



# **SELF STUDY REPORT**

**FOR**

**1<sup>st</sup> CYCLE OF ACCREDITATION**

**VISAT ENGINEERING COLLEGE**

VISAT ENGINEERING COLLEGE, MUTHOLAPURAM P.O. ,ELANJI.

686665

[www.visat.in](http://www.visat.in)

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

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# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Established in 2011, VISAT Engineering College has been a hub of academic excellence in rural areas amidst the picturesque Western Ghats. The college is committed to providing quality education, with approval from the All India Council for Technical Education (AICTE) and affiliation with APJ Abdul Kalam Technological University, Thiruvananthapuram. Majestic mountain ranges surround the campus and provide spectacular scenery, creating an environment conducive to learning and personal growth.

With a vision to produce socially committed engineers capable of meeting evolving technological needs, VISAT focuses on imparting values and skills beyond the academic curriculum. The institution's dedication to continuous enhancement, inclusivity and outcome-driven education establishes it as a dynamic hub for aspiring engineers.

Currently, offering seven undergraduate programs in engineering, including Civil Engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Mechanical Engineering, Computer Science and Engineering (Artificial Intelligence & Machine Learning), and Computer Science and Engineering (Data Science), the institution ensures a diverse range of academic opportunities for students. Beyond academics, VISAT Engineering College strongly emphasizes holistic development through various student-centric initiatives.

The institution's commitment to staying abreast of technological advancements is evident through the presence of IEEE student chapters, where various activities are underway. Additionally, a well-functioning National Cadet Corps (NCC) unit is pivotal in instilling discipline and leadership skills, significantly contributing to overall personality development. The institution's National Service Scheme (NSS) unit prioritizes social responsibility and community engagement, urging students to contribute actively to societal well-being. The Innovation and Entrepreneurship (IEDC) and the Institution's Innovation Council (IIC) foster an entrepreneurial spirit, nurturing student's creativity and problem-solving abilities.

VISAT boasts various committees for SC/ST, Minority Affairs, Grievance Redressal, Internal Complaints, and Anti-ragging, highlighting the commitment to maintaining a safe and inclusive campus. Students and faculty of VISAT Engineering College are attending Universal Human Values, NPTEL, and other Massive Open Online Courses.

### **Vision**

To be a nationally recognized centre of excellence in engineering education and research for creating professionally competent and socially committed engineers equipped to meet the developing technological and socio-economic needs.

### **Mission**

We are committed to

1. Impart technical education through value-based holistic teaching and learning integrating innovative practices
2. Nurture the practice of real-world problem solving, the spirit of entrepreneurship, and critical thinking among the students.
3. Foster a conducive environment for Research, Innovation, and extension services.
4. Develop the potential of human resources to meet the requirements of cutting-edge technology.
5. Prepare all students for successful careers based on a strong moral & ethical foundation

## 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

### Institutional Strength

By conducting a meticulous analysis encompassing internal strengths and weaknesses, as well as external opportunities and challenges, the College could comprehensively understand the Institution's current position. This information enabled us to make informed decisions and take necessary actions to improve the Institution's performance further and enhance its overall success. The analysis for Strength, Weakness, Opportunities and Challenges (SWOC) invites the Institution's attention to positively reshaping the planning processes in the College. The College management has initiated brainstorming sessions involving students, parents and staff members to gather diverse perspectives on strengths, weaknesses, opportunities, and challenges. Consolidating inputs from these sessions, the College Executive Council constructed a comprehensive SWOC analysis. Also, the key reports and other data of the Institution were identified and reviewed. These constructed strengths, weaknesses, opportunities, and challenges are presented and finalised in the Governing Board meeting. The analysis revealed the current state of affairs while highlighting areas where VISAT Engineering College is vital and those requiring further quality improvement.

The institutional strengths of VISAT Engineering College include:

- Visionary leadership for guiding the institute in the strategic direction in order to attain its vision.
- Young and dynamic staff members.
- With a commitment to environmental sustainability, the College maintains a green campus, promoting a healthy learning environment.
- Student-centred learning practices.
- Effective and healthy student mentoring.
- Activities for holistic development of students.
- Well Planned teaching Methodology and Continuous evaluation of students.

- The industry – institution interface.

### **Institutional Weakness**

- Lack of sophisticated tools for research.
- Less number of funded projects.
- Less number of Ph.D. holders.
- Paucity of consultancy activity in most of the departments.
- Poor comprehension skills of academically weak students.

### **Institutional Opportunity**

- Bridging the learning gaps of rural communities.
- Engaging with local communities through outreach programs, skill development initiatives, or social responsibility projects.
- Encouraging interdisciplinary collaboration between engineering disciplines, as well as arts and science courses, to foster innovation and address complex societal challenges.
- Collaborations with industries and International institutions.
- Placements and international internship opportunities in companies owned by the same management.
- Attracting students from outside India to experience an eco-friendly campus for education.

### **Institutional Challenge**

- Although college provides transportation facilities there is limited access to public transportation.
- Less nearby industries for internships.
- Increasing the number of student enrollments.
- Accumulation of funds from Govt. and Non-govt. Organisations.
- The affiliated University limits the academic freedom of the College.

## 1.3 CRITERIA WISE SUMMARY

### Curricular Aspects

VISAT Engineering College, Elanji, Ernakulam, affiliated with APJ Abdul Kalam Technological University (APJAKTU), ensures effective curriculum delivery through a comprehensive process. The curriculum is industry-relevant and job-oriented, providing students with a strong foundation in their chosen field and exposure to emerging technologies.

Regular updates to the curriculum keep pace with industrial trends. The college's IQAC prepares the academic calendar based on the university calendar. Before every semester, meetings are held at the department and college level to include all activities in the calendar.

Department heads allocate subjects based on faculty preferences and expertise. Class and course committee meetings are held three times per semester, including department heads, subject-matter experts, and student representatives to discuss academic activities. Faculty members assess students through internal tests conducted by the exam cell and through assignments. The department conducts remedial classes for slow learners based on their performance in the examinations. Each faculty maintains a course file covering various aspects, and they undergo FDPs, workshops, and MOOCs to enhance their teaching quality. The department conducts student feedback surveys twice a semester to improve its teaching methods. PTA meetings discuss the academic progress of the learners. The IQAC conducts internal and external academic audits to review activities and offer advice for improvement. The institution follows Outcome-Based Education (OBE) principles, emphasizing holistic development and learner-centric approaches. The institution supports learners participating in MOOCs, add-on courses, internships, technical invited talks, and conferences to enhance academic excellence and personal skills.

VISAT has made efforts to integrate cross-cutting issues relevant to gender, environment and sustainability, human values and professional ethics into the curriculum. The institution assesses the curriculum's effectiveness through a feedback system that engages various stakeholders, including students, teachers, parents, employers, and alumni. Through a well-planned and documented approach, VISAT Engineering College focuses on delivering a quality education that aligns with industry needs and fosters holistic development.

### Teaching-learning and Evaluation

The college designs and executes a meticulous teaching, learning, and evaluation process to help students acquire the latest technological knowledge and expertise in their respective fields. The college ensures transparency in the admission procedures, and the students comprise diverse ethnic, cultural, religious and financial backgrounds. The college recruits well-qualified and experienced faculty who are highly professional and passionate towards teaching and learning. The faculty are assigned courses based on their areas of specialization and proficiency in their specific fields.

Since implementing outcome-based education (OBE), faculty members have employed more student-centered

learning techniques in addition to the traditional lecture style. Learner-centered education facilitates effective learning through appropriate methodologies such as participative, experiential, and collaborative learning modes. Furthermore, ICT-enabled tools actively facilitate the college's teaching-learning process with students' active participation.

The institution emphasizes transparent and effective internal assessment procedures, and the University(APJAKTU) guarantees transparency and compliance with academic standards through external assessments. Grievance redressal mechanisms for internal and external examinations are transparent, timebound, and efficient. Effective implementation of OBE, clearly communicated through Program Outcomes (POs), Program Specific Outcomes(PSOs), and Course Outcomes(COs), coupled with robust assessment mechanisms, reflects a commitment to academic excellence and enhancement in learners skills.

Accurate CO-PO mapping and appropriate assessment mechanisms help in evaluating the attainment of COs and assessing POs. To simplify the process of calculating attainment, the college has the licensed Ezygo software. The obtained attainment values are compared with the targeted/expected attainment levels to find the gaps, and the corresponding departments can initiate various measures for filling these gaps for the next batch of students.

The college prioritizes student learning by implementing transparent admission procedures, employing qualified faculty, and incorporating student-centred learning methods. Implementing Outcome-Based Education (OBE) ensures the learners' holistic development. ICT tools enhance teaching, while internal and external assessments ensure academic standards. Attainment of outcomes is assessed for continuous evaluation and improvement.

### **Research, Innovations and Extension**

VISAT actively nurtures innovation, research, and development by implementing a wide range of activities through collaborations.

VISAT's IEEE encourages coming up with new ideas and working together by organising events that help people learn professionally and educationally, making them more resourceful and better at solving problems. IEEE Photonics Society selected the Dean (R&D) of VISAT Engineering College to its Board of Governors.

VISAT's IEEE organised an IEEE conference, 5NANO 2023, in collaboration with All Indian Council for Technical Education (AICTE) and the Science and Engineering Research Board (SERB) on an international scale. Further, VISAT scheduled an IEEE International Conference on 5 NANO 2024 in April 2024, sponsored by the IEEE Photonics Society and SERB. The conference centred around nanoelectronics and nanophotonics, providing a platform for presenting papers that promote discussion and knowledge sharing in these fields.

VISAT's IIC and IEDC work together to foster innovation and entrepreneurship within the academic setting. This collaboration raises awareness about the latest innovations, including the YUKTI-National Innovative Repository, where students can bring their ideas to life.

The faculty at VISAT consistently publishes papers in journals indexed in SCI/SCOPUS/UGC and contributes to conference proceedings of international acclaim. The institution encourages faculty members and students to publish patents for the protection of intellectual property rights and recognition of innovative contributions,

VISAT Engineering College has distinguished itself by delivering faculty and student support through its extension activities. Through the initiatives led by the NSS, NCC, and VISAT Students' Union, volunteers are actively engaging in community development and various social programs.

The institution has established Memorandums of Understanding (MOUs) with industry partners to instil a research-oriented mindset among students and faculty. These agreements facilitate research extension activities. Consultancy works are carried out at the institution, bringing real-world industry expertise directly into the academic environment fostering a practical and up-to-date learning experience for students and staff members.

### **Infrastructure and Learning Resources**

VISAT Engineering College features a 7.53 -acre campus with adequate infrastructure, including 19 classrooms, 21 labs, a well-equipped library, and computer facilities. The institution provides transportation and hostel accommodation for boys and girls. Facilities for sports and arts promote cultural and sportive activities. Overall, it creates a conducive environment for holistic development.

The college library, encompassing 432 sq.m, is automated using KOHA software. It features various sections, including a reading room, and offers services like book borrowing, conducting quizzes, and essay writing competitions. Additionally, it has institutional memberships for e-resources, providing access to a vast collection of books, journals, and articles.

VISAT Engineering College prioritizes technological advancements to enhance the learning experience. They focus on Wi-Fi upgrades, network security with Sophos firewall, cloud services, modern classroom technology, and hardware upgrades. The Ezygo software supports attainment calculations and academic activities. The college provides user training to enhance IT utilization effectively.

During the latest academic year, the college maintained a favorable 1:2 computer-to-student ratio, ensuring ample access to computing resources. This high ratio facilitates an enriched learning environment, allowing students to effectively engage with technology for academic purposes and other educational activities.

23.49% of the budget is dedicated to infrastructure development, focusing on new hostels and technology installations. Additionally, 72% is allocated for infrastructure maintenance, covering physical and academic facilities. This steadfast commitment reflects the institution's dedication to sustaining a conducive and well-maintained environment for effective teaching and learning.

The institution underscores holistic growth through good infrastructure, automated library services, updated IT facilities, focused budget allocation, and an optimal student-to-computer ratio suitable for a supportive learning atmosphere. The ongoing investment in infrastructure highlights the college's commitment to providing an optimum environment for effective learning with well-developed infrastructure and resources.

### **Student Support and Progression**

The college offers comprehensive support services to students to ensure their academic success and facilitate progression to higher levels. In terms of scholarships and freeships, the institution achieved an impressive 75% in providing financial support to students through various sources, reflecting a commitment to facilitating access to education.

The commitment to enhancing students' capabilities is evident through the organization of diverse activities. These include soft skills development, language and communication skills, life skills encompassing yoga and physical fitness, and the nurturing of ICT/computing skills. The institution recognizes the importance of holistic development and actively fosters a well-rounded educational experience for its students.

Moreover, the institution has shown dedication to guiding students for competitive examinations and career counseling, with a success rate in the last five years. This guidance underscores the institution's commitment to academic excellence and the overall well-being and future prospects of its students. Students are encouraged to participate in sports and cultural activities both on and off campus.

