAT, Management Representative)
2. Principal, Chairman IQAC
4. Dr. C Sheela (Vice Principal)
5. Dr. Mini P R (Dean Academics), Coordinator
6. Dr Joshua A J (Staff in Charge of ISO, Dean in Charge MBA)
7. Dr Surya Susan Alex (Joint Coordinator, Staff in Charge of KTU Audit)
8. Dr. Asha Joseph (Joint Coordinator)
9. Dr Unni Katha G (Placement Officer)
10. Mr Shinto Sebastian (PRO)
11. Ms. Jisha Jacob (Manager, Academic Wing)
12. Mr. George Joseph (Manager, Accounts)
13. Mr. Sino Varghese (Librarian)
14. Dr. Parvathy R (KTU Coordinator)
15. Dr Prasad J C (Professor CSE)
16. Dr. Jose Cherian (First Year Academic Coordinator)
17. Mr. Santhosh Kottam (Software Cell & IT Operations)
18. Dr. Jiji Antony (HoD, CE)
19. Dr. Jyothish K John (HoD, CSE)
19. Dr. Sumanlal M R (HoD, ME)
20. Dr. Abi P Mathew (HoD, EIE)
21. Dr. Anilkumar M N (HoD, ECE)
22. Dr. Archana R (HoD, EEE)
23. Ms. Deepa Mary Mathews (HoD, MCA)

24. Dr. Binimol Punnose (HoD, S&H)
25. Dr. Kavitha P E (NAAC Joint Convener)
26. Dr Dhanya Alex (NAAC Joint Convener)
27. Mr Jitesh V (Manager, Network Administration)
28. Dr. Arun S (Physical Education)
29. Ms. Reshmi R (CSE)
30. Ms Vinitha V (ECE)
31. Ms. Rosemin Parackal (EEE)
32. Ms. Sreevidya P (EIE)
33. Ms. Rinu J Achison (CE)
34. Ms. Honeymol P Chako (S&H)
35. Mr. Sajan S (ME)
36. Ms. Senu Abi (MCA)
37. Mr Prasanth P John (MBA)
38. Ms. Sreeja E A (EEE)
39. Ms. Anu K Kuriakose (ECE)
40. Dr. Paul P Mathai (CSE)
41. Mr. Ranjith R (ME)
42. Ms. Sruthi Bhaskaran (EIE)
43. Ms. Rose Mary Mathew (MCA)
44. Ms Ananya Rajeev (Student Representative)
45. Ms. Lakshmi Nandakumar (Alumni Representative)
46. Mr. Paul P (President – Mookkannor Gramma Panchayath)
47. Mr. N I Thomas (PTA Representative)
48. Mr Greg Xavier (Industry Representative)
49. Mr. Jaison Joseph (Civil Supervisor)
50. Mr Stany E George (Faculty in charge-Electrical Maintenance)
51. Mr Rajesh T R (System Administrator)
52. Dr Arunkumar M N (College Research Cell)

QUALITY

INITIATIVES

ACCREDITATIONS

NAAC ACCREDITATION

FISAT has been accredited by the National Assessment and Accreditation Council (NAAC) in 2016 with an A grade. The Internal Quality Assurance Cell (IQAC) in the College has task with developing a system for conscious, consistent and catalytic improvement in the overall performance of the College. The IQAC submits the Annual Quality Assurance Report (AQAR) to NAAC every year on the quality sustenance initiatives undertaken in the institution. The institution is in the process of submitting the Self-Study Report (SSR) under the Revised Accreditation Framework (RAF) for the second cycle of accreditation. The Institutional Information on Quality Assurance (IIQA) is submitted in May 2022 and the Self Study Report (SSR) is planned to be submitted in July 2022.

1st phase of Orientation workshops on Revised Accreditation Framework was conducted in July 2021 with Dr Sreeram B of NGP Institute of Technology, Coimbatore as the resource person.

1st phase of audits on the Revised Accreditation Workshops was conducted in August 2021 with Dr Sreeram B of NGP Institute of Technology, Coimbatore as the resource person.

2nd phase of Orientation workshops on Revised Accreditation Framework was conducted in September 2021 with Dr Johnson K M as the resource person.

2nd phase of Audits on Revised Accreditation Framework on the qualitative and quantitative metrics was conducted in October 2021 with Dr Johnson K M as the resource person.

3rd phase of the audit on Revised Accreditation Framework on the qualitative and quantitative metrics was conducted in March 2022 with Dr Johnson K M as the resource person.

4th of the audit on Revised Accreditation Framework on the qualitative and quantitative metrics was conducted in May 2022 with Dr Johnson K M as the resource person.

NBA ACCREDITATION

Five B Tech Programs Computer Science and Engineering, Electronics and Instrumentation Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering and Mechanical Engineering are successfully accredited by NBA for a period of 3 years (1/7/2020-30/6/2023). These departments are currently preparing for the next phase of accreditation due in the academic year 2022-2023. The departments of Civil Engineering, Computer Applications and Business Administration are actively preparing for NBA accreditation by adhering to 'Outcome Based Education' (OBE), and following the norms and guidelines specified by the National Board of Accreditation.

ANNUAL QUALITY ASSURANCE REPORT

The Annual Quality Assurance Report (AQAR) for the year 2020-2021 was successfully submitted in December 2021.

AUDITS

ISO AUDIT

Federal Institute of Science and Technology has been an ISO-certified institution since 2005 and is currently following the ISO 9001-2015 standards. ISO 9001:2015 specifies requirements for a quality management system when an organization:

- a) needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and
- b) aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

All the requirements of ISO 9001:2015 are generic and are intended to be applicable to any organization, regardless of its type or size, or the products and services it provides.

Federal Institute of Science and Technology (FISAT) is an ISO 9001:2015 certified organization. Its certificate is valid till 18th April 2025. Continuous Auditing is done to ensure the same. The details are as follows

Internal Audit

15th, 16th and 17th November 2021

External Surveillance Audit in due in the month of November 2022.

KTU Audit

Audits on the academic activities were conducted as scheduled by the affiliating APJ Abdul Kalam Technological University. Internal audits to verify preparedness was conducted prior to the external audits by faculty members appointed by the university

Gender Audit

A gender audit was conducted in December 2021. Mr Santosh Kumar, Dr Asha Achy Joseph and Dr K M Sheeba were the auditors

Green, energy and Environmental Audits

The green, energy and environmental audits were conducted in September 2021.

Activities

New website for FISAT

A new website is being designed for FISAT and is scheduled to be active by the first week of July 2022. A committee has been formed for the design of the new website and periodic meetings are conducted.

INSTITUTION DAY AND FOUNDERS' DAY

The Institution Day, which was originally slated on September 23, 2022, was celebrated on September 27, 2022, along with Founders Day Celebrations, due to an unexpected hartal on 23rd September. Mr. S. Sundararajan, Assistant Professor, Department of Electronics and Instrumentation Engineering received the Best Teacher Award. Mr Mani K K, Workshop Instructor, Department of Mechanical Engineering received the award for the Best Performing Non-Teaching Staff. The invaluable contributions made by the Founder Chairman of the Institution and the first Secretary of the Society, Adv P V Mathew were commemorated in the meeting by the Chief Guest, Dr J Letha, Pro Vice Chancellor, Jain University, and former Vice Chancellor, Cochin University of Science and Technology, and other members of the FBOAES Managing Committee. The Adv P V Mathew Memorial Scholarships were presented to meritorious students from economically disadvantaged backgrounds. The college magazine "EMERALD" commemorating the 20th year of FISAT was also released in the function. The Vishnu Memorial Endowment Award for the Best Outgoing Student of MCA Department was also awarded during the function.

ENDOWMENTS

The following endowments are awarded to students in memory of a beloved member of the FISAT family, from contributions made by their colleagues/batchmates/family.

S.No	Name of the Endowment	Department	Awarded to	Award	Sponsored by
1	Vishnu Memorial Endowment Award	Computer Applications	Best Outgoing MCA Student	Rs 3000/-	Batchmates of Mr Vishnu
2	Dr K U Joseph Memorial award	Science & Humanities	Student with outstanding performance in first year B Tech University Examination	Memento	Family of Dr K U Joseph
3	Shinoy George Memorial Award	Science & Humanities	Top scorer in Mathematics	Memento	Staff members of Science and Humanities Department

4	Hima Memorial Award	Electronics and Communication Engineering	Top scorers in second and third year	Rs 1500/- each	Batchmates of Ms Hima
5	Shaheej Memorial Award	Computer Science and Engineering	The winner of the coding competition conducted during CSE day every year	Rs 4000/-	Batchmates of Mr Shaheej

ACADEMICS

Result of university examinations (2021-2022 Academic Year)

Department	Program	Semester	% Result
Civil Engineering	B Tech	S1 (2020 admn)	68.33
		S1 (2021 admn)	34.38
		S2 (2020 admn)	70
		S3 (2019 admn)	55.86
		S4 (2019 admn)	56.36
		S5 (2019 admn)	65.14
		S7 (2018 admn)	46.43
		S8 (2018 admn)	80.08
	M Tech	S2	100
		S3	100
S4		100	
Computer Science and Engineering	B Tech	S1(2021 admsn)	79.23
		S1(2020 admsn)	83.87
		S2(2020 admsn)	76.61
		S3(2019 admsn)	93.85
		S4(2019 admsn)	90.7
		S5(2019 admsn)	74.42
		S6(2018 admsn)	79.51
		S7(2018 admsn)	74.59
	S8(2018 admsn)	80.33	
	M Tech	S1 AI&DS (2021 admsn)	100
		S3 CSIS (2020 admsn)	100
		S4 CSIS (2020 admsn)	100
	Electronics and Communication Engineering	B Tech	S1(2020 admsn)
S1(2021 admsn)			80.8
S2(2020 admsn)			68.14
S3(2019 admsn)			70.34
S4(2019 admsn)			70.34
S5(2019 admsn)			66.95
S6(2018 admsn)			79.57
S7(2018 admsn)			71.74
S8(2018 admsn)		83.7	
M Tech		S1 VLSIES	100
		S4 VLSIES	100
		S4 COEN	100
Electrical and Electronics Engineering		B Tech	S2 (2020 ad)July 2021
	S4 (2019 ad)July 2021		47.37
	S6 (2018 ad)July 2021		67.4
	S7 (2018 ad)Dec 2021		71.7
	S8 (2018 ad)June 2022		84.78

	M Tech	S2 (2020 ad)July 2021	100
		S3 (2020 ad)July 2021	100
		S4 (2020 ad)July 2021	100
Electronics and Instrumentation Engineering	B Tech	S2 (2020 ad)July 2021	65
		S4 (2019 ad)July 2021	69
		S6 (2018 ad)July 2021	43
		S7 (2018 ad)Dec 2021	43
		S8 (2018 ad)June 2022	80
Mechanical Engineering	B Tech	2018 Admission	60.1 %
		S6 - 2018 Admission	65.48 %
		S7 – 2018 Admission	47.44 %
		S8 – 2018 Admission	78.3 %
		S3 - 2019 Admission	69 %
		S4 – 2019 Admission	52.5 %
		S5 – 2019 Admission	49.17 %
		S1 - 2020 Admission	67 %
		S2 - 2020 Admission	64.77 %
		S1 - 2021 Admission	36.08 %
Computer Applications	MCA	S1-2021 Admission	92.44%
		S3-2020 Admission	94.74%
		S2-2020 Admission	92.98%
		S1-2020 Admission	91.29%
		S6-2019 Admission	100%
		2019 Programme Pass	78.6%
FISAT Business School	MBA	S2- 2020 Admission	92.24%
		S1- 2020 Admission	92.31%
	MBA	T6- 2019 Admission	100%
		2019 pass percentage	89.38%

QUALITY INITIATIVES IN ACADEMIC MATTERS

The college's Internal Quality Assurance Cell (IQAC) routinely checks and assesses the institution's adherence to quality standards. The actions done to enhance the institution's academic environment are routinely evaluated, focusing on how well they are enhancing the outcomes, placement, research output, etc. Heads of departments take care of the academic affairs of the department. The departmental associations, cells, and clubs conduct curricular and cocurricular activities for the students. Academic Performance Monitoring Committee headed by Dr C Sheela, Vice Principal, evaluates the students' performance following series exams and proposes corrective measures to assist slow learners.

