

# FOR

# 2<sup>nd</sup> CYCLE OF ACCREDITATION

# VIMAL JYOTHI ENGINEERING COLLEGE

# VIMAL JYOTHI ENGINEERING COLLEGE CHEMPERI 670632 www.vjec.ac.in

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Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

# BANGALORE

# February 2024

# **1. EXECUTIVE SUMMARY**

# **1.1 INTRODUCTION**

Vimal Jyothi Engineering College (VJEC) is an educational project of the Archdiocese of Thallassery established in the year 2002 and is managed by Meshar Diocesan Educational Trust. The college is approved by AICTE and affiliated to APJ Abdul Kalam Technological University (KTU). VJEC is a self-financing catholic minority institution aiming at generating fervor for Engineering and Technology in students. Here we inspire, nurture and foster them to realize their career potential in the field of Engineering and Technology.

With profound insight into the resource requirements of the higher education system, VJEC has proudly set up world-class infrastructure complemented with intellectual capital in the form of competent faculty.

Digital library, industry supported project labs, language lab, and student chapters of professional bodies such as IEEE, ISOI, IETE, SAE, and CSI offer an extensive range of resources, opportunities and services to the outcome based teaching learning process. Effective implementation of quality control processes ensure Engineering graduates with the expected level of knowledge, skill and attitude.

The institution offers ten undergraduate programs in engineering and two post graduate programs. The undergraduate programs are:

- 1. BTech Applied Electronics and Instrumentation Engineering
- 2. BTech Civil Engineering
- 3. BTech Computer Science and Engineering
- 4. BTech Electrical and Electronics Engineering
- 5. BTech Electronics and Communication Engineering
- 6. BTech Mechanical Engineering
- 7. BTech Computer Science and Design,
- 8. BTech Artificial Intelligence and Data Science,
- 9. BTech Computer Science and Engineering (Cyber Security),
- 10. BTech Computer Science and Engineering and Business Systems,

The postgraduate programs offered are:

- 1. MTech Computer Science & Engineering
- 2. MTech Structural Engineering & Construction Management

Six undergraduate programs, CE,ME,CS,EC,EE and AE are accredited by NBA, New Delhi.

#### Vision

To bloom into a Center of Excellence for Technical Education and a pace-setter in rural India with its quality processes and procedures, interwoven with freedom of flexibility, moulding professionals of superior quality, dedicated to the progress and development of Humanity.

## Mission

To prepare the students to see beyond geographical limit and belong to a new age of acquisition and application of technology to meet the challenges of the changing world. Inspired and guided by gospel values, we contribute to the socioeconomic welfare of the country with due concern to the marginalized.

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

# Institutional Strength

- All eligible programs are accredited by National Board Accreditation (NBA).New Delhi
- Accredited by the Institution of Engineers- IE(India)
- QS-I Gauge has accredited us with E LEAD Certification.
- The infrastructure is of exceptional quality.
- The college has established the IEDC (Innovation and Entrepreneurship Development Centre) and MHRD IIC (Ministry of Human Resource Development Institute Innovation Council).
- Memorandums of Understanding (MoUs) with large number of industries.
- Committed and proficient teaching staff.
- Specialized coaching sessions for students preparing for competitive exams such as IAS and GATE.
- Sustainable campus
- Committed management devoted to providing high-quality education.

## **Institutional Weakness**

- Research Culture at the nascent stage.
- A limited number of externally funded research projects.
- Located in a rural area.
- Affiliated institution with limited flexibility in curriculum.
- Limited number of core companies visiting the campus.

## **Institutional Opportunity**

- To provide quality technical education to needy students from rural areas.
- To become a centre of excellence in Northern Kerala in technical education.
- To become a skill and entrepreneurship development centre.
- To become a centre for research, consultancy, and appropriate technology centre.

## **Institutional Challenge**

- Incorporating the latest technologies in the curriculum.
- Socio-political environment prevalent in North Malabar.
- Stagnation in engineering admissions.
- Exodus of students to forien countries for higher studies

# **1.3 CRITERIA WISE SUMMARY**

# **Curricular Aspects**

- Content beyond syllabus and bridge courses for students.
- Effective curriculum delivery through Smart class rooms, Google classrooms and NPTEL.
- Industrial visits, Seminars, Conferences, Workshop for the students.
- Pre-planned preparation of lesson plans, Timetable and Academic Calendar.
- Remedial classes for slow learners.
- Continuous assessment for laboratory work.
- Digital library with e-books are available to both students and faculty.
- Conducts periodical meetings like staff meeting, course team meeting, class committee meetings, DAB meetings etc.
- MOUs are signed with recognized Industries and Organizations.
- Workshops and certificates courses for the students.
- Effectual communication with parents (eg. Progress Report, Counselling).
- Course delivery as per lesson plan and completion of syllabus is monitored by HOD.
- Institution always encourages and supports the faculty to attend FDP/workshops.
- 20 students each are assigned to a faculty as mentor to support in academic and personal empowerment.
- Maintenance of Course File, Lesson Plan, Lecture notes, Master Attendance etc.
- Internal & External Academic Audit.
- Student's feedback taken twice in the semester for teaching learning process.