Addressing student grievances is a priority, as reflected in the institution's adoption of mechanisms for timely redressal. The implementation of guidelines from statutory/regulatory bodies and the creation of awareness with zero-tolerance policies highlight the institution's commitment to ensuring a safe and conducive learning environment.

The registered Alumni Association, known as VISATAA, plays a pivotal role in contributing significantly to the institution's development. The alumni's active engagement on various platforms, including Facebook, WhatsApp, and LinkedIn, showcases their commitment to staying connected, sharing valuable insights, and supporting current students.

The institution creates a conducive and supportive student environment by focusing on scholarships, capacity development, student guidance, grievance redressal, and alumni engagement.

## **Governance, Leadership and Management**

VISAT, an educational venture of the Vinjyan Foundation initiated in 2011, emphasises the pivotal role of governance in shaping its identity and fostering growth. Aligned with its mission and vision, the institution aims to be a nationally recognised hub for engineering education and research, producing socially committed and professionally competent engineers.

VISAT's governance is characterised by a strong governing body and an efficient administrative leadership team. This structure enables decentralised decision-making processes, empowering academic leadership while ensuring alignment with institutional goals. Moreover, VISAT embraces the principles of the National Education Policy, NEP 2020, expanding its academic offerings and encouraging faculty and student participation in various educational initiatives.

In addition to academic pursuits, VISAT prioritises the welfare of its staff and students. Various measures, such as medical insurance, subsidised transportation, hostel and mess facilities, and recreational facilities, are provided to ensure the community's well-being. The institution also implements a comprehensive self-appraisal system for staff evaluation, encompassing teaching effectiveness, research contributions, and professional development activities.

Financially, VISAT mobilises funds from government grants and projects like IEDC, PMKVY, and NSS to support infrastructure development, academic enhancements, and student and social welfare initiatives. Transparent financial management and efficient fund utilisation contribute to the institution's sustainability and growth.



Quality assurance is another focal point at VISAT, facilitated through its Internal Quality Assurance Cell (IQAC). The IQAC oversees various activities to enhance academic and administrative excellence, including student support, curriculum development, and faculty training. Regular audits ensure adherence to quality standards and promote accountability across all institutional operations.

VISAT Engineering College is a testament to effective governance, financial management, and quality assurance practices in higher education. Through these mechanisms, the institution continually strives to uphold its commitment to excellence while nurturing the holistic development of its stakeholders. By fostering an environment conducive to learning, innovation, and social responsibility, VISAT remains dedicated to its mission of shaping the engineers of tomorrow.

### **Institutional Values and Best Practices**

VISAT Engineering College is committed to creating a safe and inclusive environment, focusing on gender equity, sensitization, and campus security. The courses "Constitution of India" and "Professional Ethics" underscore fundamental principles in basic education, focusing on enlightening students about the significance of treating individuals equally, irrespective of gender. Various committees actively address all stakeholders' concerns. CCTV cameras and 24x7 security systems ensure campus safety. Privacy measures, separate facilities, and the "Internal Complaint Committee" contribute to well-being. Hostel facilities, gender-neutral leadership opportunities, and initiatives like the Women Cell, NSS, NCC, IEEE, and IEDC further promote inclusivity. VISAT provides a secure and equal environment for all and conducts Gender Audit to promote gender equity in activities and facilities on campus.

Through campus initiatives, VISAT Engineering College promotes tolerance, unity, and inclusivity among diverse individuals. Events like College Day, Onam, and Christmas celebrations foster cultural harmony. The institution actively supports activities encouraging tolerance for societal differences, ensuring a community where students and employees understand and embrace constitutional duties, and promoting a harmonious environment.

The college excels in enhancing students' English communication skills through programs like "Toastmasters International" for faculty and "Eloquence" for students. Despite challenges from diverse student backgrounds and time constraints, the institution observes improvement in students' confidence and participation in various contests and projects. The "Dream-Weave" mentoring fellowship focuses on holistic student development, addressing academic stress, peer pressure, and mental health challenges. The program proves effective with a supportive triangular relationship among mentors, parents, and learners.

The alliance between VISAT Engineering College and the UNISIS Group exemplifies a commitment to preparing students for the global job market. Emphasizing placement, international internships, and online job training, coupled with UNISIS industry expertise, enriches the educational experience, cultivating a culture of innovation and excellence. This collaboration ensures graduates are not only employable but also forward-thinking professionals.

The institution provides alternate energy sources, waste management, water conservation, a green campus, and a disabled-friendly environment. Audits and initiatives demonstrate a strong commitment to environmental and energy sustainability. VISAT College values inclusivity, fosters unity, and excels in academia-industry collaboration.



## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	VISAT ENGINEERING COLLEGE
Address	VISAT Engineering College, Mutholapuram P.O., Elanji.
City	Piravom
State	Kerala
Pin	686665
Website	<a href="http://www.visat.in">www.visat.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Anoop K J	0485-2259900	9020209030	-	office@visat.ac.in
IQAC / CIQA coordinator	Subash T D	04852-259999	9486881397	-	deanresearch@visat.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	

State	University name	Document
Kerala	A.P.J. Abdul Kalam Technological University	<a href="#">View Document</a>

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	10-06-2023	12	

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	VISAT Engineering College, Mutholapuram P.O. ,Elanji.	Rural	7.53	14168.31

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BTech,Civil Engineering,	48	Senior Secondary	English	30	19
UG	BTech,Computer Science And Engineering,	48	Senior Secondary	English	60	20
UG	BTech,Electronics And Communication Engineering,	48	Senior Secondary	English	60	15
UG	BTech,Electrical And Electronics Engineering,	48	Senior Secondary	English	30	3
UG	BTech,Mechanical Engineering,	48	Senior Secondary	English	30	9
UG	BTech,Computer Science And Engineering Artificial Intelligence And Machine Learning,	48	Senior Secondary	English	60	34
UG	BTech,Computer Science And Engineering Data Science,	48	Senior Secondary	English	60	6

### **Position Details of Faculty & Staff in the College**

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	4				2				34			
Recruited	3	1	0	4	0	2	0	2	9	25	0	34
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				38
Recruited	19	19	0	38
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	5	3	0	8
Yet to Recruit				0

### Qualification Details of the Teaching Staff

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	0	0	0	0	0	0	0	0	2
M.Phil.	0	0	0	0	2	0	0	0	0	2
PG	1	1	0	0	0	0	9	25	0	36
UG	0	0	0	0	0	0	0	0	0	0

<b>Temporary Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

<b>Part Time Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

<b>Details of Visting/Guest Faculties</b>					
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
	0	0	0	0	0

**Provide the Following Details of Students Enrolled in the College During the Current Academic Year**



Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	61	0	21	0	82
	Female	20	0	6	0	26
	Others	0	0	0	0	0

**Provide the Following Details of Students admitted to the College During the last four Academic Years**

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	2	3	0	0
	Female	0	1	0	0
	Others	0	0	0	0
ST	Male	0	1	0	0
	Female	1	0	0	0
	Others	0	0	0	0
OBC	Male	28	30	8	16
	Female	8	14	3	10
	Others	0	0	0	0
General	Male	50	21	10	3
	Female	21	2	2	3
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		110	72	23	32

**Institutional preparedness for NEP**

1. Multidisciplinary/interdisciplinary:	VISAT Engineering College embraces the principles of the National Education Policy (NEP) 2020, emphasizing a holistic and multidisciplinary educational approach. VISAT has expanded its
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	<p>program offerings, introducing B.Com (Computer Applications), B.Com (Finance &amp; Taxation), BBA, and BCA programs. It will shift from our traditional focus and emphasize a comprehensive educational experience aligned with NEP 2020. Further, the Governing Board recommended starting B.A (Animation and Graphic Design) for the upcoming academic year. The curriculum integrates humanities and sciences with STEM subjects, including interdisciplinary courses, life skills, professional ethics, and engineering management. Credit-based courses in sustainable and environmental engineering enrich the academic journey. Soft skills are crucial in the modern world, and we have launched programs to enhance communication, teamwork, problem-solving, and leadership skills. A total of 100 activity points is stipulated for involvement in community engagement, environmental initiatives, and co-curricular and extracurricular activities organized by college clubs/external institutions. The multidisciplinary and adaptable system enables students to explore diverse fields through electives, minor and honor programs, fostering creativity and cultivating a broader perspective. VISAT Engineering College actively promotes multidisciplinary research projects, emphasizing innovation through IEDC/IIC and real-world problem-solving, contributing significantly to knowledge advancement.</p>
<p>2. Academic bank of credits (ABC):</p>	<p>VISAT Engineering College has wholeheartedly taken up the Academic Bank of Credits (ABC) initiative, adhering to its guidelines. The college encourages all students to maintain academic credits within their ABC accounts, promoting credit mobility and transparency. In addition, there are Memorandums of Understanding (MoUs) with renowned international universities, including Malaysian Universities. These collaborations will provide the students with valuable global exposure and enrich their academic excellence. The college can facilitate inter-university credit transfers upon attaining university status or achieving autonomy. The institution encourages students to do MOOCs to improve their academic excellence, and the credit earned can be added to ABC.</p>
<p>3. Skill development:</p>	<p>Committed to a value-based education, the curriculum integrates Universal Human Values,</p>

	<p>professional ethics, the Constitution of India, and life skills. This prepares students as responsible, socially conscious individuals for success. Having completed the Faculty Development Program (FDP) on Universal Human Values by AICTE, faculty members adeptly impart ethical principles. Commencing in the 2022-23 academic year, AICTE introduced a mandatory program with an annual addition of meticulously crafted courses to enhance students' skill development. Additionally, the college offers specialized add-on courses that address contemporary industry needs. Moreover, the institution promotes a vibrant atmosphere by fostering a music band. As a student-centered institution, the institution offers opportunities for students to actively participate in various clubs and professional organizations, enhancing holistic development.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>By establishing a yoga and meditation cell, our institution demonstrates a profound commitment to integrating Indian knowledge systems. Emphasizing holistic well-being, our dedicated yoga and meditation club conducts regular activities to foster physical, mental, and spiritual harmony.</p>
<p>5. Focus on Outcome based education (OBE):</p>	<p>In VISAT Engineering College, the academic routine commences with instructors clearly delineating course outcomes, underscoring their practical significance in the industry. The well-defined assessment mechanism is crafted by incorporating both direct and indirect methods. Following this, mapping exercises meticulously demonstrate the harmonization of these course outcomes with program outcomes. The dedicated integration of 'Ezygo' software seamlessly facilitates the calculation of attainment of program outcomes, ensuring efficiency. Regular analysis is crucial in pinpointing potential gaps in course and program outcomes. This insightful assessment leads to strategic planning for the subsequent academic batch, fostering a proactive response to evolving educational needs, including internships, field trips, projects, technical invited talks, workshops, seminars, and innovative assignments.</p>
<p>6. Distance education/online education:</p>	<p>During the challenging times of the COVID-19 pandemic, the institution seamlessly transitioned to distance education, manifesting its adaptability and</p>

commitment to uninterrupted learning. Additionally, numerous papers were presented online at the IEEE International Conference (5 NANO 2k23) conducted in April 2023. Through a series of online academic activities such as webinars, virtual conferences, and online paper presentations, ensure students' and faculty's continued engagement and scholarly pursuits.

### Institutional Initiatives for Electoral Literacy

<p>1. Whether Electoral Literacy Club (ELC) has been set up in the College?</p>	<p>Yes, On September 25, 2023, our college took a significant step towards fostering political awareness, civic engagement, and a deeper understanding of the democratic process by officially launching the Electoral Club. This club represents a vital platform for students to actively participate in the democratic system, promote informed decision-making, and contribute to our community's political discourse.</p>
<p>2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?</p>	<p>The Electoral Club is led by a dedicated team of Staff in charge, Student in charge, and other student members. The staff in charge brings valuable expertise and guidance, ensuring the club operates effectively. The Student in charge, elected by members, will spearhead club activities and serve as the liaison between the student body and club administration.</p>
<p>3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.</p>	<p>The college's Electoral Literacy Club (ELC) is initiating innovative efforts to boost voter awareness, ethical voting, and participation, especially among underprivileged groups. Their plans include comprehensive voter awareness campaigns using digital and traditional methods, educating students and local communities on the importance of voting. Collaborations with NGOs serving marginalized communities will facilitate targeted outreach, voter registration drives, and addressing unique needs. ELCs aim to remove barriers, like documentation challenges, that hinder underprivileged individuals from registering to vote. Additionally, they promote ethical voting through pledges, emphasizing the significance of voting without coercion or bribery. These initiatives will empower people from all backgrounds to exercise their democratic rights.</p>

<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>Their plans include comprehensive voter awareness campaigns using digital and traditional methods, educating students and local communities on the importance of voting.</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>ELC actively engages with students, encouraging them to register to vote as soon as they turn 18, emphasizing the importance of their civic participation. Simultaneously, they work to streamline the voter ID registration process for students and confirm the registration of staff members, ensuring that every member of the academic community has the opportunity to exercise their voting rights. These efforts contribute to building a more informed and participatory electorate within the educational institution, fostering a culture of civic responsibility.</p>