A variety of high-quality templates have been adopted as the institution gets ready for the peer team visit for the NAAC and NBA accreditations. For FISAT, a new website has been developed. Audits by ISO and KTU are carried out as per schedule. Value added courses are

given to students to enable them to be industry ready. The students are actively mentored through a strong group advisory system.

FISAT ALUMNI ASSOCIATION (FISTAA)

The FISAT Alumni Association (FISATAA) was registered under the Travancore -Cochin Literary, Scientific and Charitable Societies Registration Act on 9.2.2022. Members of the alumni actively support their alma mater as resource persons for webinars, invited talks, placement assistance etc

RESEARCH ACTIVITIES

PHD HOLDERS:

S.No	Name of Faculty Member	Department	Year of award of PhD
1	Dr Manoj George	Principal	2017
2	Dr C Sheela	S& H	1994
3	Dr Binimol Punnoose	S& H	2007
4	Dr Sona Narayanan	S& H	2015
5	Dr Ayswarya E P	S & H	2017
6	Dr Arun S	S&H	2021
7	Dr Deepa Mary Mathews	MCA	2021
8	Dr Shidha M V	MCA	2021
9	Dr Rakhi Venugopal	MCA	2019
10	Dr Sumanlal M R	ME	2018
11	Dr Jose Cherian	ME	2015
12	Dr Rajeesh C R	ME	2019
13	Dr Midhun Paul	ME	2018
14	Dr Mini P R	ECE	2018
15	Dr Anil Kumar M N	ECE	2014
16	Dr Krishnakumar S	ECE	2012
17	Dr Abi P Mathew	EIE	2017
18	Dr Anish Mathew K	EIE	2018
19	Dr Jiji Antony	CE	2020
20	Dr Unni Kartha G	CE	2019
21	Dr Asha Joseph	CE	2019
22	Dr Kavitha P E	CE	2017
23	Dr Archana R	EEE	2016
24	Dr Parvathy R	EEE	2019
25	Dr Surya Susan Alex	EEE	2021
26	Dr Rabiya Rasheed	EEE	2021
27	Dr Jyothish K John	CSE	2019
28	Dr Prasad J C	CSE	2013
29	Dr Arun Kumar M N	CSE	2013
30	Dr Paul P Mathai	CSE	2019
31	Dr Reshmi R	CSE	2021
32	Dr Joshua A J	FBS	2010
33	Dr Anoo Anna Antony	FBS	2011
34	Dr Dhanya Alex	FBS	2014
35	Dr Jose Varghese	FBS	2016
36	Dr Sindhu George	FBS	2018
37	Dr Santosh Kottam	MCA	2022
38	Dr Sujesh P Lal	MCA	2021
39	Dr Shahana K U	MCA	2021
40	Dr Hema Krishnan	CSE	2022
41	Dr Harish T M	ME	2022

List of funds received

Sl.No	Institution/ Department/Faculty	Scheme	Funding Agency	Year of Award with Duration	Amount
1	CSE / Ms.Hansa/ Ms.Chethana	Consultancy (External)	M3 Homes, Munnar	2021 July (6 months)	20,000/-
2	EEE / Ms.Surya Natarajan/ Ms. Muhammed Noufal C	FDP	KTU, Kerala	22-28 July 2021	1,92,000/ -
3	ME / Dr.Rejeesh C R	FDP	KTU. Kerala	21-23 July 2021	43,000/-
4	CE / Dr.Asha Joseph/ Dr.Unnikartha G	FDP	KTU, Kerala	21 -26 June 2021	89,250/-
5	CE / Dr.Unnikartha	Consultancy (External)	M/S Associated Structural Consultants, Kochi	2022 Aug	1,18,000/ -
6	CE / Dr.Unnikartha	Consultancy (External)	Anish Mathew Angamaly	2022 Oct	5000/-
7	MCA / Dr.Santhosh Kottam	Consultancy (Internal)	Software Cell, FISAT	2021 July (1 Year)	10,000/-
8	MCA / Dr.Santhosh Kottam	Consultancy (External)	Block Panchayath, Koduvally	2021 July (1 year 6 monhs)	25,000/-

S.No	Name of Principal Investigator	Name of Student Investigators	Title of the Project	Amount sanctioned	DEPART MENT
1	Harish T M Assistant Professor	Nandu Krishnan A U Nasmal Navas Sreekanth K.A	Development and fabrication of Al 7075 composite reinforced with industrial waste and clay	45,000	MECH
2	Manu Mohan C M Assistant Professor	Joheon C P Joseph Paul Linto Thomas Rajeev K B	Sign language to speech converter using machine design	16500	ECE
3	Sreevidya P Assistant Professor	Gokul Rejitkumar Godson Thomas	Integrated communication system for deaf and mute	14000	EIE
4	S Sundararajan Assistant Professor	Bilal Ibrahim P A Rajeena R Sony Shajan	Fruits adulteration detection system	7500	EIE
5	Panjami K Assistant Professor	Aleena Garvasis Apsara S Baiju	Study on Effectiveness of Mobile sensors in detecting sutsurface cavities- A step	50000	CE

		Gayathri S Kumar Gokul S	towards early detection of cavities at Kerala		
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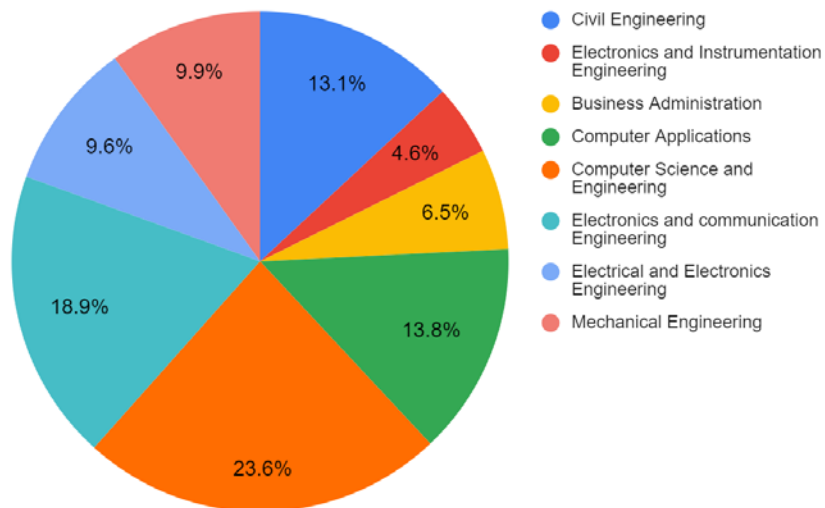
Feedback from Stakeholders

FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY (FISAT)®

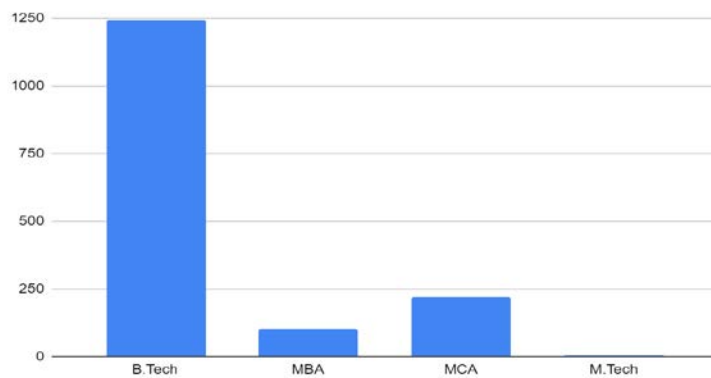
Student Satisfaction Survey

2021 - 2022

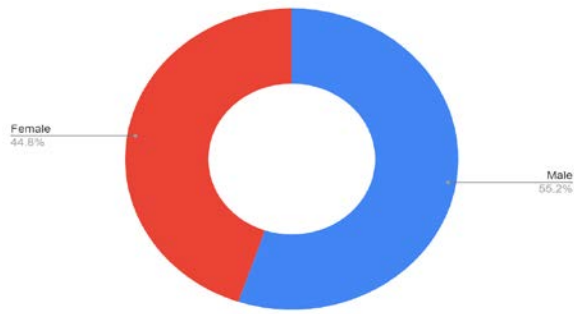
Department



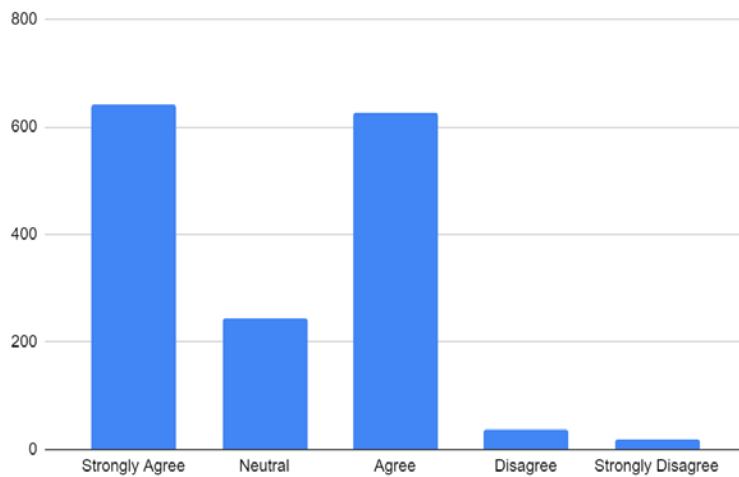
Program for which the student is enrolled



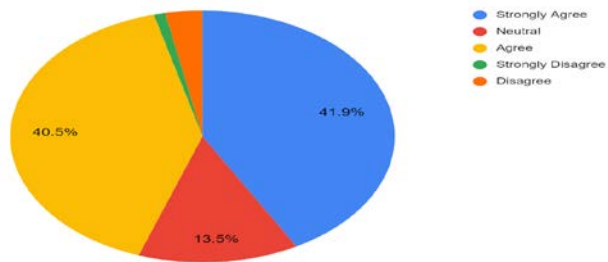
Gender



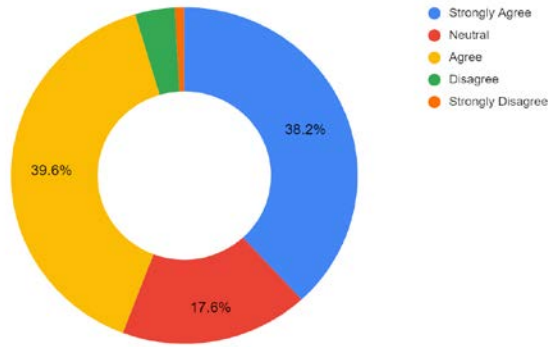
The university curriculum for the program is structured and well designed to promote learning experience.