# **Teaching-learning and Evaluation**

- Transparent Admission Policies in line with Admission guidelines of Kerala Government
- Recruitment of Faculty as per AICTE norms.
- Academic Calendar, Semester Plan, Assessment plan and Lesson plan prepared before commencement of every semester.
- Equipped with well furnished smart classrooms and seminar halls.
- Seminars, Workshops with industrial experts, mini-projects, Industrial Visit and Internship.
- Innovation and Entrepreneurship Development Centre (IEDC) Programmes.
- Bridge Courses / Remedial Coaching classes.
- Faculty quality improvement through FDPs and other Professional Devolopment programs.
- Mentoring systems with effective staff and student involvement.
- Every course is evaluated through feedback and which in turn is used for further improvement.
- Exposure to recent trends in technological developments.
- Participation of students in competitions conducted by various organizations like IEEE, CSI, IETE, ISTE, SAE, ISOI to encourage their innovative talents.
- Industry supported labs like Intel Galileo lab, Cypress Psoc Lab etc.
- Continuous assessment of students with perpublished assessment plan.

## **Research, Innovations and Extension**

• College management encourages its teachers to submit research proposals, and conduct research for which a research seed money is offered from the college.

- The institution organizes workshops and sensitization programs to create research spirit among teachers and students.
- Some faculty members have got research projects sanctioned, some of which have been in progress.
- Faculty members have published their research papers in reputed National and International journals with good impact factors.
- The institution is also actively involved in extension activities to help society by its services.
- Students are socially sensitized and made aware of their responsibilities through community service programmes organized by NSS and Outreach programmes.
- Linkage with industries, institutions, research centers, social service organizations are formed for enhancing research, providing hands-on experience, on-job training for student projects and carrying out social welfare programmes to the community.

# Infrastructure and Learning Resources

- A sprawling 30 acres campus located in the foothill of Western Ghats with lush greenary.
- Spacious and well furnished Class Rooms, seminar halls, Department library, Central Library, Digital Library and E-Learning Resources.
- Adequate number of ICT enabled classrooms/Tutorial rooms for each department.
- Centralized computer centre, well-equipped laboratories with exclusive machines and major equipments.
- The Administrative Office, Board room, HOD's Cabins, individual cubicle of faculty are well equipped and having internet connectivity.
- Library constructed in 1000 sq mt of carpet area with 325 sq mt of reading space and 200 seating contains 46152 books
- Digital library facility to access e-journals & e-books.
- Air conditioned conference Halls, Interview Rooms, Auditoriums, Laboratories, IEDC Cell, Placement Cell, R&D Cell, Examination Cell etc.,
- Research lab/project lab for each department
- Well equipped Laboratories with state of art equipments.
- Comfortable sick rooms, prayer halls for all religions and amenities
- Availability of indoor and outdoor sports facilities.
- Psychiatric Counselor for students.
- Bank along with ATM, Postal Service, Reprographics, Stationery store etc are available
- Round a clock internet facility with 600 Mbps Speed for more than 700 computers with 24 hour power backup.
- 50KWh energy through in house solar power generation.
- Three diesel generators with capacity 62.5,125,250 KVA ensures the uninterrupted power supply

## **Student Support and Progression**

- The institution has 138 well qualified and experienced faculty members.
- The management encourages the meritorious students by providing merit scholarships. So far around 314 students have been encouraged through merit scholarship by the management. In the academic year 2022–2023, 50% of the students (Merit cum means scholarship & Post Matric Scholarship, Centre Sector Scholarship, SC/ST, OEC) are benefitted through Government scholarship schemes.
- IETE, ISTE, SAE, IEEE, IIPE Professional Society chapters and various Club activities are launched

for the students.