## Extended Profile

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### 1 Students

#### 1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
234	181	226	327	501

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 2 Teachers

#### 2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 71

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

#### 2.2

Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
35	35	31	31	33

### 3 Institution

#### 3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
167.68	110.83	53.02	89.86	151.5

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>

## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

##### 1.1.1

**The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment**

**Response:**

VISAT Engineering College, Elanji, Ernakulam, affiliated with APJ Abdul Kalam Technological University (APJAKTU), Thiruvananthapuram, Kerala, ensures effective curriculum delivery through a well-planned and documented process that focuses on the following points:

- The institution adheres to the curriculum set by the affiliated university. Academic programs integrate projects, add-on courses, extracurricular activities, field trips, and internships to attain the institute's vision.
- The curriculum designed by APJAKTU is industry-relevant and job-oriented. The courses are structured to provide the students with a strong foundation in the basics of their chosen field, as well as advanced topics and emerging technologies. The curriculum is regularly updated to keep pace with changing industry trends and demands.
- To bridge the industry-academia gap, the institution conducts various activities such as MOOCs, add-on courses, invited talks, and conferences.
- This institution follows an academic calendar framed by the college's IQAC concerning the university calendar. Departmental and college-level meetings are held to plan the activities well before the commencement of each semester.
- The department head finalises each faculty member's workload through a departmental meeting based on their preferences and subject expertise.
- Each faculty member maintains a course file containing course information, schedule, course coverage, teaching strategy, attendance, assignments, tutorials, internal assessment marks, question bank, and calculations of outcome attainment.
- Before the university exams, faculty members regularly assess students' academic performance through internal tests. The exam cell conducts the internal test, and both DQAC and IQAC scrutinise the questions. Based on the series examination results analysis, proper remedial classes are conducted for slow learners.
- The class and course committee meetings are held three times each semester to discuss academic activities, including subject coverage, lab experiments, and add-on courses. The chairman moderates discussions involving department heads, subject-matter experts, and student representatives.
- Feedback from students is taken twice each semester to evaluate faculty performance.
- PTA meetings are held class-wise to discuss student academic progress and other matters.
- Faculty members undergo various FDPs, workshops, and MOOCs to improve their teaching quality.
- In alignment with the institution's vision and mission, the institution follows Outcome-Based Education (OBE) principles that emphasise holistic development of learners, learner-centric



approaches, and evaluation of well-defined learning outcomes.

- IQAC periodically reviews the curricular, co-curricular, and extracurricular activities scheduled and conducted through internal and external academic audits and provides proper advice to improve their quality.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

## 1.2 Academic Flexibility

### 1.2.1

**Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)**

**Response:** 16

File Description	Document
List of students and the attendance sheet for the above mentioned programs	<a href="#">View Document</a>
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Evidence of course completion, like course completion certificate etc. Apart from the above:	<a href="#">View Document</a>

### Other Upload Files

1

[View Document](#)

### 1.2.2

***Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years***

**Response:** 15.93

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
124	58	1	28	23

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 1.3 Curriculum Enrichment

### 1.3.1

*Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum*

#### Response:

VISAT Engineering College follows the curriculum of APJ Abdul Kalam Technological University, which strongly emphasises incorporating cross-cutting issues to foster a deep commitment to social principles and sustainable practices among its students. The curriculum integrates professional ethics, gender empowerment, environmental consciousness, sustainability, and human values into educational programs to nurture well-rounded engineers who can positively contribute to society.

#### Professional Ethics

The institution recognises the pivotal role of instilling professional ethics in all students. Understanding that ethical behaviour is essential for engineers to maintain public trust and uphold the integrity of their profession, the curriculum offers a course on professional ethics for second-year engineering students. In addition, the college IQAC unit provides students with practical experience, preparing them to address ethical challenges they may encounter in their careers.

#### Gender Empowerment

The curriculum offers two courses on gender empowerment for second-year engineering students. VISAT Engineering College actively promotes gender equality and women's empowerment in engineering. The curriculum provides a course for second-year engineering students to comprehend the importance of gender empowerment. Moreover, the college has been celebrating International Women's Day on March 8, underscoring the college's commitment to gender empowerment.

#### Environment

VISAT Engineering College is dedicated to addressing environmental challenges and preparing its students to be environmentally conscious engineers. The curriculum offers fifteen courses for second, third, and fourth-year engineering students. In addition, the NSS and NCC units of the college conducted

various programmes for students to understand their commitment to the environment. Through these initiatives, the college aims to educate the next generation of leaders to prioritise the environment in their future endeavours.

### Sustainability

VISAT Engineering College is dedicated to addressing sustainable challenges and preparing its students to know sustainable practices. The curriculum includes fifteen courses on sustainable engineering practices for second, third and fourth-year engineering students. Moreover, the IEDC Cell of VISAT Engineering College provides programs that envisage the importance of sustainability.

### Human Values

VISAT Engineering College acknowledges the significance of human values in shaping engineers with technical competence and a solid moral compass. The college offers three courses on human values for second-year engineering students, focusing on moral and ethical values. Moreover, the college's NSS and NCC units engage in charitable activities toward society, involving students in fostering teamwork and human values. By prioritising human values, VISAT Engineering College aims to develop engineers who positively contribute to society's well-being. Faculty, staff, and administrators are encouraged to be role models by promoting respect, fairness, and empathy in daily interactions.

VISAT Engineering College's commitment to integrating cross-cutting issues into its curriculum reflects its vision of producing socially responsible engineers. Through these concerted efforts, VISAT Engineering College creates a sustainable, inclusive, and ethical engineering community that upholds social principles and values.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

### 1.3.2

**Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)**

**Response:** 93.59

#### 1.3.2.1 Number of students undertaking project work/field work / internships

Response: 219

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 1.4 Feedback System

### 1.4.1

*Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website*

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	<a href="#">View Document</a>
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	<a href="#">View Document</a>
Action taken report on the feedback analysis	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	<a href="#">View Document</a>

## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1

##### Enrolment percentage

**Response:** 20.14

##### 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
110	72	23	32	53

##### 2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
240	300	300	300	300

#### File Description

#### Document

Institutional data in the prescribed format

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

#### 2.1.2

*Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years*

**Response:** 48.57

##### 2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
39	49	11	26	28

### 2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
60	75	60	60	60

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	<a href="#">View Document</a>
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule ( Translated copy in English to be provided as applicable)	<a href="#">View Document</a>

## 2.2 Student Teacher Ratio

### 2.2.1

**Student – Full time Teacher Ratio  
(Data for the latest completed academic year)**

**Response:** 6.69

## 2.3 Teaching- Learning Process

### 2.3.1

**Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process**

**Response:**

## **Introduction**

VISAT Engineering College has developed a learning environment that gives students the best learning experience. Since implementing outcome-based education (OBE), faculty members have employed more student-centred learning techniques despite traditional teaching methods. Further, the teaching-learning process is facilitated by ICT-enabled tools incorporating students' active participation.

The following are the teaching-learning methodologies adopted by faculty members to improve the learning experiences:

### **Experiential Learning**

Experiential learning provided by the college enhances students' educational experiences, improving retention of knowledge and preparing them for a better future. Experiential learning involves participating the learners in activities inside and outside the classroom to develop active learning skills. The actions taken to encourage experiential learning are listed below.

- Industrial and Field Visits
- Internships
- Laboratory practices
- Socially Relevant Projects
- Add-on Courses

### **Participative Learning**

Participative learning promotes active engagement and collaborative and analytical thinking skills among students. Through these practices, students participate in hands-on learning rather than passive lectures or readings. Participative learning methodologies followed in the institution enhance academic performance and strengthen essential life skills, such as effective communication and teamwork, that are valuable beyond the classroom. The following activities are the participatory learning methods, strategies, and techniques to engage students in hands-on activities.

- Interactive workshops and seminars
- Technology-based learning
- Quiz competitions
- Tech fest participation
- Group Discussions
- Debates
- Peer Learning
- Roleplay
- Mini projects
- NPTEL courses
- Flipped classroom
- Concept mapping

### **Problem-Solving Methodologies**

Problem-solving skills in students are encouraged by conducting tutorial classes for core subjects where

the students can explore complex concepts in more detail, leading to a better understanding of the material. Project-based learning is a problem-solving approach through which the students are encouraged to develop solutions or create projects that address unidentified problems or challenges. This method helps students to prepare for real-life situations where problems may have multiple solutions or require a novel approach.

Student-centric learning is facilitated using various ICT tools, which enhance accessibility and allow students to access educational resources from anywhere, fostering their learning experiences. The faculties of VISAT use different ICT tools, including projectors, smart televisions and other online tools for class presentations and demonstrations. There are class-wise WhatsApp groups and group emails under the surveillance of group advisors through which the academic well-being of the students is ensured.

The college's experiential learning, participative learning, and problem-solving methodologies play an integral role in shaping a well-rounded and effective educational experience. These approaches transform traditional teaching methods into student-centric approaches and offer students the opportunity to actively engage with their studies, foster critical thinking, and prepare for the complexities of the real world.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1

#### Percentage of full-time teachers against sanctioned posts during the last five years

**Response:** 100

#### 2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
35	35	31	31	33

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>



**2.4.2**

*Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)*

**Response:** 5.45

**2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
6	2	0	0	1

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	<a href="#">View Document</a>
Institution data in the prescribed format	<a href="#">View Document</a>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

**2.5.1**

**Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient**

**Response:**

### **INTERNAL ASSESSMENT MECHANISM**

The institution emphasises transparent and effective internal assessment procedures that are in accordance with academic standards. To achieve this, several key strategies have been implemented.

### **Academic Calendar**

An academic calendar is prepared for each semester following university guidelines. It provides comprehensive information about internal assessments and other academic events, ensuring students, parents and staff are well informed.

## **Question Paper Preparation and Standardization**

Faculty members individually create two internal examination question papers following IQAC guidelines. The Departmental Quality Assurance Committee (DQAC) reviews these papers to ensure academic standard compliance. Once approved, the IQAC conducts additional quality assurance and aligns the question papers with educational standards before forwarding them to the Examination Cell.

### **Roles of Internal Exam Cell**

The college's internal exam cell is responsible for creating notices that detail exam logistics, including dates, seating arrangements, and staff duty lists. Verified question papers from the IQAC are provided to the exam cell and printed on-site for distribution.

### **Evaluation Process**

Assessment for theory subjects includes two series tests. Students missing exams for valid reasons can take retests at the end of the semester. The process adheres to university guidelines, with faculty using predefined answer schemes. Results are communicated with the students and their parents.

### **Laboratory Classes**

Practical classes are conducted in group collaboration and evaluation through practical demonstrations, viva voce examinations, record completion, continuous assessment and a final internal examination carried out in the same form as the university external lab exam.

### **Seminars and Projects**

Seminars and projects at the university adhere to established norms and are evaluated by a panel of assessors for individual groups, ensuring transparency in grading. The project evaluation extends across two semesters, following university guidelines, with preliminary assessments in the seventh semester and final evaluations in the eighth semester, involving external experts to maintain transparency.

## **EXTERNAL ASSESSMENT MECHANISM**

The university guarantees transparency and compliance with academic standards through external assessments. Detailed examination information will be published well in advance. Question papers are securely delivered to colleges two hours before the exam, with access controlled by specific passwords and OTPs. A university-appointed observer ensures exam integrity and a centralised committee conducts fair, double-blind evaluations, with online systems recording and publishing validated results accurately.

## **GRIEVANCE REDRESSAL MECHANISM**

The institution has established a transparent, timebound, efficient grievance redressal system for internal and external examination-related grievances.

### **Institutional Level**

Internal examination grievances are promptly addressed at the departmental level. A hierarchical

approach is followed, starting with the faculty advisor, escalating to the Head of the Department (HOD), and potentially involving the grievance committee or the principal.

### University Level

The university is committed to a fair and transparent examination process. A robust Exam Grievance Redressal Mechanism promptly resolves concerns, providing students with a structured avenue for voicing issues, ensuring accountability, and maintaining examination integrity. Students can address their concerns through the college, which may submit grievances to the university or via personal emails.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

## 2.6 Student Performance and Learning Outcomes

### 2.6.1

*Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website*

#### Response:

VISAT implemented the OBE framework to achieve all twelve program outcomes through course outcomes. The institution has adopted Outcome-Based Education (OBE) in its teaching, learning, and evaluation process, incorporating the Program Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs) for the planning of courses, content delivery, and assessment procedures. These outcomes for all the programs are stated and displayed on the website.

#### Program Outcome (POs):

Program outcomes are narrower statements that describe what students are expected to demonstrate by the time of graduation. The National Board of Accreditation has defined twelve POs or Graduate attributes. These POs are common for all undergraduate engineering programs in India. POs are specific, measurable and achievable. All the students are aware of these POs.

#### Program Specific Outcome (PSOs)

Program Specific Outcomes (PSOs) are statements that describe what the graduates of a specific program in engineering shall be able to do at the end of their graduation. PSOs are program-specific and measure a graduate's competence in their field. Each branch of Engineering will have a different set of PSOs. The Department Advisory Board finalises Program Specific Outcomes after receiving suggestions and feedback from the stakeholders.