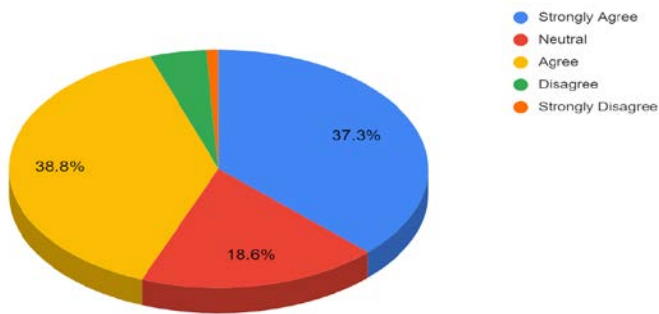
The curriculum recommends relevant reference text books for each course.



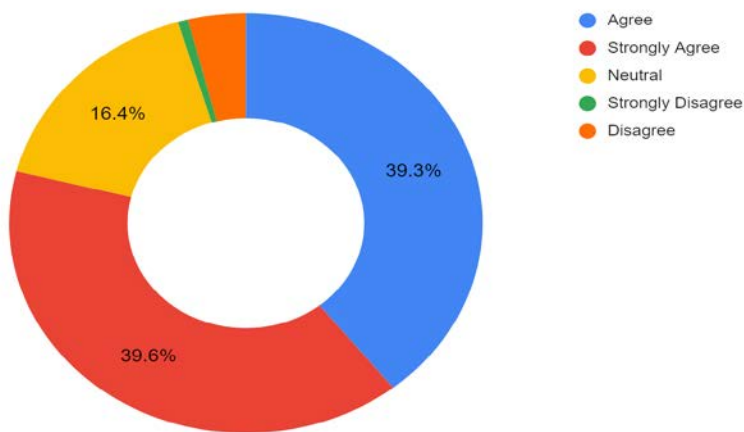
The curriculum is effective in developing analytical and problem-solving skills.



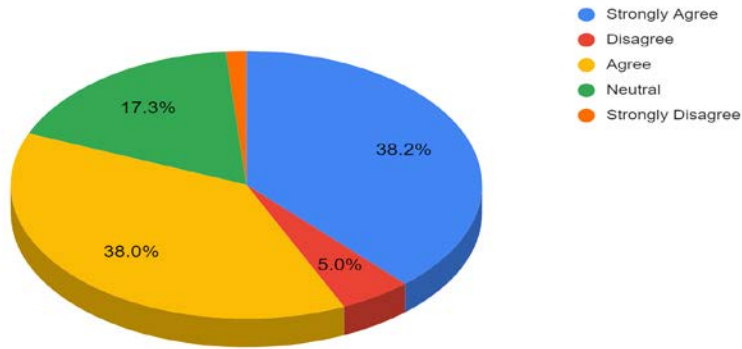
The curriculum is effective in developing ICT & communication skills.



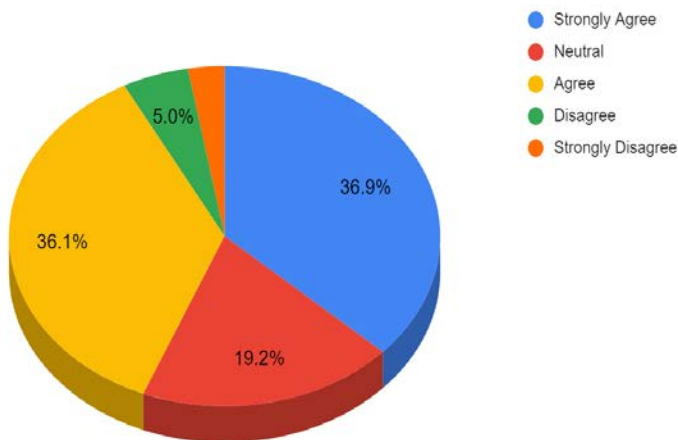
The curriculum is capable of supporting students in their higher studies and research work



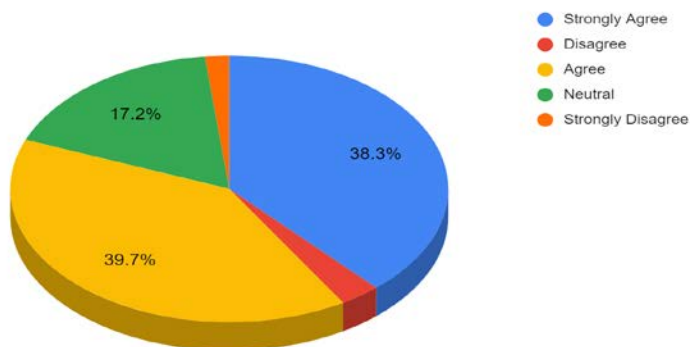
The curriculum has sufficient courses that address innovation and entrepreneurship skills.



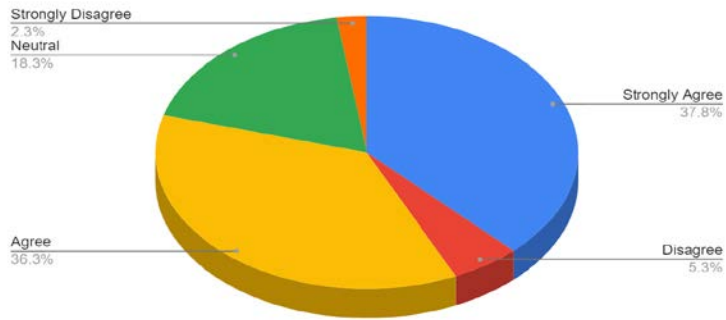
The curriculum encourage students' overall holistic development through co-curricular and extra curricular activities.



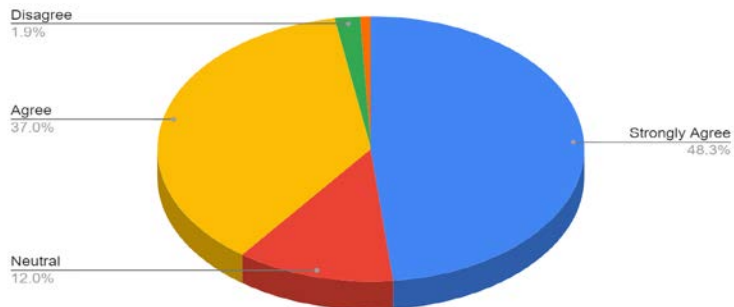
The curriculum provides the essential skills for an ethically driven technical / management professional .



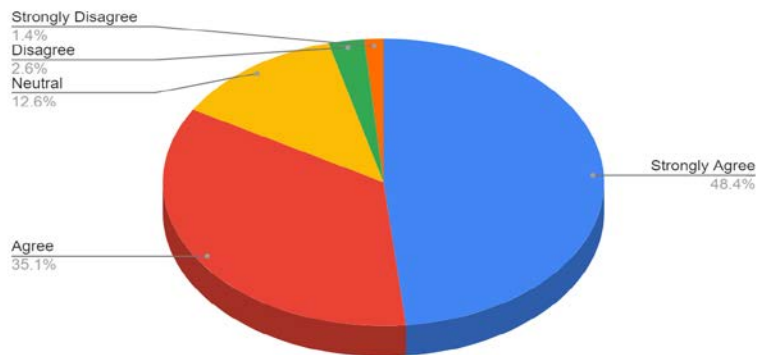
The curriculum is relevant to current industry trends.



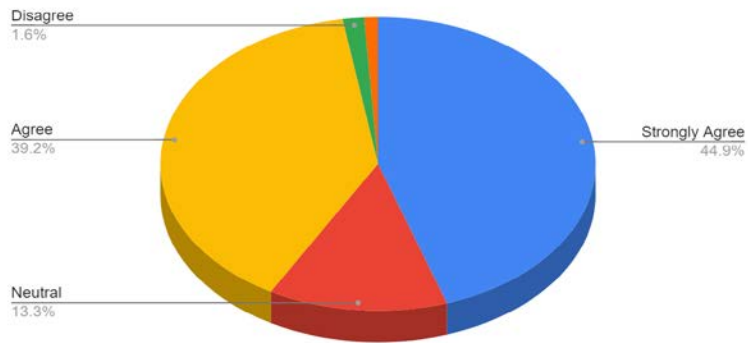
The faculty covers the syllabus prescribed by the university completely in the class.



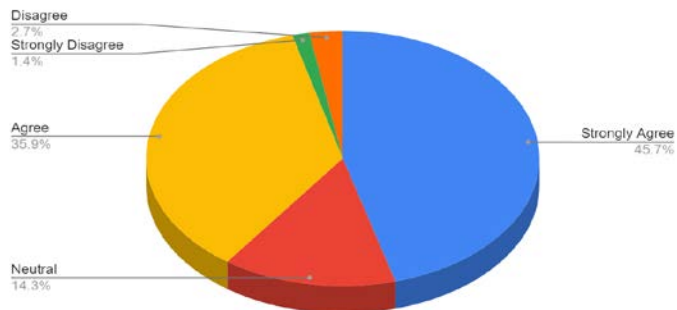
The mentoring and group advisory system are efficient.



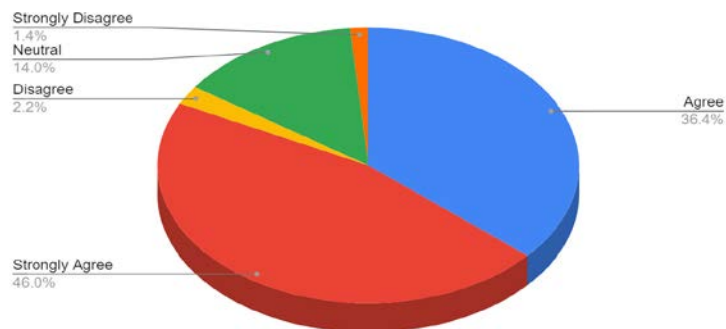
The teacher's level of preparation for each class is excellent.



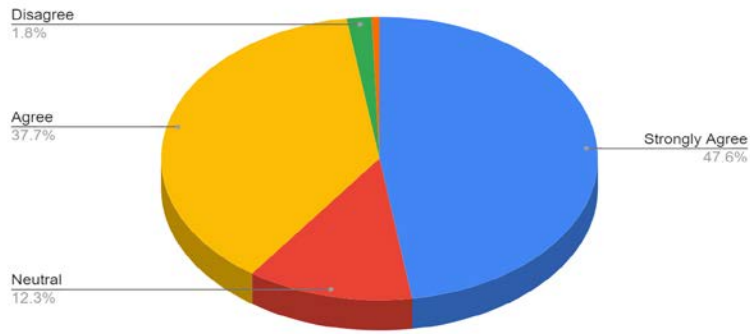
Internal evaluation process is fair and transparent.