- Sports have been conducted regularly to bring out their inner skills as well to improve the physique of the students. Number of sports and cultural activities/ competitions is organized at the institutional level every year.
- Every year, more than 80% of the eligible students from various disciplines are placed in the reputed organizations and many students have taken internship in well-established companies.
- Alumni association functions effectively through Alumni Meet and Guest Lectures, in order to exhibit the latest trends in the chosen field.
- Special coaching for GATE, I.A.S examinations are arranged for the students.
- Remedial coaching, Career Counseling and Personal Counseling are given to the required students. Soft skills and Language Lab is also provided to the students to enhance the communication, comprehensive and aptitude skills.
- The institution has a transparent mechanism to redress the issues like ragging cases and sexual harassment.

#### **Governance, Leadership and Management**

- The Institution conducts periodical meetings of the various mandatory committees.
- Institution level IQAC is constituted with 18 members.
- Department level IQAC assess the question papers well in advance before the series examination.
- Periodic updation of feedback from stakeholders.
- Internal and external academic audit is conducted for every semester to assess the academic performance.
- Enthusiastic participation of students in cocurricular and extra curricular activities under the supervision of faculty.
- There is cordial co-ordination between the management and stakeholders.
- Feedback of the stakeholders is updated periodically.
- Institution follows an effective financial management system.

## **Institutional Values and Best Practices**

- Our campus is located in a hilly region of Kerala, in which 70% of the total area is covered with shrubs, plants and trees thus creating a pleasant greenish environment rich in biodiversity reducing carbon foot print.
- Importance is given for rain water harvesting, using renewable energy sources like solar energy (we are part of energy grid), Bio gas and increase the greenery of the campus.
- We have an effective waste management system for solid waste, liquid waste and e-waste.
- Good rapport has been developed with nearby villages and local public by helping and guiding them in following good practices, in saving energy, creating awareness about government initiatives through NSS and departmental programmes.
- We create awareness among our students and staff about protection of environment for the next generation and about Conservation and effective utilization of the available Natural Resources
- In addition to the Placement and Training activities for final year students for employment opportunities, we also concentrate on Concurrent Employment Enhancement Program for the final year students. This motivates and increases the self confidence in them in getting an employment after the course is over.

• We strive to develope our institution as a centre of excellence in a rural area.

# **2. PROFILE**

# **2.1 BASIC INFORMATION**

Name and Address of the College				
Name	VIMAL JYOTHI ENGINEERING COLLEGE			
Address	VIMAL JYOTHI ENGINEERING COLLEGE CHEMPERI			
City	Kannur			
State	Kerala			
Pin	670632			
Website	www.vjec.ac.in			

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Benny Joseph	0460-2213900	9048292767	-	principal@vjec.ac.i n
Professor	ROSHINI T V	0460-221390	9496402767	-	deanacademic@vje c.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular Day

Recognized Minority institution				
If it is a recognized minroity institution	Yes <u>Minority Institution.pdf</u>			
If Yes, Specify minority status				
Religious	Christian			
Linguistic				
Any Other				

F	Establishment Details		
	State	University name	Document
	Kerala	A.P.J. Abdul Kalam Technological University	View Document

Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC	12-10-2018	View Document		
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/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	03-07-2022	12	
AICTE	View Document	03-07-2022	12	
AICTE	View Document	03-07-2022	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	VIMAL JYOTHI ENGINEERING COLLEGE CHEMPERI	Rural	30.5	34785.59	

# **2.2 ACADEMIC INFORMATION**

Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Appli ed Electronics And Instrum entation,	48	HSC	English	30	15
UG	BTech,Civil Engineering,	48	HSC	English	30	23
UG	BTech,Comp uter Science And Engineering,	48	HSC	English	252	245
UG	BTech,Electr onics And Co mmunication Engineering,	48	HSC	English	60	44
UG	BTech,Electr ical And Electronics Engineering,	48	HSC	English	60	29
UG	BTech,Mech anical Engineering,	48	HSC	English	30	19
UG	BTech,Comp uter Science And Design,	48	HSC	English	30	25
UG	BTech,Artifi cial Intelligence And Data Secience,	48	HSC	English	120	98
UG	BTech,Comp uter Science And Engineering Cyber Security,	48	HSC	English	60	36

UG	BTech,Comp uter Science And Engineering And Business Systems,	48	HSC	English	60	31
PG	Mtech,Civil Engineering, Structural Engineering and Construction Management	24	UG	English	12	0
PG	Mtech,Comp uter Science And Engineering,	24	UG	English	6	0
Doctoral (Ph.D)	PhD or DPhil,Applie d Electronics And Instrum entation,	72	PG	English	8	1
Doctoral (Ph.D)	PhD or DPhil ,Computer Science And Engineering,	72	PG	English	16	0
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Commu nication Engineering,	72	PG	English	24	10
Doctoral (Ph.D)	PhD or DPhil ,Electrical And Electronics Engineering,	72	PG	English	16	0
Doctoral (Ph.D)	PhD or DPhil ,Mechanical Engineering,	72	PG	English	16	1