#### Course Outcome (COs)

Course outcomes (COs) outline students' expected skills, knowledge, and abilities after a course, which addresses POs and PSOs. They are written by professors with substantial expertise in their respective fields.

The institution has implemented proper assessment and evaluation mechanisms to analyse the outcomes. The gap between the set targets and the actual outcomes is calculated, and remedial action to fill the gap is implemented through technical invited talks, industrial visits, internships, workshops, innovative projects, and assignments.

### **Communication of POs, PSOs and COs for Academic Excellence**

The POs, PSOs and COs are disseminated to all stakeholders by exhibiting them on the institution's website, in the main corridor, entrance, laboratories and departments, and in Brochures. Additionally, POs and PSOs were introduced during the induction programs for new batches. At the beginning of each course, the respective faculty member discusses Cos and the evaluation parameters of each course's outcomes. Furthermore, internal exam question papers include explicit connections to the relevant COs for each question for enhanced clarity.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>

## **2.6.2**

*Attainment of POs and COs are evaluated.*

**Explain with evidence in a maximum of 500 words**

**Response:**

COs' attainment is evaluated through a proper assessment mechanism, and POs' attainment is calculated using CO-PO mapping levels. To facilitate attainment calculation, licensed Ezygo software is used.

### **Assessment Process of COs**

The assessments are mainly categorised into two: Direct and Indirect assessment.

#### **Direct assessment**

In this, the student's performance is evaluated through an internal assessment mechanism that includes internal tests, assignments, seminars, projects, lab experiment evaluation, etc., and external assessment is through the end-semester examinations conducted by the University.

#### **Indirect assessment:**

Indirect assessment is calculated from course-end survey reports collected at the end of every course.

The attainment level of the courses is taken based on the following criteria:

SI No:	Assessment Methods	Assessment Tool	Target Percentage	Attainment Level criteria in % of Students(s)	Attainment Level
1	Direct/Indirect	Internal Exams/ Assignments/University Exams/Course end Survey	50	$S < 50$	0
				$50 \leq S < 65$	1
				$65 \leq S < 80$	2
				$S \geq 80$	3

CO<sub>i</sub> attainment from direct assessment (D<sub>i</sub>) (For i, j = '1' to 'n')

Where A<sub>i</sub> is the CO<sub>i</sub> attainment level of internal tests

B<sub>i</sub> is the CO<sub>i</sub> attainment level of assignments

C<sub>i</sub> is the CO<sub>i</sub> attainment level of University Exams

Final attainment CO<sub>i</sub>, i.e., (E<sub>i</sub>), is computed by combining direct assessments, D<sub>i</sub>, (80%) and indirect assessment, X<sub>i</sub>, (20%).

$$E_i = 0.8 * D_i + 0.2 * X_i$$

### POs & PSOs Attainment

Using the already mapped CO-PO/PSO matrix and CO attainment level (E<sub>i</sub>), average PO/PSO attainments are calculated.

PO attainment (PO<sub>j</sub>) corresponding to CO<sub>i</sub> can be calculated as follows:

$$PO_{ij}(A) = E_i * (CO_i - PO_{ij} \text{ mapping}) / 3$$

(PO Attainment(PO<sub>j</sub>) is calculated by dividing the sum of PO<sub>ij</sub>(A) by the number of non-zero PO<sub>ij</sub>(A) entries.)

The formula is given below:

$$\text{PO Attainment (PO}_j) = (\text{sum}(i='1' \text{ to } 'n') PO_{ij}(A) / (\text{No. of non - zero } PO_{ij}(A)))$$

Using the above equation, the PO attainment of one course can be calculated. The Direct PO/PSO attainment of the entire course in a program can be determined by averaging the PO/PSO attainment of

all the courses in the program. The program exit survey determines indirect PO/PSO attainment. A weightage of 80% for direct attainment and 20% for indirect attainment is used to calculate a graduate batch's final PO/PSO attainment. The obtained attainment values are compared with the targeted/expected ones to find the gaps. The corresponding departments can initiate various measures to fill these gaps for the next batch of students.

### Gap Analysis and Action taken to improve the Target level:

A detailed gap analysis gives the necessary corrective actions to be implemented if attainment falls below targets. Additional tutorials, assignments, technical invited talks, value-added courses, internships, projects and industrial visits are among the corrective measures. If the achieved PO/PSO levels are greater than the expected value, the later one can be increased, and this cumulative process leads to continuous improvement. It can attain a batch of skilled graduates.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

### 2.6.3

#### Pass percentage of Students during last five years (excluding backlog students)

**Response:** 63.05

#### 2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
12	12	57	97	153

#### 2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
31	51	119	134	190

<b>File Description</b>	<b>Document</b>
Institutional data in the prescribed format	<a href="#">View Document</a>
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	<a href="#">View Document</a>
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	<a href="#">View Document</a>

## 2.7 Student Satisfaction Survey

### 2.7.1

**Online student satisfaction survey regarding teaching learning process**

**Response:** 3.97

<b>File Description</b>	<b>Document</b>
Upload database of all students on roll as per data template	<a href="#">View Document</a>

## Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

#### 3.1.1

*Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)*

**Response:** 7

**3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
7	0	0	0	0

#### File Description

#### Document

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

### 3.2 Innovation Ecosystem

#### 3.2.1

**Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident**

**Response:**

VISAT fosters innovation, knowledge transfer, and student development through IEEE, IIC, and IEDC collaborations alongside departmental initiatives. The institution actively promotes patent filing and publication to enhance the learning infrastructure for comprehensive undergraduate growth.

#### **IEEE (Institute of Electrical and Electronic Engineers)**

VISAT's IEEE fosters innovation and collaboration through professional and educational activities, enhancing resourcefulness and problem-solving. Dr. T.D. Subash, VISAT's R&D Dean, was recently elected to the IEEE Photonics Society's Board of Governors. Various active IEEE chapters are listed below:

- IEEE Photonics Society Student Chapter



- IEEE SIGHT Student Chapter
- IEEE Biometrics Council Student Chapter
- IEEE Nanotechnology Council Student Chapter
- IEEE Sensors Council Student Chapter
- IEEE Council on Electronic Design Automation
- IEEE Computer Society Students Chapter

VISAT'S IEEE hosted the International IEEE 5NANO 2023 conference cosponsored by AICTE and SERB, focusing on nanoelectronics, nanophotonics promoting papers were presented.

### **IIC (Institution's Innovation Council) and IEDC (Innovation and Entrepreneurship Development Centre)**

VISAT's IIC and IEDC collaborate to nurture innovation and entrepreneurship in academia, offering students a platform to develop entrepreneurial skills and organise activities with IIC members, raising awareness of the latest innovations, including the YUKTI-National Innovative Repository, where they were allowed to transform their ideas.

### **R&D Cell**

VISAT's Research and Development Cell has produced valuable innovations such as the "IoT Self-Charging E-Rickshaw for Differently Abled Persons". VISAT's faculty members and students have also taken the initiative to research and file patents such as Properties of Modified Hollow Laterite Cement Bricks, Permeable Pavement with Ceramic Tile Wastes, etc.

### **NASA Space Apps Challenge**

VISAT Engineering College hosted students from various schools and colleges participating in NASA's Space Apps Challenge Bootcamp. At NASA Space Apps Thrissur, students showcased scientific creativity.

### **Indian Knowledge System**

VISAT Engineering College recently began the Indian Knowledge System initiative, which aims to create a database of individuals and organisations connected to Education and Research all over India.

### **NPTEL (National Programme on Technology Enhanced Learning)**

NPTEL courses, a government initiative, provide free online education through video lectures and materials. VISAT promotes student and faculty enrollment to facilitate continuous learning and access to various disciplines of their interests.

**Add-on Courses**

VISAT offers exclusive add-on courses such as Python and AUTOCAD, enriching students' education and providing opportunities to explore coding and design, enhancing their skills.

**IPR Cell**

VISAT Engineering College conducted the IPR awareness session as a part of the National Intellectual Property Awareness Mission (NIPAM) 2.0. The seminar was organised based on Intellectual Property Rights (IPRs) such as patents, designs, trademarks, and copyrights.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

**3.2.2**

*Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years*

**Response:** 33

**3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
19	2	7	1	4

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

**3.3 Research Publications and Awards****3.3.1**

**Number of research papers published per teacher in the Journals notified on UGC care list during the last five years**

**Response:** 0.37

### 3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
4	4	5	4	9

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	<a href="#">View Document</a>
Link to re-directing to journal source-cite website in case of digital journals	<a href="#">View Document</a>
Links to the papers published in journals listed in UGC CARE list or	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 3.3.2

#### Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

**Response:** 0.04

#### 3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1	0	2	0	0

File Description	Document
List of chapter/book along with the links redirecting to the source website	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	<a href="#">View Document</a>

### 3.4 Extension Activities

#### 3.4.1

**Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.**

**Response:**

The VISAT Engineering College takes pride in having a meticulously planned programme of wide-ranging initiatives to respond empathetically and constructively to the current social issues in the community. To enhance the student's social responsibility in a morally and ethically grounded setting, we have carefully considered and devised a plan to tackle local social problems and provide long-term charitable assistance to the poor and disenfranchised members of society.

The sole aim of the VISAT National Service Scheme Units 325 and 570 is to provide hands-on experience to young students in delivering community service. The VISAT Engineering College NSS Units contribute to the nation's development process by organising and conducting extension activities in the neighbourhood community, which in turn is beneficial for society as well as for the holistic development of the students. The various programs organised by NSS units are as follows:

- Rebuild Kerala NSS Special Camp
- Charity Assistance To Mariyalayam Old Age Home
- National Tourism Day - Clean-Up Campaign
- Energy Conservation Rally
- Harithamithrom Digital Program Awareness And Survey
- Painting Waiting Shed
- Ayurveda Medical Camp
- Blood Donation Camp
- Road Maintenance Work

In line with the Central Government's Swachh Bharat Mission and Swachhta Pakhwada schemes, as well as the numerous innovative programmes for India's youth, the VISAT Engineering College has an active National Cadet Corps 16 BN NCC Kottayam under the directorate of Kerala And Lakshadweep which aims at tackling the socio-economic issues faced by marginalised citizens in both rural and urban areas. The VISAT NCC Unit organised various programmes such as:

- Swachh Rail Swachh Bharat Campaign Vaikom Railway Station
- Swachh Rail Swachh Bharat Campaign Kanjiramattom Railway Station
- Patriotic Run
- Awareness Campaign On The Adoption Of 'UTS' Mobile Application
- World Environmental Day Celebrations - Clean Up Campaign
- Swachhata Pakhwada - Piravam Railway Station
- Swachhata Pakhwada - Kanjiramattom Railway Station

In addition to the NSS and NCC, the VISAT Engineering College has an active VISAT Students' Union, where the members are dedicated to social and organisational activities. The students of VISAT have improved their technical and intellectual awareness through their volunteer work in various programmes.

The students have taken on several social necessities associated with the everyday lives of those living in the areas, and they have done so with an incredible feeling of devotion to handle extremely urgent life-saving issues. The VISAT Students' Union organised programmes such as:

- COVID-19 Vaccination Awareness Campaign
- Foot Powered Sanitizer Dispenser Awareness Campaign
- Free Food Kit Supply
- Anti-Drug Awareness Campaign Koothattukulam
- Anti-Drug Awareness Campaign Ramapuram
- BIS Care Mobile Application Awareness Campaign

As an outcome of the activities conducted by the NSS, NCC and VISAT Students' Union, the volunteers understood the values of honesty, truthfulness, self-sacrifice, perseverance and hard work, and participating in community development and other social programmes. Moreover, they were able to become a social leader and an efficient administrator.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

### 3.4.2

#### **Awards and recognitions received for extension activities from government / government recognised bodies**

##### **Response:**

VISAT Engineering College has established itself as prominent in providing the faculties and students through its extension activities.

- VISAT Engineering College received the SEEM National Energy Management Silver Award for Educational Institutions on September 16, 2022.
- VISAT has proved its mettle by receiving the most prestigious Edu. Excellence Award 2022 from the honourable Minister for Higher Education Kerala, Prof. Dr R. Bindu. Chairman of VISAT Engineering College, Sri. Raju Kurian received this covetable award on 26th April 2022.
- VISAT Engineering College was awarded the Sir. C.V. Raman Excellence Award by the Overseas Resident Malayalees Association (ORMA) International Philadelphia, USA. Sri Roshy Augustine, the Honourable Minister for Water Resources, Govt of Kerala, handed the award to the College.
- Parvathy Anil Kumar (S2 CSE) was recognised for participation in the second round of the ORMA Inter-continental Speech Competition.
- VISAT Engineering College has obtained the esteemed ISO 2018:21001 certification for its

exemplary implementation of an Educational Organizations Management System (EOMS).