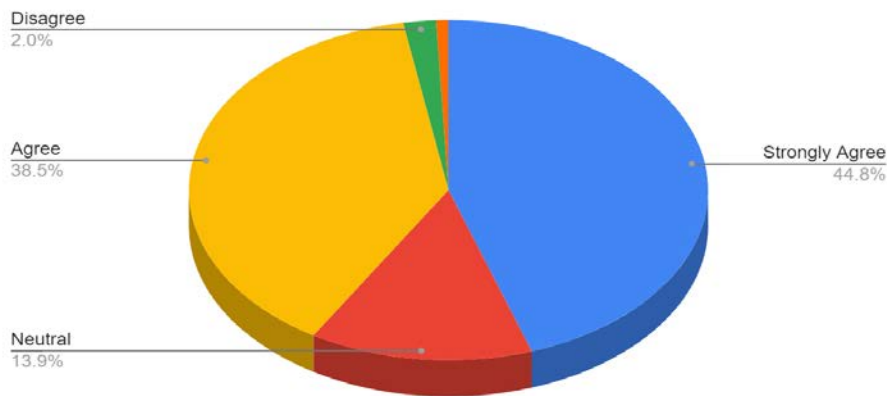
The faculty members are supportive; encourages and motivates to perform better.



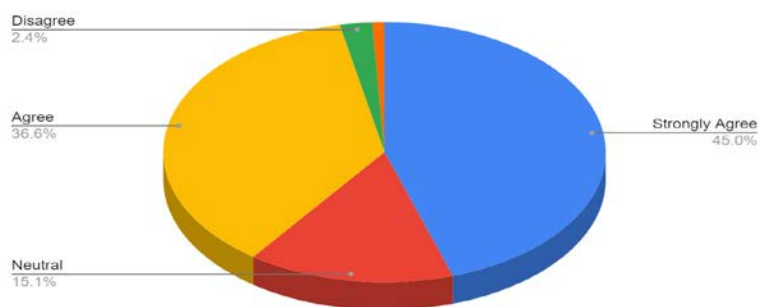
The teachers effectively communicate in the class.



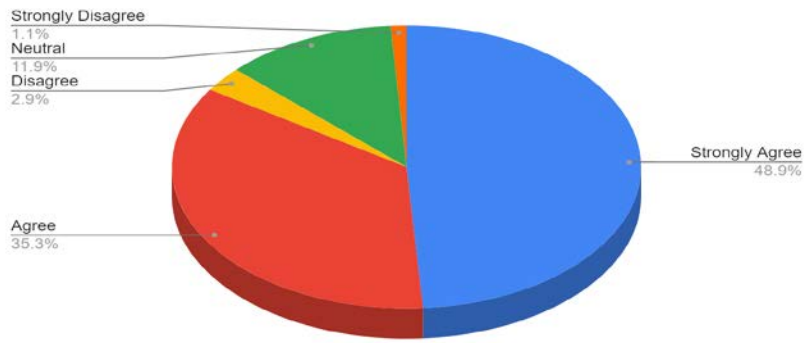
The course outcomes, program outcomes and expected competencies are communicated clearly.



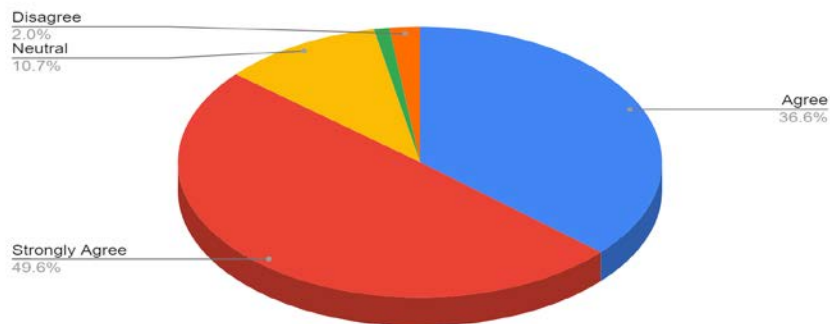
The faculty members provide adequate teaching and learning materials and make use of ICT enabled methods to improve learning experience.



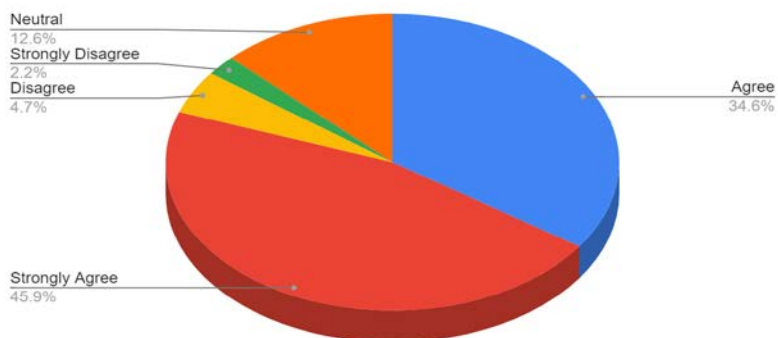
Student feedback mechanism is regular and efficient



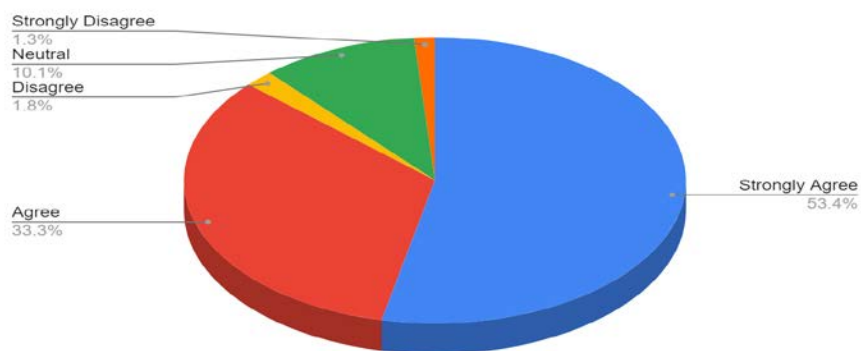
The physical space and facilities in classrooms are adequate.



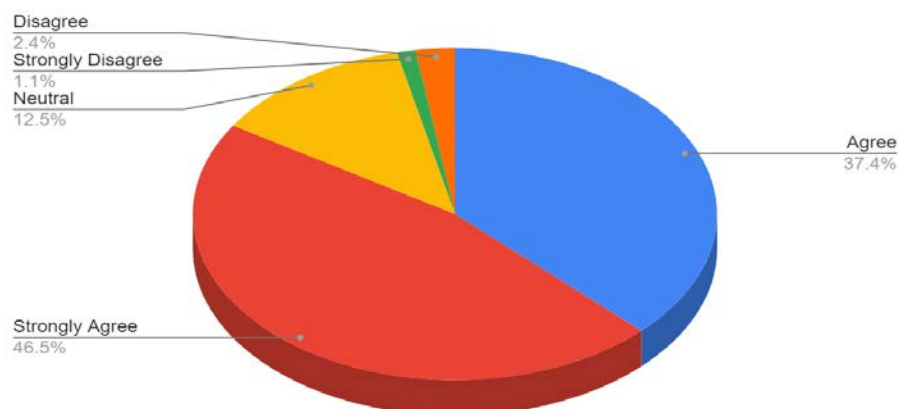
Common facilities (drinking water, canteen, toilet facilities and common areas) are adequate



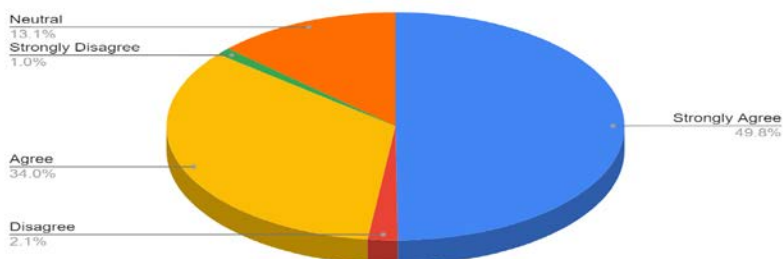
The college library sufficiently caters to the needs of students by providing adequate number of books, periodicals, journals and a digital library.



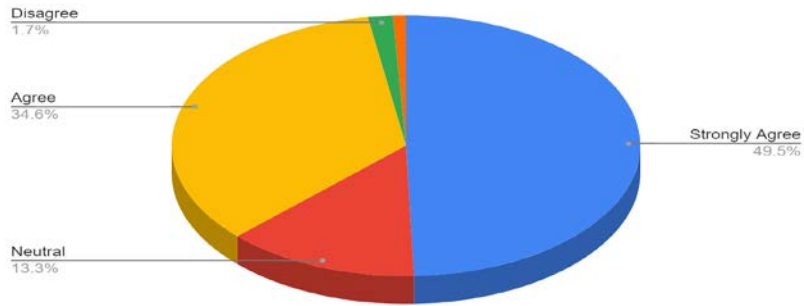
Supporting staff in the institution are found to be prompt, efficient & cooperative and provide adequate information.



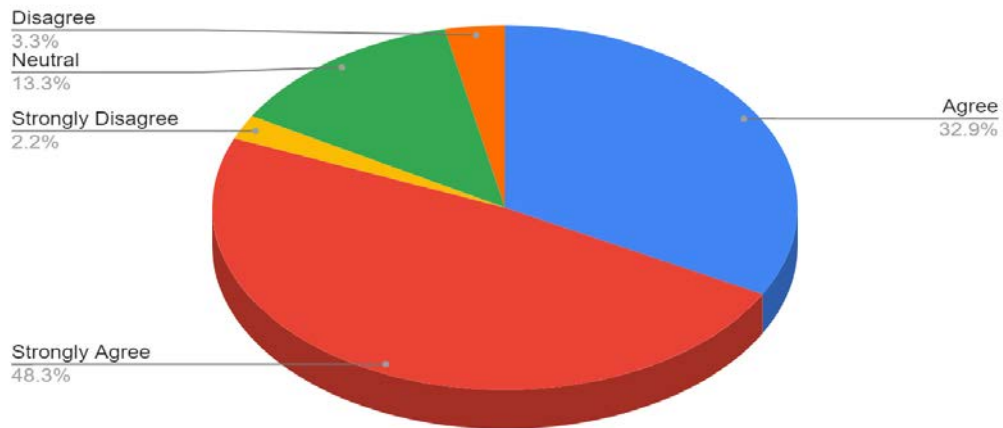
The placement cell offers special training for students to improve their aptitude and soft skills.