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	essor			Assoc	Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0	1			0				0	1		
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0	1			0	0			0			
Sanctioned by the Management/Soci ety or Other Authorized Bodies	15				16				107			
Recruited	12	3	0	15	8	8	0	16	32	75	0	107
Yet to Recruit	0				0				0			

		Non-Teaching	Staff	
	Male	Female	Others	Total
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				54
Recruited	42	12	0	54
Yet to Recruit				0

Technical Staff						
	Male	Female	Others	Total		
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				138		
Recruited	52	86	0	138		
Yet to Recruit				0		

# **Qualification Details of the Teaching Staff**

	Permanent Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	11	3	0	2	2	0	0	0	0	18
M.Phil.	0	0	0	2	0	0	1	1	0	4
PG	1	0	0	5	6	0	37	76	0	125
UG	0	0	0	0	0	0	0	0	0	0

	<b>Temporary Teachers</b>									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	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

	Part Time Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	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

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty	Male	Female	Others	Total	
engaged with the college?	1	0	0	1	

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	266	1	71	0	338
	Female	187	2	38	0	227
	Others	0	0	0	0	0
PG	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	6	0	0	0	6
	Female	4	0	0	0	4
	Others	0	0	0	0	0

Catagory		Year 1	Year 2	Year 3	Year 4
Category		rear 1	rear 2	Tear 5	rear 4
SC	Male	1	3	1	2
	Female	2	1	2	2
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	1	0	0
	Others	0	0	0	0
OBC	Male	78	63	82	62
	Female	48	49	48	49
	Others	0	0	0	0
General	Male	56	41	50	36
	Female	48	19	31	30
	Others	0	0	0	0
Others	Male	0	0	6	3
	Female	0	0	3	0
	Others	0	0	0	0
Total		233	177	223	184

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

# Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Based on NEP 2020, The institute provides B.Tech Minor degree courses along with B.Tech regular courses. A Minor is an additional credential, a student will earn if he/she obtains minimum 20 credits worth of additional learning in a discipline other than his/her major discipline. The objective is to permit a student to customize their Engineering degree to suit their specific interests. Upon completion of an Engineering Minor, a student will be better equipped to perform interdisciplinary research and will be better employable. The college has always strives for a multidisciplinary approach in
	its academic as well as co-curricular activities. Students are encouraged to undergo minor/major

	projects in the Multidisciplinary/Interdisciplinary mode by formulating teams from different courses. Students are also encouraged to formulate teams from different disciplines to participate in various events like Hackathons conducted by KSCSTE, IEEE etc. Add-on courses are provided in interdisciplinary areas to increase the breadth of the domain of knowledge and students are encouraged to take interdisciplinary electives to enable them to function in a multidisciplinary real-time projects. On top of the above, all invited lectures and seminars are offered to the students in the field of interdisciplinary topics. Following are some of the interdisciplinary programs offered by our college 1. BTech Applied Electronics and Instrumentation Engineering. 2. BTech Computer Science and Design 3. BTech Computer Science and Engineering and Business Systems.
2. Academic bank of credits (ABC):	The institute has registered on Academic Bank of Credit via National Academic Depository with NAD ID NAD034947 and is encouraging the students to register with ABC. The institute has implemented a policy for students to take online courses through National Schemes like SWAYAM, MOOC, NPTEL, etc, and is considering credits earned against elective courses, Minor and Honor courses. Revision of the curriculum has been started for the academic year 2024- 2025. We are in the process of developing a system for executing ABC in true spirit.
3. Skill development:	The following skill development programs are offered by the institute to the students as a part of carrier guidance and vocational training 1. CNC programming skills 2. Employment enhancement program 3. AutoCAD, STAAD PRO 4. ETABS 5. Coding skills in popular languages 6. ICT Enabled Language skill programs Apart from this, the institute provides hands-on exposure to practical subjects through mini-projects and main projects, in which students identify their skills to fabricate and learn the concepts through experiential learning.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	To popularize the traditional knowledge of plants and trees, all the trees in the campus are labelled with its scientific name and the local names. To promote the traditional foods of south India such as Puttu and Idly, an automated cooking machine is developed by our students. This could make the cooking much