- Sonu Sunil, a final-year student in the Electronics and Communication department, received the runner-up award for the project "IoT-based self-charging rickshaw for differently-abled persons" in SRISHTI 2023.
- Dr Anoop KJ (KTU-F37059), Principal of VISAT Engineering College, is a recognised and approved Research Supervisor of the affiliated University. In recognition of IEEE, Dr Anoop KJ has been elected to the ‘Senior Member’ grade.
- Dr T.D Subash (KTU-F30452), Professor, VISAT Engineering College is recognised as an approved Research Supervisor of the affiliated University. Dr. T.D. Subash, Dean (R&D) is the first Indian to be elected to the Board of Governors of the IEEE Photonics Society.
- Appreciation for Excellence was received by Prof. Rahul K.R. who successfully coordinated and facilitated the PFMS Workshop at Munnar, Kerala.
- Certificate of Appreciation was awarded to Smitha Sunil of VISAT Engineering College for being the evaluator of the YIP 5.0 district-level evaluation at Emmanuel’s Higher Secondary School, Kottayam, organized by Kerala Startup Mission (KSUM), in association with Kerala Development and Innovation Strategic Council (KDISC).

Some of the notable recognitions by the NSS volunteers of VISAT Engineering College for their remarkable services are:

- Waiting shelter painting at Mutholapuram, which took place on 15/10/2023.
- Road maintenance work from Elanji to Koorumala, which took place on 14/04/2023.
- NSS volunteers of VISAT Engineering College for their exemplary service during the Koorumala View Point cleaning drive, organised as part of National Tourism Day 2021.
- The house wiring project in Elanji Grama Panchayat Ward 2 on 18/01/2023.
- The extension activity of wiring the Nellorupara Anganwadi took place on May 2nd, 2023."
- The effective plan for the Life Mission Project by VISAT Engineering College. This initiative is a significant step forward in improving the quality of life and living conditions for the residents of Elanji Panchayat.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

**3.4.3**

*Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.*

**Response:** 18

**3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
8	7	1	1	1

<b>File Description</b>	<b>Document</b>
Photographs and any other supporting document of relevance should have proper captions and dates.	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	<a href="#">View Document</a>

**3.5 Collaboration****3.5.1**

*Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.*

**Response:** 23

<b>File Description</b>	<b>Document</b>
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	<a href="#">View Document</a>
List of year wise activities and exchange should be provided	<a href="#">View Document</a>
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>



## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

#### 4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching – learning, viz., classrooms, laboratories, computing equipment etc
- ICT – enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

**Response:**

#### Physical Facilities for Teaching & Learning

VISAT Engineering College, Elanji, sits on 7.53 acres of land. The institution has good infrastructure with physical buildings, machinery, equipment, books and other learning resources. The college offers seven graduate programs. Sufficient classrooms, tutorial rooms and seminar halls are available for conducting these courses.

Some of the major facilities which are being used for effective teaching-learning are furnished below:

- The institute's campus occupies 7.53 acres of land with a total built-up area of 14313 sq.m.
- The campus features 19 classrooms, 21 laboratories, and two central workshops for teaching and learning.
- the college has one Principal room, Director Room, Registrar's office, Administrative office, Office room, Examination rooms with CCTV facility, Seminar hall with 2 LCD projectors, Library, Reading room, staff common rooms, ladies hostel, men's hostel, ladies common room, IQAC room, student seating area in the garden, one Cafeteria.
- The institution has 120 computers connected by LAN and has Wi-Fi access.
- Physical infrastructure encompasses computer labs, other engineering laboratories, and a library.
- The college provides eight laptops, one photocopier, one scanner, 23 printers, three projectors, and 30 CC cameras for surveillance.
- The institution has an active Training and Placement Cell headed by a qualified and experienced Placement Officer. Department-level coordinators are identified in each department to coordinate the activities of the placement cell.
- The institution has one library with 17500 books, e- journals and e-books.
- The institution provides hostel facilities for both men and women. The women's hostel has 32 rooms and a capacity of 100, and the men's hostel has 32 rooms and can accommodate 100 students. There is a well-furnished food lab and a canteen on campus that serves hygienic food.
- The college also provides a first aid facility and health care room and has fire extinguishers installed in laboratories and administrative offices.
- The Institution provides transportation facilities for both students and staff.

### Facilities for Cultural Activities

The college is renowned for its diversity and hosts various cultural programs throughout the year, utilising an open-air hall.

### Facilities for Sports and Games

Sports and games are essential for human life and keep people physically and mentally strong. In these spheres, special attention is given to the institution. A playground is available on the college campus, with provisions for planning different games, including outdoor games, volleyball, football, and cricket. The annual sports event is held every year. Prizes and trophies are awarded to the successful participants in the annual sports meet. To promote good health and fitness, the college offers a gymnasium facility.

### Facilities for Yoga

Our college typically offers a space for students, staff and faculty members to practice yoga in connection with International Yoga Day and other occasions. Trained and experienced yoga instructors are giving classes for students and staff members. They go through proper alignment, breathing techniques, meditation practices, yoga asanas, etc.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

#### 4.1.2

*Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years*

**Response:** 23.49

**4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
61.21	71.21	0.09	0.31	1.77

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

### 4.2.1

*Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students*

#### Response:

The college library is over a 432 sq.m area, including a reading room and a collection of books, journals, and periodicals. The library is fully automated with an integrated library management software, KOHA and the functions are fully integrated with the barcode system. The status of a book can be identified through the Online Public Access Catalogue (OPAC). Search options based on author, title, and subject are available. The library has different infrastructure sections for regular administration, i.e. Issue-Return, Stacking Area, Newspaper and Periodical Section, and Property Counter. Computers, printers, and barcode scanners are available for in-house operations. The reading room of the college library has a seating capacity of 60, where students can read, write, and prepare their course materials. A reference section is also located along with the reading room. Reprographic services are provided as part of the library. The students can borrow three books from the library at a time. The books are lent for 14 days, which can be renewed further, and a faculty member can borrow five books for one month. The library also conducts quiz programmes, book reviews, essay writing competitions, etc., and observes essential days. The library can be accessed from 8.30 AM to 5.00 PM during the working days.

#### Library Automation

##### Software Details

- Name of software: KOHA
- Operating System: Ubuntu 22.04
- Nature of automation (fully or partially): Fully Automated
- Version: KOHA Version 12.11
- Year of Automation: 2011
- Library Link: 127.0.0.1:8080
- OPAC Link: 127.0.0.1

#### Library Software Modules

The library software has many modules, and it serves different purposes; they are listed below,

- Acquisition
- Circulation - Issue/Return/Renewal
- Catalogue
- Advanced Search -Book Search
- Patrons - Member Registration (Staff/Student)

The acquisition and cataloguing modules of the library management system enable the librarian to select and buy books and other resources.

### **Circulation**

The circulation module includes checking out library materials to library users, renewing borrowed items, and checking in returned materials.

### **Library Facilities**

- The library functions are fully computerised for issuing, searching and returning books.
- All the books are barcoded, and barcode scanners are used for book transactions.
- The searching and renewal are made more accessible to circulate with the help of a bar-code scanner.
- The library has an internet connection.

### **Subscription To E-Resources**

The college library has various institutional memberships for e-resources. The library has a membership (Membership No. IM-9075) in the Developing Library Network (DELNET), including e-resources and e-journals, which provide access to the Union Catalogue of books & journals and Interlibrary Loan. It provides access to over 3.7 crore catalogue records of books, Journals, and Articles. The library has a membership in the National Digital Library of India (NDLI), sponsored and mentored by the Ministry of Education, Government of India, through its National Mission on Education through Information and Communication Technology.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>

## **4.3 IT Infrastructure**

### **4.3.1**

**Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection**

*Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words*

**Response:**

VISAT Engineering College recognises the importance of staying technologically updated to provide an enriching learning experience for teachers and students. The institution focuses on frequent updates to enhance the IT infrastructure in the following areas.

### **Wi-Fi Infrastructure**

Wi-Fi network updations are carried out by upgrading hardware components and increasing bandwidth to accommodate the growing number of devices. Wi-Fi is provided using Ruiji and D-Link access points. Fifteen network switches manage the wired network. The college has three internet connections: a 100 Mbps BSNL leased line connection, a 300 Mbps BSNL broadband connection, and a 125 Mbps Kerala Vision broadband connection. Total bandwidth: 525 Mbps.

### **Network Security**

IT security measures are given much importance to protect against cyber threats. There is a server maintained in the central server room for network connectivity on the campus, an upgraded Sophos firewall through which the internal network and external leased line are routed, and the bandwidth can be effectively allocated and utilised with all the servers and computers.

### **Software and Applications**

VISAT maintains educational software as stipulated in the curriculum to fulfil the student's needs cum support. The college provides packages such as MS Office, Oracle/MySQL, STAAD pro, AutoCAD, TurboC++, Dosbox, MATLAB, Solid Edge, and Edwin XP.

### **Cloud Services**

The institute's faculty uses software such as PowerPoint, video lectures, Google Meet, Zoom, and YouTube for online courses to facilitate the integration of innovative teaching methods and collaborative projects. This allows them to use the latest technology to deliver their lectures and make the learning experience interactive and engaging for students.

### **Classroom Technology**

Seven lecture halls have LCD facilities and Android smart TVs with sufficient internet bandwidth. Modern classroom technology encourages student engagement and active participation in lessons.

### **Learning Management Systems (LMS)**

VISAT has a simple LMS to support learning activities and KOHA for library-enabled services. Institutions update KOHA with barcode access, and as far as the accounting domains are concerned, the institution uses an ERP named OXARD ERP effectively. To extend online academic support, the students and staff use the Ezygo App to compute students' marks and academic-related activities.

### **Hardware Upgrade**

The college regularly upgrades hardware components for faster processing, reducing downtime and enhancing IT systems' overall efficiency.

### Mobile Device Support

Students are advised and guided on how to use mobile phones, laptops, and tablets properly.

### Remote Learning Technologies

The remote learning systems for supporting virtual classrooms and video conferencing are regularly monitored by the college for improvements and regular updates in these areas to enhance the quality of remote education and enable interactive and immersive learning experiences.

### User Training and Support

First, to use this institute's IT infrastructure, students and staff are trained to use computers, the Internet, and connected gadgets effectively. The system Division of VISAT will monitor and conduct the overall training.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

#### 4.3.2

#### Student – Computer ratio (Data for the latest completed academic year)

**Response:** 1.95

#### 4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 120

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	<a href="#">View Document</a>
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	<a href="#">View Document</a>

## 4.4 Maintenance of Campus Infrastructure

### 4.4.1

*Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)*

**Response: 72.1****4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
138.50	89.57	20.80	55.88	108.29

<b>File Description</b>	<b>Document</b>
Institutional data in the prescribed format	<a href="#">View Document</a>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	<a href="#">View Document</a>

## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1

*Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years*

**Response:** 75.29

**5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
164	129	160	253	400

#### File Description

#### Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Upload policy document of the HEI for award of scholarship and freeships.

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

#### 5.1.2

*Following capacity development and skills enhancement activities are organised for improving students' capability*

- 1. Soft skills*
- 2. Language and communication skills*
- 3. Life skills (Yoga, physical fitness, health and hygiene)*
- 4. ICT/computing skills*

**Response:** A. All of the above



File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	<a href="#">View Document</a>
Report with photographs on ICT/computing skills enhancement programs	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.1.3

**Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years**

**Response:** 63.65

**5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
222	147	0	250	316

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.1.4

*The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases*

- 1.Implementation of guidelines of statutory/regulatory bodies**
- 2.Organisation wide awareness and undertakings on policies with zero tolerance**
- 3.Mechanisms for submission of online/offline students' grievances**
- 4.Timely redressal of the grievances through appropriate committees**

**Response:** B. 3 of the above

<b>File Description</b>	<b>Document</b>
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	<a href="#">View Document</a>
Proof related to Mechanisms for submission of online/offline students' grievances	<a href="#">View Document</a>
Proof for Implementation of guidelines of statutory/regulatory bodies	<a href="#">View Document</a>
Details of statutory/regulatory Committees (to be notified in institutional website also)	<a href="#">View Document</a>
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	<a href="#">View Document</a>

## 5.2 Student Progression

### 5.2.1

**Percentage of placement of outgoing students and students progressing to higher education during the last five years**

**Response:** 4.73

**5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
5	20	0	0	0

**5.2.1.2 Number of outgoing students year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
31	51	119	133	194

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	<a href="#">View Document</a>
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.2.2

*Percentage of students qualifying in state/national/ international level examinations during the last five years*

**Response:** 1.99

**5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)**

2022-23	2021-22	2020-21	2019-20	2018-19
0	0	0	3	7

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 5.3 Student Participation and Activities

### 5.3.1

**Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years**

**Response: 0**

**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
0	0	0	0	0

File Description	Document
Upload supporting document	<a href="#">View Document</a>
list and links to e-copies of award letters and certificates	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

**5.3.2**

**Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)**

**Response: 4**

**5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
6	4	03	03	4

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

**5.4 Alumni Engagement****5.4.1**

**There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services**

**Response:**

The Institute has a registered Alumni Association for building strong bonds between alumni and the present students. The alumni support the students through interaction, financial funding, guidance and placement. The Alumni Association of the Institute is named VISATAA (VISAT Alumni Association). This is registered under "The Travancore-Cochin Literary Scientific and Charitable Societies Registration Act 1955(act XII of 1955) with registration number EKM/TC/452/2022. The office of VISATAA is on the premises of VISAT Engineering College, Ernakulam, Kerala, India. The mission of the Alumni Association is to foster a mutually beneficial relationship between the Institute and its alumni. Alumni meeting is arranged on the last working day of December every year, either online or offline.