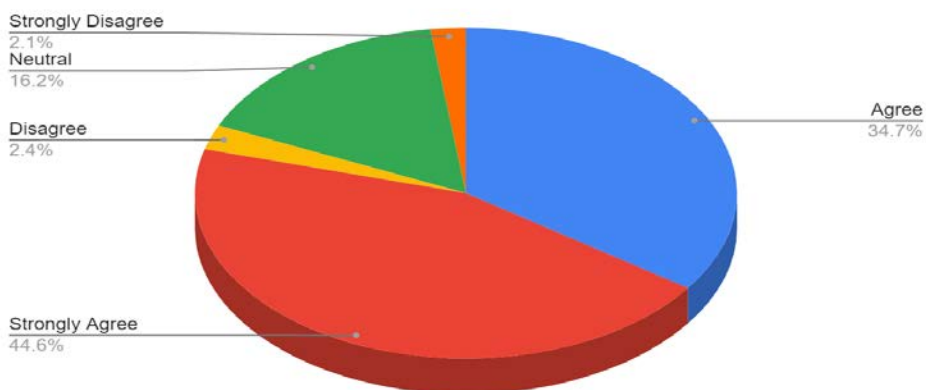
The placement cell facilitates on-campus recruitment opportunities for the students in leading multi national companies.



The college bus service to the institution ensures smooth conveyance facility for the students.



The separate in-campus hostel facilities in the institution provides a safe and hygienic accommodation for students.



Publications

S.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication
1	A novel secure and robust encryption scheme for medical images	Siyamol Chirakkarottu	CSE	Current Medical imaging	2021
2	A machine learning based framework for assisting pathologists in grading and counting of breast cancer cells	Dr. Jestin Joy	CSE	ICT Express	2021
3	SignText: a web-based tool for providing accessible text book contents for Deaf learners	Dr. Jestin Joy	CSE	Universal Access in the Information Society	2021
4	Optimization Assisted Convolutional Neural Network for Sentiment Analysis with Weighted Holoentropy-based Features	Hema Krishnan	CSE	International Journal of Information Technology & Decision Making	2021
5	Weighted holoentropy-based features with optimised deep belief network for automatic sentiment analysis: reviewing product tweets	Hema Krishnan	CSE	Journal of Experimental and theoretical artificial intelligence	2021
6	Deep Learning Based Capsule Neural Network Model for Breast Cancer Diagnosis Using Mammogram Images	Dr. Paul P Mathai	CSE	Interdisciplinary Sciences: Computational Life Sciences	2021
7	Deep Learning Approach For Identifying And Classifying Cancer Types Using BPSO And GAN	Prasad J C	CSE	Turkish Online Journal of Qualitative Inquiry	2021
8	Sentiment analysis of product reviews using weighted distance based whale optimization assisted deep belief network	Dr Hema Krishnan	CSE	International journal of business information systems	2022
9	A Comprehensive Survey on Sentiment Analysis in Twitter Data	Dr Hema Krishnan	CSE	International journal of distributed systems and technologies	2022
10	Synthesis and study of evolutionary optimised sensor linearisation with translinear & FPGA circuits	Noble G, S.Sundararajan	ECE	International Journal of Electronics	2021

S.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication
11	Investigations into the Development of a Mycelium Biocomposite to Substitute Polystyrene in Packaging Applications	Dr Rejeesh C R	ME	Arabian Journal for Science and Engineering	2021
12	Synthesis and third-order nonlinear optical properties of low band gap 3,4-ethylenedioxythiophene-thiophene copolymers	Dr. Sona Narayanan	S&H	Materials Today: Proceedings	June 2021
13	A comparative study of mechanical, dynamic mechanical and thermal properties of rice husk ash, modified rice husk ash and nano silica filled epoxy composites	Dr. Ayswarya E P	S&H	Materials Today: Proceedings	June 2021
14	Leech Index Of a Tree	Seena Varghese	S&H	Journal of Discrete mathematical Sciences and Cryptography	June 2021
15	Novel hyper chaotic color image encryption based on pixel and bit level scrambling with diffusion	Dr. Shahna K U	MCA	Signal Processing: Image Communication	#####
16	A Maximum Power Point Tracking Technique for the Photovoltaic System Using PSO	Rinku scaria	EEE	Design Engineering (Toronto)	#####
17	An advanced approach for an efficient mode of organ transportation	Rinku scaria	EEE	Materials Today: Proceedings	2021
18	Comparison of SMC and PID controllers for pneumatically powered Knee Orthosis	Anila Mathew	EIE	Journal of control, automation and electrical system	July 2021
19	Deep learning driven physical layer security for asimultaneously wireless information and power transfer network.	Sujesh P Lal	MCA	Alexandria Engineering Journal	2022

S.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication
20	Novel hyper chaotic color image encryption based on pixel and bit level scrambling with diffusion	Shahna K U	MCA	Signal Processing: Image Communication, ISSN: 0923-5965 Impact Factor : 3.256	2021
21	An enhanced fusion based region selection for Co-Salient detection	Dr. Paul P Mathai	CSE	International Journal of Advance Research and Innovative Ideas	2021
22	Computer Aided Diagnostic System For Diabetic Retinoathy Detection using Image processing and Artificial Intelligence	Dr.Arun Kumar M N, Anitha T Nair	CSE	International Journal of Computer Science and Information Security	2021
23	Job Satisfaction of Engineering college teachers: Before and during COVID19	A J, Joshua	MBA	International Journal of Advanced Research in Science, communication and Technology	2021
24	Impact of globalisation on Gender Equity	A J, Joshua	MBA	International Journal of All Research, Education and Scientific Methods, Volume 9, Issue 10	2021
25	Ethicality and acceptability of Product placement: A demographic comparison of moviegoers in Kerala	A J, Joshua	MBA	International Journal of Research and Analytical Reviews, Volume 8, Issue 3	2021

S.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication
26	An assessment of the pioneering gender based human resource constraints that exists among IT Employees in Kerala	A J, Joshua	MBA	International Journal of research and analytical Reviews (IJRAR), Volume 8, Issue 4	2021
27	Effect of Organisational Support on Work engagement with special reference to Self Financing Colleges	A J, Joshua	MBA	EPRA International Journal of Research and Development(IJRD), Volume 6, Issue 10	2021

Books and Chapters

Sl. No.	Dept.	Name of the teacher	Title of the book/ chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	Year of publication
1	MCA	Senu Abi		An Efficient Text Detection And Recognition Framework From Natural Scene Images Using AS-CNN	Lecture Notes on Data Engineering and Communication Technologies, Springer	ICCNET 2022	
2	MCA	Deepa Mary Mathews		"Psychological Aspects of Stress Prediction in working employees during the covid 19 pandemic"	Proceedings of International Conference on Advancements in Computer Applications 2021, ISBN : 978-93-5473-978-1, pg 39-42		2022
3	MCA	Deepa Mary Mathews		Data Protection Using Blockchain Technology	Proceedings of AICTE sponsored International Conference on Cyber Security and Ethical Hacking in Blockchain Technology 2021 (ICCSEHBT 2021), ISBN:978-81-920267-6-3, Pg 124-129		2021
4	MCA	Sujesh P Lal		Consensus based Data Transfer in Wireless Sensor Network for Reliability Interpretation	Springer Proceedings of International Conference on Computing, Communication and Control System		2021
5	MCA	Sujesh P Lal		A Comprehensive Review on FPGA based PWM techniques for DC-DC converters	Springer Proceedings of International Conference on Computing, Communication and Control System		2021
6	CE	Keerthisabu	Transportation, Water and Environmental geotechniques	Feasibility study on dispersivity of lignosulphonate-treated clay using pinhole test	Proceedings of Indian Geotechnical Conference 2020- Volume 4	Indian Geotechnical Conference 2020- Developments in geotechnical engineering for sustainable tomorrow	2021
7	CE	Sowmya V Krishnankutty	Transportation, Water and Environmental	Feasibility study on dispersivity of lignosulphonate-treated clay using pinhole test	Proceedings of Indian Geotechnical Conference 2020- Volume 4	Indian Geotechnical Conference 2020- Developments in geotechnical engineering for	July 1905

			geotechniques			sustainable tomorrow	
8	CE	Keerthisabu	Ground Characterisation and Foundation	Effect of Bentonite Support Fluid on Pile Capacity	Proceedings of Indian Geotechnical Conference 2020- Volume 1	Indian Geotechnical Conference 2020- Developments in geotechnical engineering for sustainable tomorrow	July 1905
9	CSE	Dr.Arun Kumar M N		Disease Grading of Diabetic Retinopathy Using Deep Learning Techniques	2022 Proceedings.pdf ICCMC	6th International Conference on Computing Methodologies and Communication (ICCMC 2022)	July 1905
10	CSE	ANITHA T NAIR		Disease Grading of Diabetic Retinopathy Using Deep Learning Techniques	2022 Proceedings.pdf ICCMC	6th International Conference on Computing Methodologies and Communication (ICCMC 2022)	March 2022
11	CSE	Neenu Johnson		A survey on Deep Learning Architectures for effective Crop Data Analytics	2021 International Conference on Advances in Computing and Communications (ICACC)	10th international conferences on Advances in Computing and Communications (ICACC)	March 2022
12	CSE	Dr.Prasad J C		Automated Invasive Ductal Carcinoma Breast Cancer Classification using Deep Learning Algorithms		International Conference on Machine Intelligence in Research and Development (ICMIRD'22)	October 2021
13	CSE	Ms. Sruthy Suresh		On Decentralizing Federated Reinforcement Learning in Multi-Robot Scenarios		<u>7th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNM), 2022</u>	April 18-20, 2022
14	CSE	Pankaj Kumar G		Advanced Small Object Detection and Tracking		National Conference on Artificial Intelligence And Cognitive Computing	November 2022
15	CSE	Pankaj Kumar G		Lithium-Ion Battery Modeling: A Machine Learning Approach		International Conclave on Skills, Engineering, and	July 2022