	more easier and help us to maintain a traditional food pattern with ease rather than switching over to junk food. To promote the value of agriculture and to keep the students in touch with our traditions, a diary farm is maintained in the college campus. The Indian knowledge system of Vastu is very much relevant in the Civil Engineering and the students are introduced to the Vastu philosophy even though it is not there in the syllabus.Indian Knowledge system will include knowledge from ancient India to modern India and a clear sense of India's future aspirations with regard to education, health and environment. The faculties are encouraged to translate the text books into the native languages.
5. Focus on Outcome based education (OBE):	All the eligible undergraduate programs of the college have been accredited by the NBA until 2026, and we are currently implementing Outcome-Based Education (OBE). Our website and prominent places within the departments feature well-defined Program Outcomes (PO), Program Specific Outcomes (PSO), and Course Outcomes (CO). Students undergo assessment based on the OBE attainment model, which evaluates their progress in three key parameters: 1. Course Outcomes (CO) 2. Program Outcomes (PO) 3. Program Specific Outcomes (PSO) Our institution attracts students from diverse socioeconomic backgrounds, cultures, and experiences. During their academic journey with us, we actively encourage them to broaden their perspectives, attitudes, and enhance their existing skills while acquiring new ones. This approach is designed not only to aid them in their academic pursuits and future careers but also to fortify their roles within society. The Program Outcomes (POs) also align with the Vision, Mission, and Core Values of the institution. The attainment of POs facilitates the achievement of the following objectives: 1. Deepening discipline-specific knowledge. 2. Fostering critical thinking and problem-solving abilities. 3. Cultivating teamwork and communication skills. 4. Preparing students for careers and leadership roles. 5. Instilling intercultural understanding and ethical competency. 6. Promoting self-awareness and emotional intelligence.
6. Distance education/online education:	Google classrooms are created for each subject and the classroom codes are shared with the students, apart from regular classes they can get the complete

learning materials online. Our college has successfully imparted all its course content delivery in online mode during the Pandemic (COVID-19) and also conducted online examinations successfully. The following are some of the steps taken towards online education. 1. Google Classrooms for every course 2. Credits for approved online courses from NPTEL (Local chapter ID 276) 3. Lecture recording/streaming studio setup 4. Interactive classroom with teleconferencing facility. 5. Online classes for Civil service examination. 6. Online value
addition programs on employability skills.

# Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes ELC has been set up as per the Election Commission of India guidelines.
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?	Co-ordinator and co-ordinating faculty members are appointed by the College
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.	Aadhar card and Voter ID linking campaign was conducted by the college in October 2022. National Voters Day celebration - 25.01.2024
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.	Aadhar card and Voter ID linking campaign was conducted by the college in October 2022.
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.	80% of the eligible students above 18 years of age have been already registered as Voters in the Electoral Roll. About 20% of the students above 18 yrs of age and eligible to vote are yet to be enrolled as voters in the electoral roll.

# **Extended Profile**

# 1 Students

# 1.1

# Number of students year wise during the last five years

2022-23	2021-22	2020-21		2019-20	2018-19
1889	1637	1605		1560	1596
File Description		Document			
Upload Supporting Document		View Document			
Institutional data in prescribed format		View Document			

# **2** Teachers

# 2.1

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

Response: 230	File Description	Document
Upload Supporting Document		View Document
Institutional data in prescribed format		View Document

# 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
139	118	115	131	151

# **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
1215.25	964.27	584.74	727.82	711.51

File Description	Document
Upload Supporting Document	View Document

# 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:**

# **Response: Affirmative**

Vimal Jyothi Engineering College(VJEC), affiliated with APJ Abdul Kalam Technological University (KTU), is committed to effective curriculum planning and delivery in adherence to the prescribed university syllabi. The following structured processes and facilities contribute to the successful execution of curriculum-related activities:

# 1. Formal Course Planning, Delivery, and Assessment:

- Outcome-based learning is emphasized through faculty-driven course assignments based on preferences, competencies, and the university syllabus.
- Prior to each semester, formal staff meetings chaired by the Head of Department (HoD) facilitate course planning, delivery, and assessment.

# 2. Facilities for Enhanced Curriculum Delivery:

- Access to digital libraries for both students and faculty, along with department-specific libraries.
- Bridge courses to enhance student understanding of specific topics.
- Encouragement and support for faculty participation in FDPs/workshops to stay abreast of current technologies.
- Implementation of a mentoring system to address both professional and personal needs of students.

## **3. Monitoring and Compliance:**

- Establishment of an Academic Calendar Adherence Committee to ensure compliance with schedules, timelines, and calendar-related commitments.
- Regular Parent Teacher Association (PTA) meetings after internal examination result analysis to discuss academic and non-academic matters.