**Affinity to VISAT**

They Stay in touch with VISATAA on Facebook, WhatsApp, LinkedIn, and other platforms. The group is active. These portals provide information on their current situation, market trends, and employment prospects. In addition, alumni associations are essential for inspiring, mentoring, and information sharing with their junior members. The institution is grateful and honoured to have the support of its alumni. In addition to encouraging current students to engage in numerous admirable activities, the graduates are making significant contributions to the social work field. A few more areas that warrant attention and where significant contributions were received include sharing their corporate experience, motivating the students to bridge the gap between academia and industry, and appraising the area's current trends and future scopes by conducting alumni interaction sessions.

**A few more areas that warrant attention and where significant contributions were received include;**

- Share their corporate experience and motivate the students to bridge the gap between academia and industry.
- Appraising the thrust area's current trends and future scopes through alumni interaction sessions.
- Internship Opportunities.
- Placements in their companies.
- Promoting Institution events.
- Supporting Institute Social Responsibilities.

Alumni involvement is crucial in planning various events for their juniors, including Career Guidance Classes, Seminars, Workshops and Motivational Talks. The institution invites alumni to participate in multiple events, as their involvement is advantageous and revitalising. The alumni association makes both monetary and non-monetary contributions.

**Activities and Contributions:**

- One of the Alumni has arranged an MOU with the mechanical department.
- Alumni are included as members of the Board of Studies of all departments. They are invited to college meetings, interact with their teachers, and express their suggestions on curriculum revision.
- Few Alumni gave Guest lecturers to the existing students on contemporary technological developments and career guiding focuses.

Alumni Associations and Department Associations jointly host meetings on campus. Alumni meetings were conducted in December 2018, 2021, and 2022.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

#### 6.1.1

*The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.*

#### **Response:**

Governance is crucial in defining the institute's identity and promoting its growth. The organisation has demonstrated that it harmoniously aligns with the institute's mission and vision. VISAT is an educational venture of the Vinjyan Foundation that started in 2011.

#### **Institute Vision**

To be a nationally recognised centre of excellence in engineering education and research for creating professionally competent and socially committed engineers equipped to meet the developing technological and socio-economic needs.

#### **Institute Mission**

We are committed to

1. Impart technical education through value-based holistic teaching and learning integrating innovative practices.
2. Nurture the practice of real-world problem solving, the spirit of entrepreneurship, and critical thinking among the students.
3. Foster a conducive environment for Research, innovation, and extension services.
4. Develop the potential of human resources to meet the requirements of cutting-edge technology.
5. Prepare all students for successful careers based on a strong moral & ethical foundation.

Governance in tune with the institution's vision and mission signifies a proactive approach. The institution has a strong Governing body. The college has an efficient administrative leadership team with a Director, Principal and Registrar. Academic activities are decentralised, and decisions are made based on discussion in the class committee meetings, department meetings, and college executive council meetings with the principal. The academics are taken care of by various bodies operating in the college, like the college executive council, exam cell committee, anti-ragging committee, discipline committee, and IQAC. VISAT Engineering College embraces the principles of the National Education Policy (NEP) 2020. The institution has expanded programs by introducing B. Com (CA), B. Com (F&T), BBA, and BCA. The institution also encourages the faculty members and students to participate in seminars, workshops, conferences and faculty development programmes. Committed to a value-based education, our curriculum encompasses Universal Human Values, professional ethics, activity hours, soft skills and life skills. The institution encourages students to maintain academic credits within their ABC accounts, promoting credit mobility. The college hosts a sports club, NSS, NCC, music club and more, and various events are organised. As a part of ongoing institutional expansion, the transportation system and the

hostel amenities are also upgraded.

A classical case study event, which depicts the decentralisation and participatory management in VISAT, is described below:

**AICTE, SERB - DST Sponsored 2023 IEEE International Conference on Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience & Nanotechnology (5NAN02023) hosted by IEEE Photonics Society Student Chapter VISAT Engineering College, Ernakulam, Kerala, India held on 27th & 28th April 2023**

The IEEE conference was inaugurated by Dr Manpreet Singh Manna, pro-Vice Chancellor, Chandigarh University, Mohali, Punjab (Former Director, AICTE) and Dr Shrishail Kamble, Assistant Director, AICTE, was the Guest of honour at the conference. The various committees and their members, comprising the Principal, Deans, Registrar, HODs, Director, Staff members and students, facilitated the smooth functioning of the event.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 6.2 Strategy Development and Deployment

### 6.2.1

*The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc*

#### Response:

The institutional bodies of VISAT Engineering College are effective and efficient. This is evident from the following:

**Policies:** The college has a clear and well-defined set of policies that guide the functioning of all its institutional bodies. These policies are regularly reviewed and updated to ensure they are relevant and effective.

**Administrative setup:** The college has a well-organized administrative structure responsible for the institution's day-to-day running. This setup is efficient and responsive to the needs of the students and staff members.

**Appointment and service rules:** The college has transparent and fair appointment and service rules that align with the institute's best practices. These rules ensure that people are appointed to the right positions and fairly compensated for their work.

**Procedures:** The college has well-defined policies for all its activities. These procedures are clear and



easy to follow, which helps to ensure that work is done efficiently and effectively.

**Deployment of strategic plan:** The college has a specified strategic plan that guides its development. This plan is regularly reviewed and updated to align with the institution's changing needs. The effective and efficient functioning of VISAT Engineering College's institutional bodies is a key factor in its success. These bodies work together to ensure that the college provides a high-quality education to its students and prepares them for successful careers. In addition to the above, the college has several other initiatives to ensure the effective and efficient functioning of its institutional bodies. These initiatives include:

**Regular training and development programs for faculty:** The college provides faculty development programs for staff to help them improve their skills and knowledge. This helps ensure all staff members can perform their duties effectively and efficiently.

**Culture of innovation and creativity:** The college encourages a culture of innovation and creativity among students. This helps to ensure that the college is always moving forward and adapting to the changing needs of the industry.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Institutional perspective Plan and deployment documents on the website	<a href="#">View Document</a>

## 6.2.2

*Institution implements e-governance in its operations*

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	<a href="#">View Document</a>
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	<a href="#">View Document</a>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	<a href="#">View Document</a>

## 6.3 Faculty Empowerment Strategies

### 6.3.1

**The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression**

#### **Response:**

VISAT aims to shape its students into globally responsible, technologically adept, efficient, and creative citizens. The institution has a team of well-experienced faculty members dedicated and committed to delivering quality education. The college also provides effective welfare measures for both teaching and non-teaching staff.

#### **Welfare measures**

- Medical insurance for staff.
- Self-appraisal system for promotion.
- Provision of college vehicles for medical emergencies.
- Provides maternity leave.
- Vacation leave for staff members.
- Free college transportation to staff members.
- Toastmasters training for staff for communication, leadership, and confidence.
- Recreational facilities like badminton, football and cricket.
- Provides hostel accommodation facility to faculty free of charge.
- Advance salary for staff when an urgent matter arises.

#### **Material Benefits for teaching and Non-teaching staff**

1. Office space for teaching and non-teaching staff on the campus.
2. Two sets of uniforms for the college housekeeping staff each year.
3. Free Wi-Fi connection facility to all staff within the campus.

#### **Self Appraisal System**

A self-appraisal system can be a valuable tool for faculty to assess individual progress, identify areas for improvement, and foster self-reflection. The appraisal system constructed on three main categories, they are:

Category 1 - Teaching, learning and valuation-related activities.

Category 2 - Co-curricular, extension activities, self-development activities.

Category 3 - Research publication, research and innovation funds

Staff members' accomplishments in the above categories form the basis for the self-appraisal evaluation for a calendar year. In January, staff members submit appraisal forms and documents detailing their

accomplishments. Within March, the management will shortlist staff eligible for appraisal, and April will precede the faculty increment. Based on the three categories mentioned above will be the prime consideration for giving increments to staff.

### **Self-development activities for Staff for their development**

Self-development activities for Staff play a crucial role in engineering students' overall growth and success. The staff members are engaged in various activities to enhance their self-development.

- Attending workshops and seminars related to their field of study to stay updated on the latest trends and technologies.
- Participating in hands-on technical sessions to enhance their practical skills.
- Enrolling in online courses and certifications to gain additional knowledge in specific areas of interest.
- Join or establish learning communities within the institution or online platforms where teachers can share ideas, resources, and best practices.
- Engage in reflective practices to assess and improve teaching methods.
- Regularly evaluate and update teaching strategies based on student feedback and self-reflection.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>

### **6.3.2**

#### **Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**

**Response:** 0

#### **6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
0	0	0	0	0

<b>File Description</b>	<b>Document</b>
Policy document on providing financial support to teachers	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	<a href="#">View Document</a>
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	<a href="#">View Document</a>

### 6.3.3

*Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years*

**Response:** 47.67

**6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
28	27	20	23	25

**6.3.3.2 Number of non-teaching staff year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
18	20	18	19	18

<b>File Description</b>	<b>Document</b>
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of the certificates of the program attended by teachers.	<a href="#">View Document</a>
Annual reports highlighting the programmes undertaken by the teachers	<a href="#">View Document</a>

## 6.4 Financial Management and Resource Mobilization

### 6.4.1

**Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)**

**Response:**

#### **Mobilisation of Funds**

The fund mobilisation aims to enhance and expand infrastructure and acquire additional equipment for the overall improvement of the institution. The allocated funds are primarily utilised to cover teaching and non-teaching staff salaries. The institution gets funds from government agencies like AICTE and DST-SERB to conduct IEEE international conferences. The institution fund is used to construct and maintain the campus's physical and academic infrastructure. The other sources of funds come from agencies/projects like IEDC, PMKVY and NSS.

#### **IEDC (Innovation and Entrepreneurship Development Centres)**

VISAT engineering college has an active IEDC cell. IEDC funds are mainly used for conducting IEDC summits, workshops, bootcamps, ideathons and hackathons.

#### **PMKVY (Pradhan Mantri Kaushal Vikas Yojana)**

VISAT Engineering College has conducted five PMKVY courses: Solar PV Installation, Automotive Machinist, Assistant Technician-Computer, Electrical Technician, and Hardware Associate Construction Painter & Decorator.

#### **NSS (National Service Scheme)**

VISAT Engineering College has an active aided NSS unit. NSS funds are mainly used for conducting NSS camps, social works, refreshments for students, and student travel expenses.

## **IEEE (Institute of Electrical and Electronics Engineers)**

VISAT Engineering College has an IEEE students' chapter. The institution has received IEEE Seed Grants of Rs 4/- lakhs from AICTE and SERB (Science and Engineering Research Board) grant of Rs 3 lakhs/- for conducting the 2023 IEEE International Conference on Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience & Nanotechnology (5 NANO 2023). The institution received an IEEE Photonic Society seed grant of Rs 206600/- in Jan 2024 and was sanctioned for an amount from DST.

### **Optimal Utilization of Resources**

The funds allocated to the institution have been well utilised for:

- Maintenance of workshop and laboratory equipment
- Library and internet facilities
- Student extracurricular activities
- Conducting workshops
- Conducting international conferences
- Skill development programs
- Social Works

### **Audit Process**

VISAT Engineering College is a self-financing institute affiliated with APJ Abdul Kalam Technological University. Effective mobilisation and utilisation of funds are essential to ensure the smooth functioning of the college, infrastructure development, academic enhancements, and student welfare.

- The accounts department monitors all income and expenditure transactions.
- The finance department of the college checks the transactions.
- Certified auditors audit grants received by the college to ensure proper utilisation.

The Institution has established a mechanism for conducting internal and external audits of financial transactions every year.

### **Internal Audit Process**

The internal audit is conducted by the office staff, which includes the head accountant and other personnel responsible for accounts. This audit focuses explicitly on daily income and expenditure statements related to fees and other routine sources of income received by the institution.

### **External Audit Process**

The institution's external audit is conducted by a qualified Chartered Accountant by Statute, Profession, & Personal Qualities at the end of every financial year. The auditor verifies all the financial transactions relating to the institution.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 6.5 Internal Quality Assurance System

### 6.5.1

**Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities**

**Response:**

#### **Significant contributions of IQAC**

The Internal Quality Assurance Cell (IQAC) of VISAT Engineering College has become an integral part of the institution's system and works towards realising the goals of quality enhancement and sustenance. It aims to develop and maintain a strategy to promote academic and administrative excellence. It defines the short-term and long-term objectives of the institution by creating a benchmark for quality-enhancement measures.

As part of the strategic plan, IQAC has focused on increasing student intake and improving hostel facilities by recommending the management of a new hostel for boys in the college. IQAC has aimed to receive 'NAAC' certification this year and has developed various NAAC policies, such as the OBC Cell Policy, IPR Policy, Mentoring Policy, etc.