						Technology (ICSET)	
16	CSE	Pankaj Kumar G		Named Entity Recognition in Malayalam Using Deep Neural Networks		International Conclave on Skills, Engineering, and Technology (ICSET)	Sept 2022
17	EEE	Rinku scaria		Particle swarm optimizer based maximum power point controller for the photovoltaic system	6th International Conference on Inventive Computation Technologies (ICICT)	6th International Conference on Inventive Computation Technologies (ICICT)	Sept 2023
18	EEE	Veena wilson		Performance Analysis of SRM with Two Stage Commutation for Effective Vibration Reduction	2021 IEEE International Power and Renewable Energy Conference (IPRECON)	2021 IEEE International Power and Renewable Energy Conference (IPRECON)	February 2021
19	EEE	Veena wilson		Improved Two Stage Commutation for Effective Vibration Reduction in Switched Reluctance Motor using Particle Swarm Optimization	2022 IEEE International Conference on Power Electronics, Smart Grid, and Renewable Energy (PESGRE)	2022 IEEE International Conference on Power Electronics, Smart Grid, and Renewable Energy (PESGRE)	September 2021
20	ECE	Deepa N R		Modular adder Designs based on Thermometer coding and one hot coding	2nd International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS)	2nd International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS)	January 2022
21	ECE	Nimmy M Philip		Modular adder Designs based on Thermometer coding and one hot coding	3rd International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS)	3rd International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS)	September 2021
22	ECE	Anoop E G		Modular adder Designs based on Thermometer coding and one hot coding	4th International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS)	4th International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS)	September 2021
23	ECE	Nimmy M Philip		Review of FPGA base Accelerators of deep	6th International Conference on Devices,	6th International Conference on Devices, Circuits	September 2021

				convolutional Neural networks	Circuits and Systems (ICDCS)	and Systems (ICDCS)	
24	ECE	Deepa N R		A State-Of-Art Model of Encrypting Medical Image Using DNA Cryptography and Hybrid Chaos Map - 2d Zaslavski Map: Review	6th International Conference on Devices, Circuits and Systems (ICDCS)	6th International Conference on Devices, Circuits and Systems (ICDCS)	April 2022
25	ECE	Ambili A R		Multi-Tasking Synthetic Speech Detection on Indian Languages	2022 International Conference on Innovative Trends in Information Technology (ICITIIT)	2022 International Conference on Innovative Trends in Information Technology (ICITIIT)	May 2022
26	ECE	Ambili A R		Comparative Analysis Of Fusion-Lda And Fusion - Pca For Facial Recognition	International Conference on Intelligent Systems and Electrical Communication Technology" (ICISECT-2021)	International Conference on Intelligent Systems Electrical and Communication Technology" (ICISECT- 2021)	April 2022
27	ECE	Dr.Anilkumar M N		Comparative Analysis Of Fusion-Lda And Fusion - Pca For Facial Recognition	International Conference on Intelligent Systems and Electrical Communication Technology" (ICISECT-2021)	International Conference on Intelligent Systems Electrical and Communication Technology" (ICISECT- 2021)	9 th &10 th April
28	EEE	Sreevidya P		Lidar Based Lane-Change Assistance For Motor Vehicle		2021 IEEE 7th International Conference on Advanced Computing and Communication Systems	9 th &10 th April
29	EEE	Sreevidya P		Leaf Recognition and Disease Detection using Content-based Image Retrieval		2021 IEEE 7th International Conference on Advanced Computing and Communication Systems	June 2021
30	EEE	Sreevidya P		A machine learning based early landslide warning system using IoT		International conference on Nascent Technologies in engineering ICNTE 2021	June 2021
31	EEE	Anila Mathew		Surface Electromyogram Based Techniques for Upper and Lower Extremity Rehabilitation		2021 IEEE 3rd International Conference on Signal Processing and	July 2021

				Therapy - A Comprehensive Review		Communication (ICPSC)	
32	EEE	Anila Mathew		Artificial neural network model for the characterization of human locomotion parameters		International Conference on Communication, Control and Information Sciences (ICCISc2021)	June 2021
33	EEE	Raji P		LITERATURE REVIEW ON SLEEP APNEA ANALYSIS BY MACHINE LEARNING ALGORITHMS USING ECG SIGNALS	Journal of Physics: Conference Series	International Conference on Novel Approaches and Developments in Biomedical Engineering-2021 (ICNADBE 2021)	June 2021
34	EEE	Honey Devassy		Review on vibration sensors and control methods for cantilever beams		IEEE sponsored International conference on Advancements in Electrical, Electronics, Communication, Computing and Automation	June 2021
35	EEE	S Sundararajan		Implementation and analysis of an evolutionary optimized Non-linear function for linearization of Thermo-resistive sensors	6th international conference on Devices , circuits and Systems ICDCS	6th international conference on Devices , circuits and Systems ICDCS	October 2021
36	EEE	Sreevidya P		The role of face embeddings in classification of personality traits from portrait images	IEEE Region 10 International Conference TENCON	IEEE Region 10 International Conference TENCON	May 2022
37	ME	Dr. Rejeesh C R	Packaging applications of fungal mycelium-based biodegradable composites				February 2022
38	ME	Dr. Rejeesh C R	Thermal properties of biofibre-based polymer				1st Edition - June 2, 2022

			composites				
39	MCA	Senu Abi		An Efficient Text Detection And Recognition Framework From Natural Scene Images Using AS-CNN	Lecture Notes on Data Engineering and Communication Technologies, Springer	ICCNCT 2022	1st Edition - December 1, 2021
40	MCA	Deepa Mary Mathews		“Psychological Aspects of Stress Prediction in working employees during the covid 19 pandemic”	Proceedings of International Conference on Advancements in Computer Applications 2021, ISBN : 978-93-5473-978-1, pg 39-42		2022
41	MCA	Deepa Mary Mathews		Data Protection Using Blockchain Technology	Proceedings of AICTE sponsored International Conference on Cyber Security and Ethical Hacking in Blockchain Technology 2021 (ICCSEHBT 2021), ISBN:978-81-920267-6-3, Pg 124-129		2021
42	MCA	Sujesh P Lal		Consensus based Data Transfer in Wireless Sensor Network for Reliability Interpretation	Springer Proceedings of International Conference on Computing, Communication and Control System		2021
43	MCA	Sujesh P Lal		A Comprehensive Review on FPGA based PWM techniques for DC-DC converters	Springer Proceedings of International Conference on Computing, Communication and Control System		2021
44	MCA	Deepa Mary Mathews		“Smart Waste Collection Monitoring and Alert System via IoT”	Journal of Education: Rabindra Bharati University, Vol. : XXIV, No. :1(XX), 2022	International Conference on Machine Intelligence in Research and Development 2022	2021
45	MCA	Rose Mary Mathew		Assessment Of Resampling Techniques Over Multi-Majority Datasets	Karpagam Journal of Computer Science	8 th NATIONAL CONFERENCE on “Recent Trends and Advances in the Field of Information Technology” (NCIT'21).	June 2022
46	MCA	Rose Mary Mathew		Analyzing The Impact of Ensembling Techniques and Resampling Techniques Over	Advances in Intelligent systems and Technologies	International Conference on Machines, Computing and Management Technologies (ICMCMT 2022)	Mar-April 2022

				Multi Class Skewed Datasets			
47	EIE	Sreevidya P		Lidar Based Lane-Change Assistance For Motor Vehicle		2021 IEEE 7th International Conference on Advanced Computing and Communication Systems	July 2022
48	EIE	Sreevidya P		Leaf Recognition and Disease Detection using Content based Image Retrieval		2021 IEEE 7th International Conference on Advanced Computing and Communication Systems	June 2021
49	EIE	Sreevidya P		A machine learning based early landslide warning system using IoT		International conference on Nascent Technologies in engineering ICNTE 2021	June 2021
50	EIE	Anila Mathew		Surface Electromyogram Based Techniques for Upper and Lower Extremity Rehabilitation Therapy - A Comprehensive Review		2021 IEEE 3rd International Conference on Signal Processing and Communication (ICPSC)	2021
51	EIE	Anila Mathew		Artificial neural network model for the characterization of human locomotion parameters		International Conference on Communication, Control and Information Sciences (ICCISc2021)	June 2021
52	EIE	Honey Devassy		Review on vibration sensors and control methods for cantilever beams		IEEE sponsored International conference on Advancements in Electrical, Electronics, Communication, Computing and Automation	June 2021
53	EIE	S Sundararajan		Implementation and analysis of an evolutionary optimized Non-linear function for linearization of Thermo-resistive sensors	6th international conference on Devices , circuits and Systems ICDCS	6th international conference on Devices , circuits and Systems ICDCS	October 2021
54	EIE	Sreevidya P		The role of face embeddings in classification of personality traits	IEEE Region 10 International Conference TENCON	IEEE Region 10 International Conference TENCON	May 2022

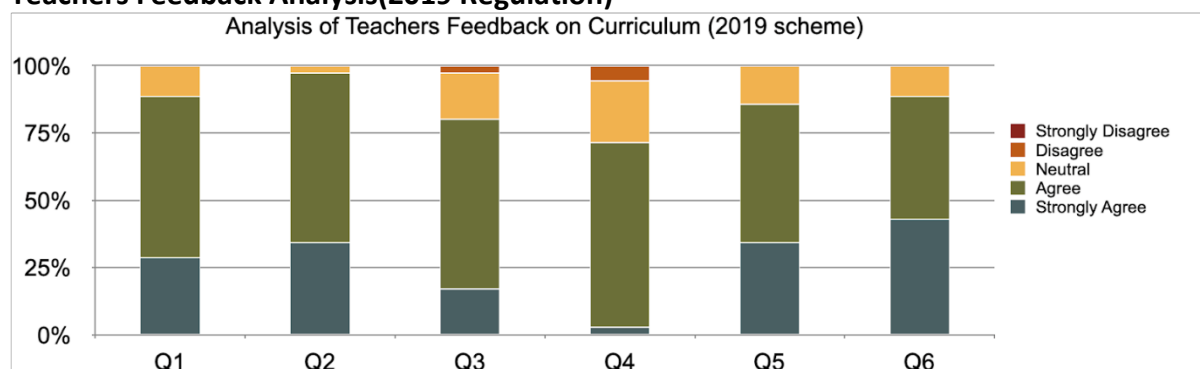
Curriculum Feedback Teachers

Questions

1. The curriculum of the program is well designed and promotes learning experience of the students.
2. Course objectives and outcomes of the course are well defined and clear to faculties and students.
3. The course is relevant to the current industry trend.
4. The course curriculum has a good balance between theory and application.
5. The Curriculum recommends relevant books and references in the field.
6. Teaching the course increased my knowledge and expertise in the subject area.

Academic Year: **2021-22**

Teachers Feedback Analysis(2019 Regulation)



Academic Year : **2021-2022**

Student Feedback Analysis Report

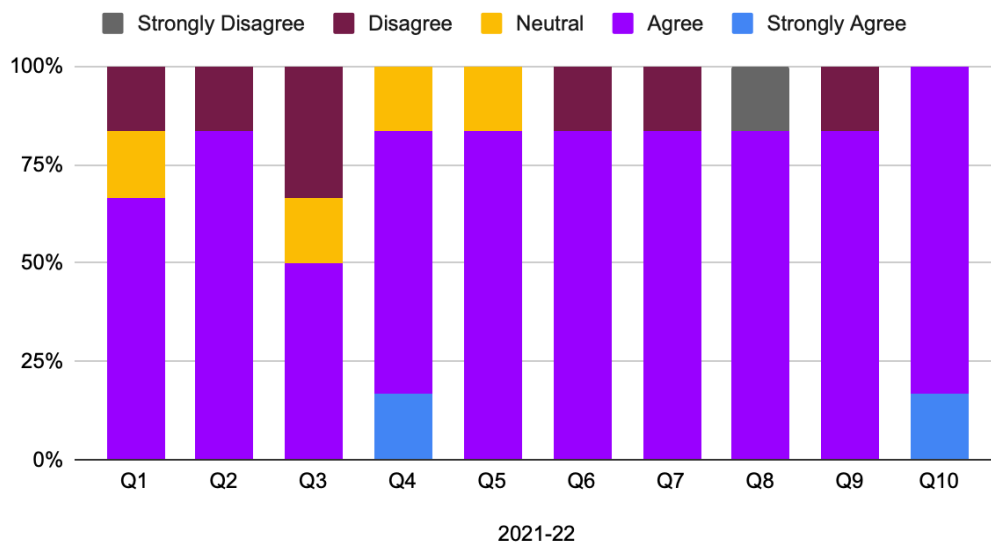
Question

- Q1:** Are the objectives of all the courses clearly defined?
- Q2:** Is the syllabus appropriate for achieving the program's learning outcomes and competencies?
- Q3:** Is the syllabus updated to reflect new advances in the field?
- Q4:** Is the library stocked with required learning resources, such as suggested textbooks and reference books?
- Q5:** Are the electives related to core subject and suitable for specializing in a specific field?
- Q6:** Do the laboratory activities help in the comprehension of concepts?
- Q7:** Does the programme encourage self-learning and higher study?
- Q8:** How well is the curriculum structured to assist students understand and provide solutions to the real-world issues?
- Q9:** How effective has the programme been in instilling confidence in you to face competitive exams and interviews?
- Q10:** Does the curriculum introduce students to environmental and sustainability issues, professional ethics, etc?.