## 4. Seminar, Project and Comprehensive viva :

- Seventh-semester students present on a current tech topic, assessed by a committee.
- Project work in two phases, each independently evaluated, involving both departmental committees and external experts.

• Comprehensive Examination assessing courses up to the sixth semester through written exams, evaluated by a committee and external experts.

#### 5. Quality Assurance Measures:

- IQAC (Internal Quality Assurance Cell) overseeing overall quality in academic, co-curricular, and extra-curricular activities.
- DQAC (Department Quality Assurance Cell) ensuring the quality of internal assessments, particularly in question paper quality.
- Academic audits conducted internally twice a semester and externally by KTU once a semester.

## 6. Adherence to OBE Standards:

- Curriculum delivery aligns with Outcome-Based Education (OBE) recommended by Washington Accord.
- Accreditation by the National Board of Accreditation (NBA) for all eligible undergraduate programs signifies effective curriculum delivery through a well-documented process.

Vimal Jyothi Engineering College's commitment to quality education is evident through these meticulous processes and continuous efforts to enhance curriculum delivery.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

## **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:** 32

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	<u>View Document</u>
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

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:** 43.47

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
1026	1316	1057	133	70

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

# **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:**

# **Response: Affirmative**

Vimal Jyothi Engineering College aligns seamlessly with the curriculum of APJ Abdul Kalam Technological University (KTU), addressing vital crosscutting issues pertinent to Professional Ethics, Gender, Human Values, Environment, and Sustainability. Below is a detailed overview of how these essential topics are interwoven into the fabric of the educational and professional environment at VJEC:

**Gender Equality:** At VJEC, a proactive stance towards gender equality is taken, ensuring equal opportunities and resources for all students irrespective of gender. Female students and staff are not only welcomed but encouraged to actively engage in decision-making processes and developmental activities, fostering a more inclusive and diverse learning and working environment. The institution has established various committees and cells, including student grievances redressal committees, anti-narcotic clubs, grievances redressal cell for staff/faculty, internal complaint committee, and women cell, all dedicated to ensuring equality and supporting the needs of female faculty members and students. Women development seminars further contribute to enhancing confidence and personality growth.

The commitment to gender equality extends to practical aspects, with the provision of separate resting rooms for female students, ensuring their well-being and comfort. Leadership opportunities are equally accessible to students of all genders, with various professional body chapters headed by both male and female students. The Placement Cell actively ensures equal opportunities for career development.

**Environment & Sustainability:** VJEC has embraced sustainability education through courses like "Introduction to Sustainable Engineering" introduced by the university. This course, along with others such as Environmental Engineering, Disaster Management, Environment Impact Assessment, Environment Health and Safety, and Industrial Safety Engineering, provides a holistic understanding of sustainability issues.

Green audits conducted under the Go Green club at VJEC exemplify the institution's commitment to sustainability. Regular evaluations of energy, water, waste, and more are in line with the Eco-campus concept. The investment in solar plant(50KW) not only reduces the institution's carbon footprint and energy costs but also contributes to cutting carbon emissions, thereby promoting renewable energy sources. The NSS unit plays an active role in promoting sustainable development through activities such as tree planting and community programs.

**Human Values & Professional Ethics:** VJEC places a strong emphasis on inculcating human values and professional ethics through a range of courses, including Life Skills and Professional Communication. These courses cover essential principles such as honesty, loyalty, transparency, dignity, respect, justice, and effective communication.

Prayer is utilized as a tool to reinforce core moral and ethical values among students, guiding them through the transition from personal ethics to professional ethics, thus preparing them for both their careers and personal development. The NSS unit further reinforces these values through vigorous advocacy and engagement in initiatives like "charity pilgrim", visits to orphanages, and book donations, among other activities.

In Conclusion: VJEC is unwavering in its commitment to creating an inclusive and empowering

educational environment. Through the thoughtful integration of initiatives and courses focusing on gender equality, sustainability, development of human values and professional ethics, VJEC ensures that every student has an equal opportunity to thrive and contribute positively to society.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

# 1.3.2

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

Response: 70.2

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

Response: 1326

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

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

# **Criterion 2 - Teaching-learning and Evaluation**

# 2.1 Student Enrollment and Profile

# 2.1.1

# **Enrolment percentage**

# Response: 71.28

# 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
606	477	496	436	320

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

2022-23	2021-22	2020-21	2019-20	2018-19
708	651	645	648	624

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: 77.91

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
129	117	142	118	136
			, ,	I
.1.2.2 Number luring the last		ed for reserved c	ategory as per GOI/ St	ate Govt rule year wise
2022-23	2021-22	2020-21	2019-20	2018-19
180	164	162	162	156
File Description       Institutional data in the prescribed format		Document   View Document		
-		View Document   View Document		
oublished by the ompetent authors	e HEI and endorsed ority.	by the		
Central Governi ategories(SC,S onsidered as po	unication issued by s ment indicating the ST,OBC,Divyangjan er the state rule ( Tr rovided as applicable	reserved ,etc.) to be anslated copy in	<u>View Document</u>	
Provide Links f	or any other relevan	t document to	view Document	