#### **The IQAC reviews the teaching-learning process.**

- Arrangement of special classes for slow learners.
- Collecting regular feedback from the stakeholders (students, alumni, industry experts, research organisations and parents).
- Filling the curriculum gap by specialising in add-on and MOOC courses (NPTEL) for students.
- The introduction to outcome-based education.
- Development of ICT integrated teaching & learning.
- Facilitate a productive educational environment in the context of learner-centred approaches with interactive learning sessions.
- Conduct faculty development programmes and workshops for faculty members.

**The IQAC reviews learning outcomes at periodic intervals**

- PTA meetings are conducted regularly at periodic intervals.
- Verification of internal question paper setting based on Bloom's Taxonomy.
- Monitoring of course files and lecture schedules at periodic intervals.
- The implementation of the EZYGO system software has made significant progress in maintaining attendance records, course coverage, and outcome attainments.
- FDPs and Swayam course certification for faculty members ensure an innovative learning environment.
- The IQAC coordinates all quality-related activities by developing an organised methodology of documentation which promotes quality, accountability and transparency.
- The DQAC is formed every year under the supervision of IQAC to monitor and implement all exam-related activities and maintain higher standards in question papers.
- The IQAC spearheads the internal audit of course files, committee files, policy structures, and external audits, including lab and department visits. Through an academic audit, IQAC periodically reviews all paperwork about the delivery of the course material.

**The IQAC records the incremental improvement in various activities.**

- The Mentor-Mentee system has been followed for personal counselling. Grievances are addressed and recorded in the student record maintained by the faculty mentor.
- MOUs are signed as a collaborative agreement with various industries.
- Technical invited talks from experts, workshops and seminars by all departments are conducted.

It enhances and integrates the college's various activities and ensures the adoption and dissemination of good practices.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**6.5.2**



**Quality assurance initiatives of the institution include:**

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2.Academic and Administrative Audit (AAA) and follow-up action taken**
- 3.Collaborative quality initiatives with other institution(s)**
- 4.Participation in NIRF and other recognized rankings**
- 5.Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

**Response:** A. Any 4 or more of the above

<b>File Description</b>	<b>Document</b>
Quality audit reports/certificate as applicable and valid for the assessment period.	<a href="#">View Document</a>
NIRF report, AAA report and details on follow up actions	<a href="#">View Document</a>
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>
Link to Minute of IQAC meetings, hosted on HEI website	<a href="#">View Document</a>

## Criterion 7 - Institutional Values and Best Practices

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1

**Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.**

*Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words*

#### **Response:**

Creating a safe and inclusive environment for everyone is a top priority at VISAT Engineering College. The Institution has taken various steps to ensure gender equity sensitisation and security on campus.

- The college stresses the importance of treating everyone equally. The subjects "Constitution of India" and "Professional Ethics" highlight principles in basic education and aim to educate students about the importance of treating everyone equally, regardless of gender.
- In compliance with grievance committee regulations, the Institution has established committees to address the various concerns of male and female members through Anti-ragging, Disciplinary action, Women's cell, SC/ST, OBC, and Mentoring committees.
- The campus is equipped with CCTV cameras and security guards to ensure the safety of students and faculty members. The Institution's mentoring programs support students in their academic, emotional, social, and mental development.
- The Institution has ensured privacy and comfort with separate restrooms and common spaces. Sanitary napkin incinerators are available for disposing of used napkins.
- The "Internal Complaint Committee (ICC)" is established in the college. This cell's primary purpose is to address and resolve complaints of students and faculty, regardless of gender.
- VISAT Engineering College provides hostel facilities for both boys and girls. The girls' and boys' hostels are within the campus. A hostel is also provided for boys outside the campus, who are given transportation.
- Promoting equal opportunities for leadership roles in various departments, regardless of gender, is essential. In VISAT Engineering College, male and female staff members hold the positions of Head of Departments.
- Union elections are conducted with a focus on gender equity. The college will ensure that all members, regardless of gender, have an equal opportunity to participate in these elections and hold leadership positions within the student union.
- The Women Cell (WC) plays a better role in empowering female students and faculty members.

As part of it, the institution conducts seminars and workshops.

- VISAT National Service Scheme Units 325 aims to learn about the communities they serve and recognise the specific needs and challenges faced by both men and women.
- The institution, working with its National Cadet Corps 16 BN NCC Kottayam, promotes qualities like character, teamwork, discipline, a broad perspective, a spirit of adventure, and selfless service in all young people, without any distinction based on gender.
- The VISAT Innovation and Entrepreneurship Development Cell (IEDC) encourages male and female students to explore and develop innovative ideas and entrepreneurial skills. It allows everyone to try out new things and develop creative solutions.

In conclusion, the institution is committed to fostering a secure and inclusive environment through various initiatives, ensuring the well-being and equal treatment of all students and staff members.

File Description	Document
Upload Additional information	<a href="#">View Document</a>

### 7.1.2

**The Institution has facilities and initiatives for**

1. Alternate sources of energy and energy conservation measures
2. Management of the various types of degradable and nondegradable waste
3. Water conservation
4. Green campus initiatives
5. Disabled-friendly, barrier free environment

**Response:** A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	<a href="#">View Document</a>
Geo-tagged photographs/videos of the facilities.	<a href="#">View Document</a>
Circulars and report of activities for the implementation of the initiatives document	<a href="#">View Document</a>
Bills for the purchase of equipment's for the facilities created under this metric	<a href="#">View Document</a>

### 7.1.3

**Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following**

- 1.Green audit / Environment audit**
- 2.Energy audit**
- 3.Clean and green campus initiatives**
- 4.Beyond the campus environmental promotion activities**

**Response:** A. All of the above

<b>File Description</b>	<b>Document</b>
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	<a href="#">View Document</a>
Policy document on environment and energy usage Certificate from the auditing agency	<a href="#">View Document</a>
Green audit/environmental audit report from recognized bodies	<a href="#">View Document</a>
Certificates of the awards received from recognized agency (if any).	<a href="#">View Document</a>

#### **7.1.4**

**Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)**

**Response:**

The VISAT Engineering College takes pride in fostering tolerance and unity among individuals from diverse cultures, regions, languages, and backgrounds. In collaboration with college management and the Principal, the institution organises campus initiatives to establish an inclusive atmosphere. These events help students develop social responsibility, enhance interpersonal skills, and celebrate diversity. The College actively supports activities that promote tolerance for societal differences, including economics, culture, and language. The college is committed to nurturing a community where students and employees comprehend and embrace their constitutional duties. The following are the programmes conducted in the college.

**College Day Celebration-** The College Day is an occasion of pure joy, bringing together students from various backgrounds in jubilant, colourful moments that leave everyone with lasting memories of their college experience.

**Onam Celebration** is a joyful and lively festival celebrated in the Indian state of Kerala marked by 'Pookalam' floral art, 'thiruvathirakali' dances, and the delicious 'Onasadhya' feast.

**Kerala Piravi-** The birth of Kerala was commemorated, reminding all students of the significance of unity in diversity.

**Toastmaster for Faculties-** A platform for teachers to hone their communication skills, fostering a more engaging and diverse learning environment.

**Christmas Celebration-** The college echoed with joyous carols and the warmth of Christmas, an opportunity for students of all backgrounds to embrace the festive spirit.

**Holi Day Celebration-** Colours united during Holi, where students and faculty shared laughter, forgetting their differences.

**Government Scholarships and Fee Concessions-** Ensuring that financial barriers do not hinder education, the college supports students with government scholarships and fee concessions.

**Staff Meetings/Staff Birthday Celebration-** This will be conducted with an emphasis on collaboration and open communication, fostering an environment where hierarchical differences are set aside.

**Yoga Day-** Yoga sessions promote health and inner peace in harmony with our values.

**Swachh Bharat Abhiyan-** Clean-up drives underscore our commitment to a clean and safe environment.

**Blood Donation Camp-** Encouraging voluntary blood donation upholds the values of compassion and unity.

**Azadi Ka Amrut Mahotsav-** Celebrating our nation's freedom reignites the spirit of unity and patriotism.

**COVID Awareness Campaign-** Educating on COVID-19 safety reflects the commitment to public health.

**Electoral Literacy Club-** Empowering students with the knowledge to participate in our democratic process.

**Drug Abuse Classes-** Providing awareness on the dangers of substance abuse, nurturing personal well-being.

**Tree Plantation-** Green initiatives uphold our duty to protect the environment.

**Road Awareness Campaign-** Promoting road safety aligns with the commitment to safety and life.

**Anti-Terrorism Day-** Emphasizing the importance of national security following the values.

**Professional Ethics, Constitution of India, UHV:** This course mainly focuses on raising students' and faculty's awareness of constitutional obligations.

**BIS-** Bureau of Indian Standard Club organises programmes to raise awareness about the qualities of commodities.

**Electoral Literacy Club-** It is a club that focuses on activities related to raising awareness regarding the voting process.

**National Anthem-** To create an awareness about patriotism and unity among students and faculties, a recorded national anthem is played at college every evening

File Description	Document
Upload Additional information	<a href="#">View Document</a>

## 7.2 Best Practices

### 7.2.1

**Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual**

**Response:**

#### Practice-1

**“Career guidance and self-empowerment by effective improvement in Communication skills through the activities of the English clubs at VISAT, the “ Toast Masters International” for faculty and “Team- Eloquence” for students.**

#### Objectives

- To enhance confidence among students in handling English through regular practice and interactive sessions.
- To design and deliver an impactful, professional presentation.
- To develop the communication skills that unlock doors to success, foster stronger relationships, drive productivity, and facilitate personal growth.

VISAT is the only engineering college located within a rural area of 25 sq. km. Most students at VISAT come from underprivileged backgrounds, having completed their higher secondary education in Malayalam medium schools, which often results in limited competence in their English communication skills.

#### Practice

**Each of the four language skills - listening, speaking, reading, and writing - plays a vital role in enhancing proficiency in the English language.**

- At VISAT, the 'Team Eloquence' club is spearheaded by proficient faculty members who actively guide and nurture the students.
- The faculty members participate in regular training sessions conducted by the Toastmasters Club.

- During the student's first year of study, a group of five students is required to deliver a 15 to 20-minute PowerPoint presentation on a specific topic, which can be either technical or non-technical. Following each presentation, there is a scheduled interactive discussion and question-answer session. Activities planned include a vocabulary quiz, verbal reasoning test, and Table Topics Level-1 session. Table Topics involve impromptu speaking, where individuals deliver speeches without prior preparation or notice.
- During their second year, every group must deliver a PowerPoint presentation focused on a "socially relevant problem and its solutions", strengthening their critical thinking and problem-solving skills. Following the presentations, a group discussion session is scheduled to encourage participants to provide constructive criticism of each other's views. Table Topics Level II sessions are also conducted to develop impromptu speaking skills further. In addition, a comprehensive test is also scheduled to improve reading and analytic thinking skills.
- In their third year, students must deliver presentations on innovative technical areas or research findings within their respective disciplines. Specialised training sessions are conducted to enhance skills in report writing, formal letter composition, minute preparation, job application writing, and CV and resume preparation. Table Topics Level-III sessions are also scheduled to refine impromptu speaking abilities further.
- In their final year, students undergo mock interview training to alleviate their stress and anxiety, boosting their confidence levels in preparation for job interviews.

### **Evidence of success**

- over their final year, students who initially lacked confidence, struggled with communication and had poor presentation skills showed modest improvement in these areas.
- The students at VISAT Engineering College actively participate in challenging technical contests and engage in innovative projects, paper publications and patent filing.

### **Problems Encountered and Resources Required**

- The institution faces various challenges stemming from its students' diverse backgrounds and upbringing, as well as introversion, indifferent attitudes, and lack of interest.
- Another issue of concern pertains to time constraints arising from the busy schedules of both faculty and students.

### **Practice-2**

**An endeavour to empower self-esteem, elevate confidence, instil moral ethics, and embrace humanistic values among students through the active involvement of the "Dream- weave" mentoring fellowship.**

### **Objectives**

- To support the students in their academic stress, peer pressure and exam anxiety.
- To strengthen emotional and mental health to handle challenges.
- To overcome functional family dynamics and relationship issues.
- To foster a positive and supportive learning environment, nurturing the holistic development of students.

## The Context

VISAT Engineering College promotes a fair and unbiased admission system, resulting in a diverse student body that includes first-generation students, quick learners, academically challenged individuals and students from various social and financial backgrounds. Teenage students transitioning from secondary school to professional colleges are emotionally volatile and confront various obstacles like struggling to adapt to the new environment, addiction to social media, disappointments in friendships, and mental and physical health issues.

The "Dream Weave" mentoring fellowship envisions significant methods and strategies for nurturing, educating, and shaping students under one roof with unity and honesty.

## Practice

- Each academic year, a team of faculty members from diverse departments are designated as mentors.
- A program coordinator supervises, organises, and monitors all aspects of the mentoring process.
- The mentor-to-mentee ratio is kept at a maximum of 20 students per mentor.
- Peer mentors and proctors are selected to provide support and guidance.
- The mentor keeps a logbook to document and track the progress, discussions, and any important notes related to the mentee's academic performance, goals, and development.
- The mentor engages with the mentee twice monthly to address various topics and concerns.
- Parents are consistently updated on their ward's academic and overall progress during their stay on campus.
- Parents are required to participate in the final counselling session of every semester with their ward.
- Continuous professional guidance is provided to mentors to facilitate the implementation of the process effectively.