Scale provided :

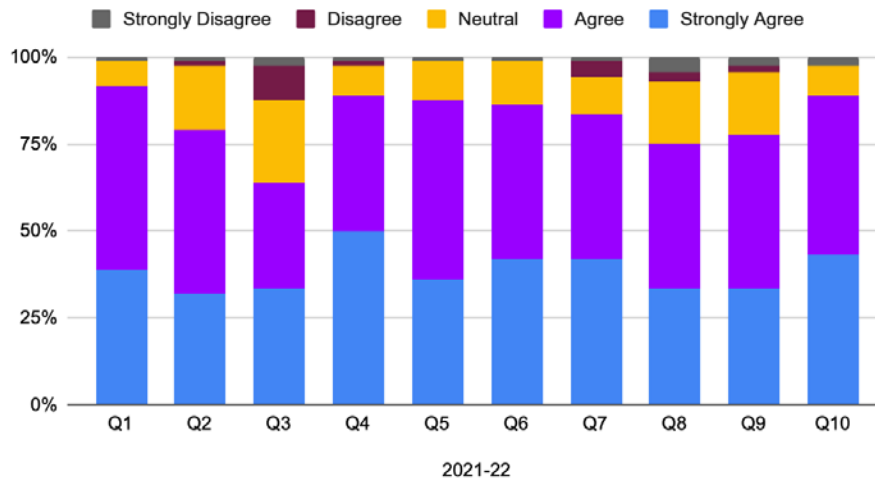
1- Strongly Disagree, 2- Disagree, 3-Neutral, 4- Agree, 5- Strongly Agree

CE - curriculum students feedback 21-22



CSE

CSE - curriculum students feedback 21-22

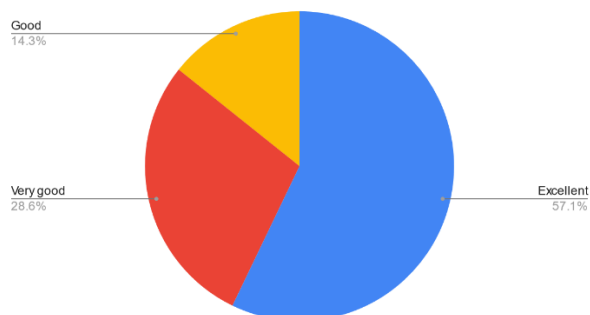


Employer Curriculum Feedback Analysis Academic Year 2021-22

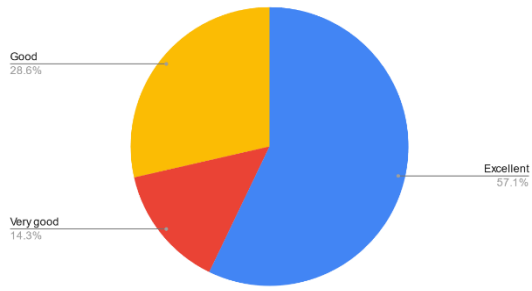
Questions

1. Fundamental knowledge in Science and Mathematics
2. Fundamental knowledge in Engineering
3. Understanding of global engineering standards
4. Ability to analyse and interpret data
5. Ability to design new systems within realistic constraints
6. Ability to identify, formulate and solve technical problems
7. Practice of professional and ethical responsibility
8. Communication and presentation skills
9. Ability to understand the impact of Engineering solutions in various contexts
10. Knowledge of current developments in Engineering field
11. Ability to use modern engineering tools for professional practice
12. Leadership and management skills