# **2.2 Student Teacher Ratio**

# 2.2.1

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

Response: 13.59

# 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:**

## **Response:** Affirmative

Vimal Jyothi Engineering College places a strong emphasis on adopting student-centric teachinglearning methods, fostering a dynamic educational environment that goes beyond traditional assessments. Faculty at VJEC employ interactive techniques, including experiential learning, participative learning, and problem-solving methodologies, all enhanced through the integration of Information and Communication Technology (ICT) tools.

## **Student-Centric Teaching-Learning Methods:**

# **1. Experiential Learning:**

- Practical sessions provide hands-on experience, bridging the gap between theory and application.
- Internships offer real-world exposure and application of theoretical knowledge.
- Industrial visits provide insights into industry practices, enhancing practical understanding.
- Projects, including those through the Unnat Bharat Abhiyan (UBA), encourage collaborative problem-solving and application of concepts.

# 2. Participative Learning:

- The buddy system facilitates peer learning, fostering collaboration and mutual support.
- Seminars and presentations encourage active student participation and knowledge sharing.
- Workshops provide a platform for interactive learning, skill development, and practical application.
- Integration of Swayam and MOOC courses expands access to diverse learning resources.

# 3. Problem Solving:

- Booster classes and tutorial sessions address individual learning needs, providing targeted assistance in problem solving.
- Question and answer sessions promote critical thinking and problem-solving skills.
- Technical Competitions organised by various student professional body encourage healthy competition among students, enhancing problem-solving abilities.

## **ICT-Enabled Student-Centric Facilities:**

VJEC recognizes the transformative impact of technology on education and provides a range of ICTenabled facilities to enhance the learning experience:

# 1. Digital Library:

° Access to an extensive digital library empowers students and faculty with a wealth of

resources for research and self learning.

#### 2. Smart Classrooms:

• Implementation of smart classrooms leverages multimedia tools for interactive and engaging learning experiences.

#### 3. Learning Management System (LMS):

• The LMS serves as a centralized platform for course materials, assignments, and communication, fostering organized and efficient learning.

#### 4. MOOC Courses:

- Integration of Massive Open Online Courses (MOOCs) broadens the curriculum, offering students access to a diverse range of subjects and perspectives.
- University approved MOOC courses are given credit in the curriculum.

#### 5. YouTube Channel:

• YouTube channel launched by faculty members serves as a repository for educational content, facilitating easy access to lectures and tutorials.

#### 6. Lecture Recording and Streaming:

• A llecture recording and streaming studio for faculty provide flexibility for students to revisit and reinforce concepts at their own pace.

#### 7. Google Workspace:

• Collaboration is enhanced through Google Workspace, offering tools for document sharing, real-time collaboration, and communication among faculty and students.

#### 8. Virtual Lab:

• The virtual lab offers a simulated environment for conducting experiments, providing practical exposure even when physical resources are limited.

#### 9. Language Lab:

• Language lab support the development of communication skills through interactive language learning tools such as BBC language lab.

In conclusion, VJEC's commitment to student-centric teaching methods and the integration of ICT tools demonstrates its dedication to providing a holistic and empowering learning environment. These initiatives are designed to nurture not only academic excellence but also the development of critical thinking, problem-solving abilities, and practical skills, ensuring that students are well-prepared for the challenges of the professional world.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# **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
139	118	115	131	151

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

# 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: 13.91

# 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
23	18	16	18	16

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.	<u>View Document</u>
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **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:** 

# **Response:** Affirmative

Vimal Jyothi Engineering College ,adheres to the regulations of the affiliated University, for Continuous Internal Evaluation (CIE) for both undergraduate (UG) and postgraduate (PG) programs. The institute ensures a transparent assessment mechanism and an efficient grievance redressal system, focusing on maintaining the highest standards of fairness and academic accountability.

Assessment Process: The evaluation process at VJEC adopts a comprehensive approach, considering diverse criteria such as subject proficiency, comprehension skills, attendance records, seminar presentations, and viva voce sessions. Guidelines vary across courses and semesters, with weightage assigned as per the university curriculum. The internal assessment includes three internal exam, two assignments for theory courses, and one internal exam for lab courses.