## Evidence of Success

- The strong and supportive triangular relationship among mentors, parents, and their wards is instrumental in identifying and resolving issues and enabling students to overcome challenges, enhance their skills, and achieve their academic goals confidently and successfully.
- The absence of any reported instances of ragging indicates the effectiveness of the institution's mentoring fellowship program.
- The VISAT campus has become a friendly, unified place where students and faculty work together in a harmonious, inclusive environment.

## Problems Encountered and Resources Required

- Many students lack intrinsic motivation and require continuous guidance in structuring their studies and planning towards their goals.
- While consistency in mentorship throughout the course is ideal, practical challenges, such as faculty reliefment or turnover issues, can disrupt this continuity.
- Cases requiring support beyond the fellowship's capacity should be referred to external counsellors for specialised assistance and guidance.



File Description	Document
Best practices as hosted on the Institutional website	<a href="#">View Document</a>

## 7.3 Institutional Distinctiveness

### 7.3.1

**Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words**

#### Response:

VISAT Engineering College's Unique Edge: Bridging Academia and Industry through Strategic Collaborations and Hands-On Experiential Learning Initiatives.

#### Introduction

The VISAT Engineering College is affiliated with APJ Abdul Kalam Technological University, Thiruvananthapuram and is approved by the All India Council for Technical Education (AICTE). This institution was founded in 2011, and its campus is located in a beautiful part of the Ernakulam district in the Western Ghats. It offers fantastic views of the area's majestic mountain ranges. VISAT is dedicated to providing quality education through the application of creative teaching approaches delivered by experienced faculties. The institution is committed to creating a learning experience that bridges academia and industry. Through hands-on opportunities, interaction with industry experts, and a focus on practical applications, the college prepares students for jobs and success in the ever-changing professional world.

#### Industry Collaboration and Experiential Learning

VISAT Engineering College is dedicated to narrowing the gap between academia and industry through a holistic approach. The college strives to create an environment that integrates education with practical experience. The commitment involves providing students with chances to engage with industry experts and establishing a connection between theoretical concepts and real-world applications. This deliberate approach goes beyond just improving job opportunities; it also readies students to excel in their professional endeavours.

#### 1. Partnership with UNISIS Group

- **Industry Expertise of UNISIS Group**

With 20 years of experience across various industries, including IT consulting, education, engineering, healthcare, and logistics, UNISIS Group brings valuable knowledge to the partnership. This expertise gives students insights into real-world scenarios, grounding their education in practical, industry-relevant applications. UNISIS Group's dedication to innovation aligns well with VISAT Engineering College's

mission. This partnership prepares students for existing industry practices and encourages innovation and adaptability in their future endeavours. The joint efforts of VISAT and UNISIS create a dynamic platform that prepares students for academic success and excellence in their chosen fields. Focusing on practical abilities, international experience, and knowledge directly applicable to the industry elevates students, making them competitive and in-demand professionals in the workforce.

- **Placement Opportunities**

VISAT Engineering College's collaboration with UNISIS Group is a significant move towards offering students a well-rounded education. The commitment to providing a 100% placement offer for the 2022-2026 batch, contingent on successful academic performance, shows a dedication to students' future success. The grand placement ceremony on 11/10/2022 marked a significant milestone, where the esteemed state Minister V.N. Vasavan, Minister for Cooperation and Registration, distributed the placement offer letters. This ceremony celebrated the academic accomplishments of the 2022-2026 batch, offering placement to students who successfully pass without any back papers. UNISIS Group, the driving force behind this initiative, plans to extend this offer to upcoming batches, further solidifying the commitment to student success and employability.

- **Global Opportunities through UNISIS**

This collaboration goes beyond academics, providing students with opportunities for international internships facilitated by UNISIS. This exposure enhances professional skills and broadens cultural and global perspectives.

- **Online Job Training**

UNISIS Group's online job training provides a practical dimension to the academic curriculum. This initiative ensures that students understand theoretical concepts and gain valuable skills demanded by the industry. The collaboration actively contributes to developing students' comprehensive skill set, preparing them for the challenges of a dynamic job market.

## **2. Annual Internship Requirement**

The College proactively provides practical exposure by ensuring all students complete at least 15 days of internship every year. This structured internship program allows students to apply theoretical knowledge in real-world settings, fostering a deeper understanding of the industry. VISAT will enable students to partake in international internships in collaboration with UNISIS, providing valuable global exposure and hands-on experience in the field.

## **3. Add-On Courses for Technological Advancements**

VISAT further empowers students by offering add-on courses incorporated with experiential learning in different areas. These courses are designed to keep students updated with modern technologies, ensuring their skills remain relevant and aligned with industry advancements.

#### 4. Technical Invited Talks Hosted by VISAT

Complementing the internship program, VISAT regularly hosts talks by various industry professionals. These sessions serve as a valuable platform for students to gain insights into industry trends, challenges, and opportunities. The firsthand experiences shared by industry experts contribute to a well-rounded education beyond the classroom's confines.

#### 5. MOUs with Industries

College's strategic MOUs with prominent industries allow students to enhance their knowledge through real-world exposure. These collaborations offer invaluable opportunities for hands-on experience, bridging the gap between academia and industry and preparing students for a successful career in engineering.

#### 6. Industrial Visits

The institution consistently organises industrial visits to enrich students' learning. These visits offer practical insights, connecting theoretical knowledge with real-world industry applications. By exposing students to various industrial settings, the college aims to develop graduates equipped with academic and practical skills for success in their professional endeavours.

#### Conclusion

In conclusion, VISAT Engineering College's alliance with UNISIS Group exemplifies a commitment to preparing students for a global job market. The emphasis on placement, international internships, and online job training, coupled with UNISIS's industry expertise, enriches the educational experience. This collaboration cultivates a culture of innovation and excellence, ensuring graduates are employable and forward-thinking professionals.

File Description	Document
Appropriate web in the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

## 5. CONCLUSION

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### **Additional Information :**

VISAT actively supports research, innovation, and extension services, aiming to develop learners capable of meeting cutting-edge technological demands. The institution's Core values emphasize the learner at the centre, continuous improvement, professionalism, equality, and teamwork. VISAT emphasizes industry-relevant curriculum delivery. By integrating cross-cutting issues into its curriculum and fostering a deep commitment to social principles, the college aims to produce engineers who positively contribute to society's well-being, reflecting a vision of sustainability, inclusivity, and ethical engineering practices.

VISAT Engineering College implements Outcome-Based Education (OBE), emphasizing student-centred learning through experiential, participative, and problem-solving methodologies facilitated by ICT tools. Internal and external assessment mechanisms ensure transparency and compliance with academic standards, while continuous evaluation and feedback drive improvement strategies to bridge attainment gaps and enhance the overall learning experience for students.

VISAT Engineering College boasts good infrastructure, facilitating effective teaching, learning, and recreational activities. Regular updates and training programs complement a robust IT framework encouraging innovation and academic excellence. VISAT Engineering College's alumni association, VISATAA, facilitates strong connections, providing support, mentoring, and industry insights to current students while actively engaging in collaborative activities with the institution. VISAT Engineering College demonstrates effective governance aligned with its mission and vision, fostering innovation, decentralized decision-making, and staff welfare measures while promoting a culture of continuous improvement and self-development among faculty and staff.

The English clubs at VISAT, including Toastmasters International for faculty and Team Eloquence for students, focus on enhancing communication and interpersonal skills through various activities, addressing challenges faced by students from diverse backgrounds. The mentoring fellowship supports students' holistic development by providing guidance, fostering positive learning environments, promoting emotional well-being, and contributing to a unified and inclusive campus culture. Additionally, strategic collaborations with industry leaders enhance students' practical skills, global exposure, and employability, bridging the gap between academia and industry for a well-rounded educational experience.

VISAT Engineering College prioritizes inclusivity with disabled-friendly facilities like lifts and ramps. It also emphasizes sustainability through a 30 kW solar panel system for alternative energy, a rainwater harvesting system for water conservation, and a biogas plant for eco-friendly measures.

### **Concluding Remarks :**

VISAT Engineering College stands as a beacon of quality education and holistic development. With a vision to produce socially committed engineers capable of meeting evolving technological needs, VISAT focuses on imparting values and skills beyond the academic curriculum. The institution's commitment to continuous improvement, inclusivity, and a conducive learning environment positions it as a dynamic hub for aspiring engineers. Through a diverse range of programs and co-curricular activities, VISAT Engineering College remains dedicated to shaping the future of its students and contributing to the advancement of the engineering

field.

VISIT Engineering College has received significant recognition, including the SEEM National Energy Management Silver Award, for its efforts in energy efficiency. The chairman of the college received the prestigious Edu. Excellence Award 2022 from Prof. Dr. R. Bindu, Minister for Higher Education, Kerala. Additionally, the college was honoured with the Sir. C.V. Raman Excellence Award from ORMA International Philadelphia, USA, presented by Shri. Roshy Augustine, Minister for Irrigation, Command Area Development Authority, Ground Water Department, Water Supply and Sanitation, Govt. of Kerala. These awards highlight VISAT's commitment to academic excellence and beyond. The achievements of both students and faculty members further demonstrate the institution's dedication to nurturing talent. These honours emphasize VISAT's dedication to fostering talent and shaping future engineers. The institution has successfully obtained the esteemed ISO 2018:21001 certification for its exemplary implementation of an Educational Organizations Management System (EOMS).

## 6.ANNEXURE

### 1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p><b>Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)</b></p> <p>Answer before DVV Verification :</p> <p>Answer After DVV Verification :16</p> <p>Remark : DVV has made changes as per the report shared by HEI.</p>																				
3.1.1	<p><b><i>Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)</i></b></p> <p><b>3.1.1.1. Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)</b></p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Remark : DVV has made changes as per the report shared by HEI.</p>	2022-23	2021-22	2020-21	2019-20	2018-19	2	0	0	0	0	2022-23	2021-22	2020-21	2019-20	2018-19	7	0	0	0	0
2022-23	2021-22	2020-21	2019-20	2018-19																	
2	0	0	0	0																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
7	0	0	0	0																	
3.4.3	<p><b><i>Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.</i></b></p> <p><b>3.4.3.1. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>23</td> <td>8</td> <td>1</td> <td>1</td> <td>1</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>7</td> <td>1</td> <td>1</td> <td>1</td> </tr> </tbody> </table> <p>Remark : DVV has made changes as per the report shared by HEI.</p>	2022-23	2021-22	2020-21	2019-20	2018-19	23	8	1	1	1	2022-23	2021-22	2020-21	2019-20	2018-19	8	7	1	1	1
2022-23	2021-22	2020-21	2019-20	2018-19																	
23	8	1	1	1																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
8	7	1	1	1																	

5.1.4	<p><b><i>The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases</i></b></p> <ol style="list-style-type: none"> <li><b>1. Implementation of guidelines of statutory/regulatory bodies</b></li> <li><b>2. Organisation wide awareness and undertakings on policies with zero tolerance</b></li> <li><b>3. Mechanisms for submission of online/offline students' grievances</b></li> <li><b>4. Timely redressal of the grievances through appropriate committees</b></li> </ol> <p>Answer before DVV Verification : A. All of the above          Answer After DVV Verification: B. 3 of the above          Remark : DVV has made changes as per the report shared by HEI.</p>																				
5.3.1	<p><b>Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years</b></p> <p><b>5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="306 949 1046 1084"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="306 1164 1046 1299"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Remark : DVV has made changes as per the report shared by HEI.</p>	2022-23	2021-22	2020-21	2019-20	2018-19	3	0	0	0	0	2022-23	2021-22	2020-21	2019-20	2018-19	0	0	0	0	0
2022-23	2021-22	2020-21	2019-20	2018-19																	
3	0	0	0	0																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
0	0	0	0	0																	
5.3.2	<p><b>Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)</b></p> <p><b>5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years</b></p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="306 1657 1046 1792"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>7</td> <td>0</td> <td>6</td> <td>6</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="306 1872 1046 2007"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>4</td> <td>03</td> <td>03</td> <td>4</td> </tr> </tbody> </table> <p>Remark : DVV has made changes as per the report shared by HEI.</p>	2022-23	2021-22	2020-21	2019-20	2018-19	10	7	0	6	6	2022-23	2021-22	2020-21	2019-20	2018-19	6	4	03	03	4
2022-23	2021-22	2020-21	2019-20	2018-19																	
10	7	0	6	6																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
6	4	03	03	4																	

6.3.3 **Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

**6.3.3.1. Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
37	27	20	23	25

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
28	27	20	23	25

**6.3.3.2. Number of non-teaching staff year wise during the last five years**

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
18	20	18	19	18

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
18	20	18	19	18

Remark : DVV has made changes as per the report shared by HEI.

## 2.Extended Profile Deviations

ID	Extended Questions
1.1	<p><b>Number of teaching staff / full time teachers during the last five years (Without repeat count):</b>            Answer before DVV Verification : 96            Answer after DVV Verification : 71</p>