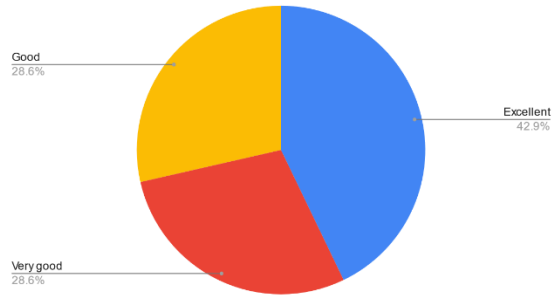
Percentage of Q1



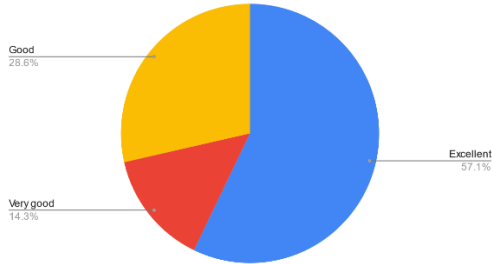
Percentage of Q2



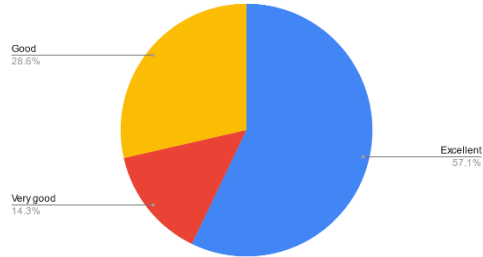
Percentage of Q3



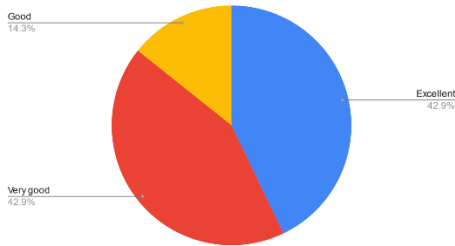
Percentage of Q4



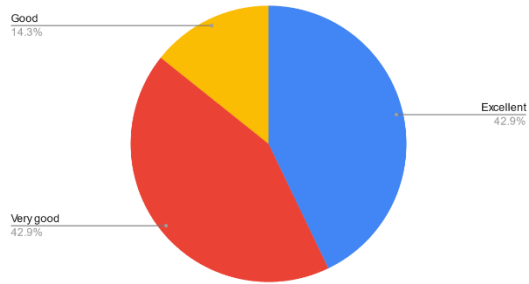
Percentage of Q5



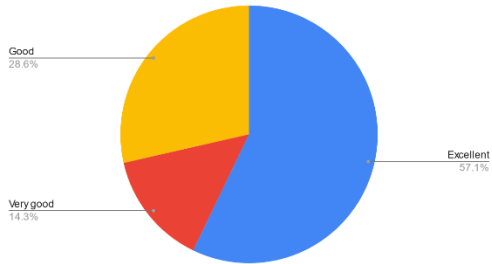
Percentage of Q6



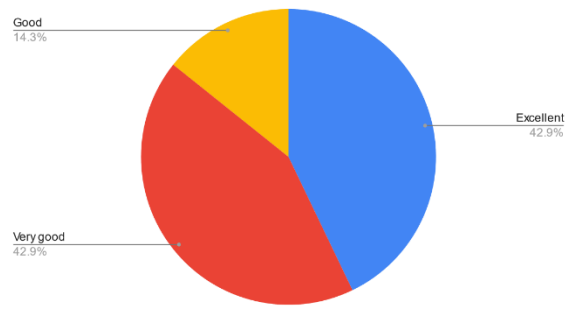
Percentage of Q7



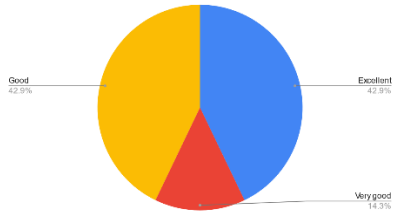
Percentage of Q8



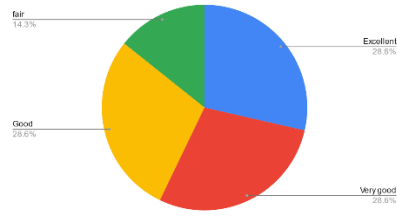
Percentage of Q9



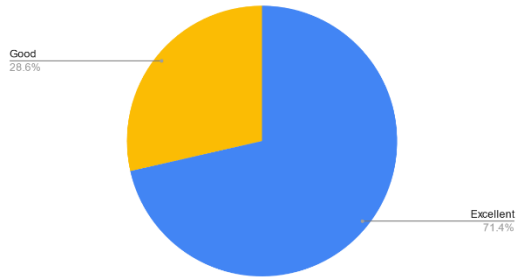
Percentage of Q10



Percentage of Q11



Percentage of Q12

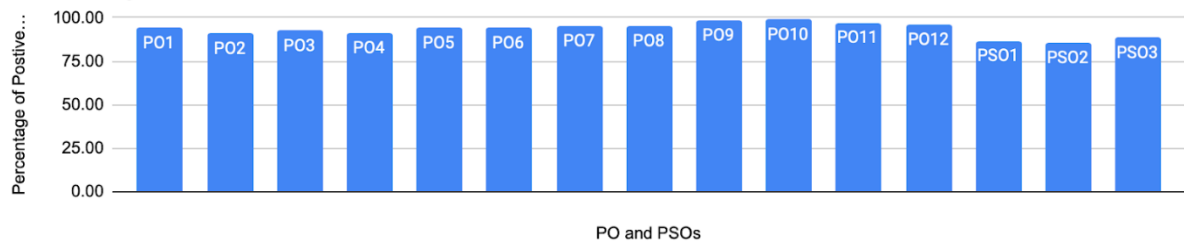


Academic Year : **2021-2022**

Alumni Feedback Analysis Report

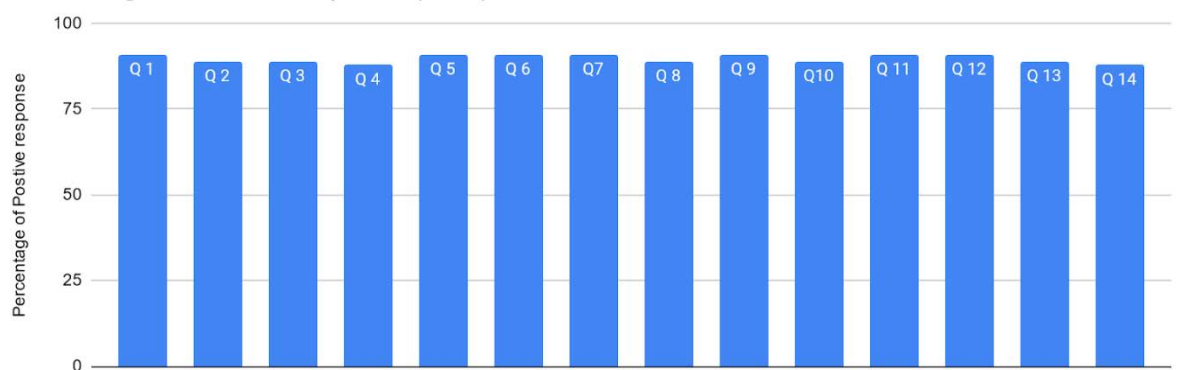
CE

Percentage of Postive response



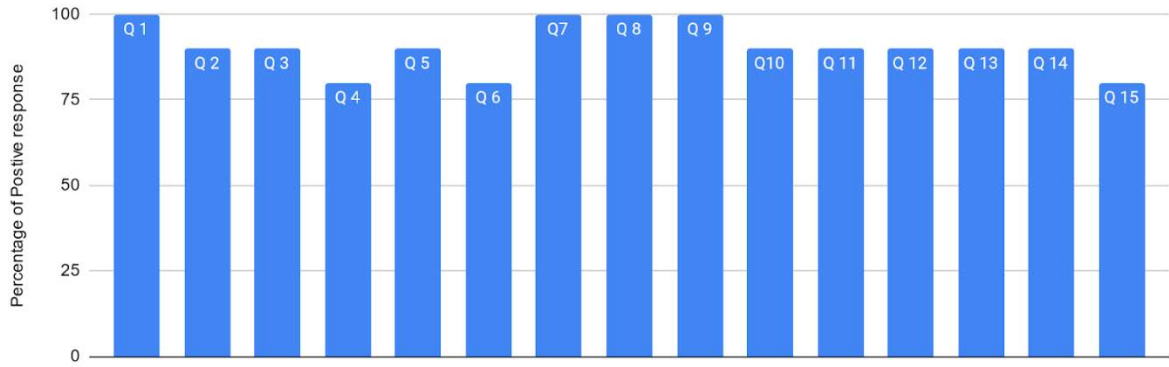
CSE

Percentage of Postive response (CSE)

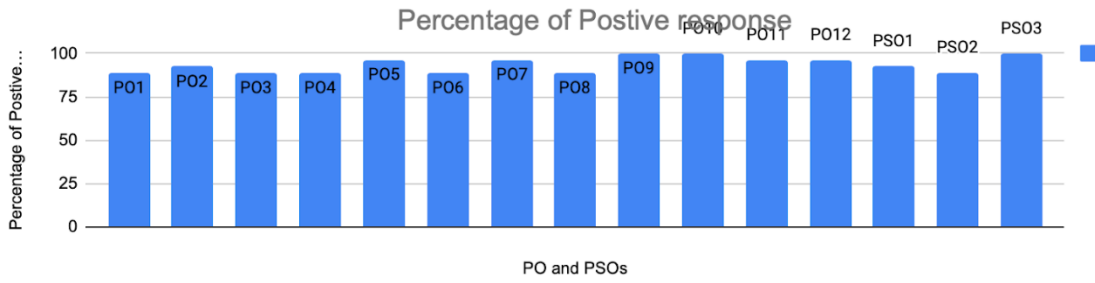


EEE

Percentage of Postive response (EEE)

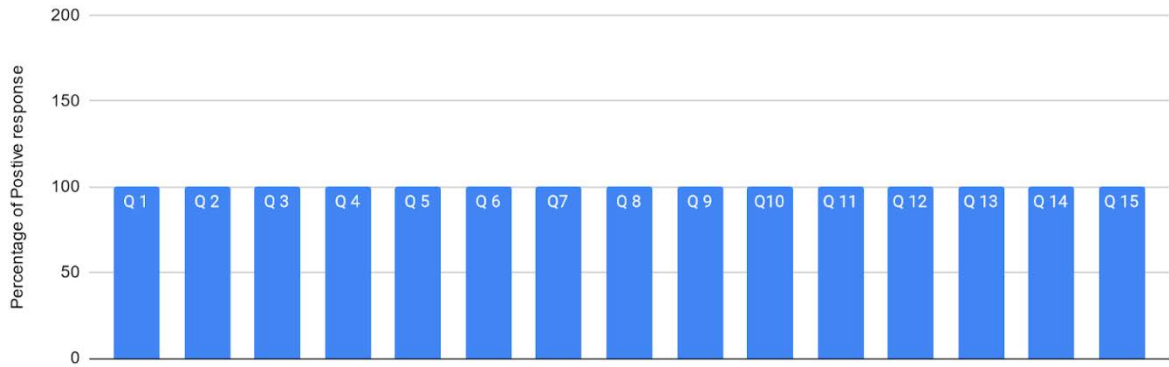


ECE

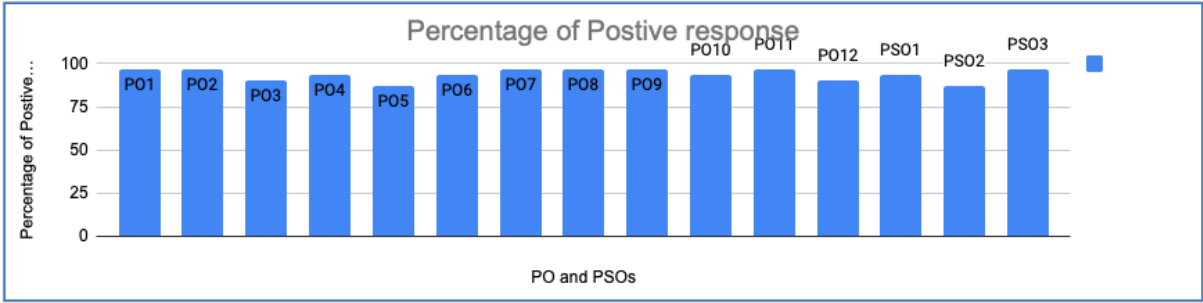


EIE

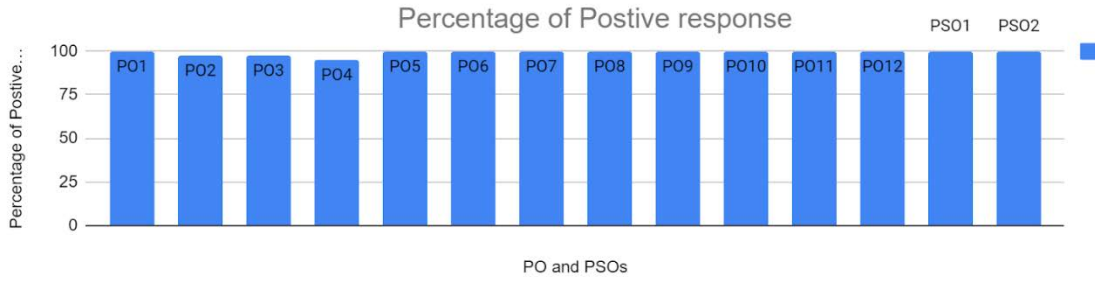
Percentage of Postive response (EIE)



ME



MCA



GENDER SENSITIZATION

Gender Sensitization

Gender Equity Cell

A Gender Equity Cell was formed in 18th December 2021. Dr Shobhana Warriar, Associate Professor, Department of History, Kamala Nehru College, University of Delhi, inaugurated the cell and delivered a talk on Gender Sensitization Training: POSHA(Prevention of Sexual Harrasment Act) 2013 and our rights.

Seminar on “Empowering Women through Financial Freedom”

By Dr Dhanya Alex, Associate Professor, MBA on 2.12.2021



Talk on Self – Worth, Respect and Dignity – Foundation of Gender Equality Dr Reshmi R, Asst Prof, CSE





Talk on "Earth Day 2022-Investing in our Planet through Smart technologies" by Mr. Jawahar Saud, Assistant Professor , Department of Civil Engineering, FISAT on 29th April 2022



Financial Literacy for young adults – Seminar by Dr Dhanya Alex, Associate Professor, MBA on 27.5.2022



Latitude: 10.231122
Longitude: 76.408706
Elevation: 18.77m
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IQAC Meetings and Action Taken Report

Action Taken Report on IQAC meetings

Date of Meeting	Decisions	Action Taken
14.6.2021	<ul style="list-style-type: none"> • Submit AQAR 2020-21 • Apply for 2f • Apply for NIRF ranking • Prepare for NAAC submission in the revised framework • Prepare for AICTE and KTU approval for new courses • Parallel website to be created for NAAC • Interim reports of cells and Committees to be collected half yearly • Committee for Value Added Courses to be formed 	<ul style="list-style-type: none"> • AQAR of 2020-21 submitted in December 2021 • Application for 2f submitted • Applied for NIRF ranking • Orientation sessions on NAAC RAF conducted, auditing of data collected as per RAF also done • New courses approved by AICTE and KTU after inspection • Parallel website created for NAAC • Interim reports of Cells and Committees collected • Committee formed to coordinate Value Added Courses
8.9.2021	<ul style="list-style-type: none"> • Correct the deficiencies identified in the first audit for NAAC • Combine the ISO and KTU internal audits • Conduct second audit for NAAC • Celebrate Institution Day on 23rd September 2021 in online mode • Apply for extension of validity of approval to NAAC • Feedback to be collected from stakeholders 	<ul style="list-style-type: none"> • The deficiencies identified in the first audit have been addressed • The ISO and KTU internal audits are conducted together • Conducted second audit for NAAC in October 2021 • Institution day was celebrated on 23.9.2021 in online mode • Applied for extension of validity of approval to NAAC on 15/9/2021 • Feedback collected from stakeholders and analysed
1.12.2021	<ul style="list-style-type: none"> • Conduct a third audit for NAAC preparation assessment • Upload data to FISAT - NAAC website 	<ul style="list-style-type: none"> • Conducted a third audit in January 2021 • Uploading of data to NAAC website in progress • Awareness program on NAAC RAF conducted by Dr Johnson on 21.1.2021 • Conducted the gender audit successfully • Conducted APMC meetings for S7 B Tech on 2nd and 3rd December 2021

	<ul style="list-style-type: none"> • Awareness program on RAF to be conducted for all staff • Conduct Gender audit • APMC meetings for S7 B Tech • Apply for extension of validity of NAAC approval • Conduct of student council elections 	<ul style="list-style-type: none"> • Applied for extension of validity of NAAC approval on 27/12/2021 • Student council elections conducted in January 2022
18.3.2022	<ul style="list-style-type: none"> • Improve academic performance and give placement orientation from 2nd year • Activities for improving admission • KTU internal audit to be conducted • IIQA to be submitted for NAAC accreditation • Encourage students to utilize all the facilities of the institution 	<ul style="list-style-type: none"> • Remedial measures initiated to improve the academic performance of students • Department-wise placement activities from the second year onwards planned • School Student visits to see the campus and tech fests, free mock entrance coaching as part of FISAT's social commitment conducted • KTU internal audit conducted on 30.3.2022 • IIQA submitted on 27.5.2022 • Many technical events, sports tournaments, arts fests-Arangu and Bharatham etc have been conducted.