## **Transparency Measures in Internal Assessment:**

#### **1. Internal Examination Cell:**

• The college has established an internal examination cell responsible for ensuring the timely execution of schedules and conduct and monitoring of the internal examinations.

#### 2. Conduct of Internal Examinations:

- Internal exams are scheduled and intimated to the students well in advance and seating arrangements are displayed on the date of exam.
- Question papers align with the syllabus and are approved by the Internal Quality Assurance Cell (IQAC) and Head of Department (HOD).
- Evaluated answer sheets are shown to students, promoting transparency and clarity.

#### 3. Result Analysis and Display:

- Result analysis is conducted by faculty advisors, and reviewed at the HoD level.
- Internal marks are published for transparency.
- Parent-Teacher Association (PTA) meetings are conducted periodically to discuss students' performance at individual level.

#### 4. Practical and Project Evaluation:

- Practical and project evaluation is based on daily evaluation using rubrics, record books, and viva.
- At the end of the semester, practical courses are evaluated through internal and external lab exam and project evaluation is conducted through Viva Voce by external experts.

## **5. Attendance Monitoring:**
- A centrally monitored computerized attendance system is executed, allowing students to verify their attendance online.
- Attendance Progression Certificates are published at the end of each semester.

#### 6. Rectification and Retests:

- The college provides opportunities for rectification of errors in the evaluation of internal exams and ssignments.
- Retests are allowed for genuine extenuating circumstances.

#### 7. Record Maintenance:

• All records related to attendance, internal examinations, question papers, valued answer sheets, and marks sheets are meticulously maintained by teachers for academic audit.

#### Hierarchical Grievance Redressal System: At Institute Level:

- Teachers distribute evaluated answer scripts, addressing student concerns.
- Any issues with answer scripts or marks are resolved by the teacher.
- Faculty mentors counsel and provide remedial classes for slow learners.
- Absentees due to genuine reasons can take retests for internal exams.

#### At University Level:

- After the declaration of university results, students can apply for revaluation.
- The university provides an option for students to obtain photocopies of their answer scripts.
- Faculty report concerns like missing data, questions outside the syllabus, or challenging questions to the controller of exams.

In conclusion, Vimal Jyothi Engineering College upholds a transparent assessment mechanism and an efficient grievance redressal system, ensuring fairness, accountability, and a student-centric approach. These practices reflect the institute's commitment to academic integrity and continuous improvement.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

### 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:**

#### **Response: Affirmative**

Vimal Jyothi Engineering College places a strong emphasis on transparency and communication regarding Programme Outcomes (POs) and Course Outcomes (COs) for all programs offered by the institution. The systematic approach to integrating these outcomes into the academic framework ensures alignment with industry standards and enhances the overall educational experience.

**Programme Outcomes (POs):** VJEC adopted the twelve POs defined by the National Board of Accreditation (NBA) for engineering graduates, in accordance with the Graduate Attributes specified by the Washington Accord. These outcomes encompass skills, knowledge, analytical abilities, attitudes, and behaviors that students are expected to acquire upon successful completion of the program.

#### **Communication of POs to Teachers:**

#### **1. Faculty Development Seminars:**

• Various seminars on Outcome-Based Education (OBE) are organized to familiarize teachers with OBE Assessment, Program Outcomes, and Bloom's Taxonomy, fostering a comprehensive understanding of the OBE framework.

#### 2. Inclusion in Course Files:

• POs, Program Specific Outcomes (PSOs), Programme Educational Objectives (PEOs), and COs are included into the course files of every course, ensuring that faculty have clear guidance on the overarching objectives.

#### 3. Faculty Meetings:

• POs are effectively communicated during faculty meetings at department level, facilitating open discussions and collaborative efforts towards the attainment of POs.

#### 4. Display in Various Spaces:

• POs and PSOs are prominently displayed in the Head of Department's (HOD) room, laboratories, staff rooms, and classrooms.

#### **Communication to Students:**

#### 1. Display on Website:

° POs, PSOs, and COs are prominently displayed on the institution's website, providing

easy access to students, faculty, and other stakeholders.

#### 2. Physical Display:

• Physical displays of POs and PSOs in the HOD's room, laboratories, staff rooms, and classrooms ensure that students are continually aware of the program's overarching objectives.

#### **3. Inclusion in Publications:**

• POs are published in the college magazine and newsletters, enhancing visibility and emphasizing their importance in the overall academic experience.

#### 4. Lab Record :

• POs, PSOs, and corresponding COs are incorporated into students' lab records, providing a tangible link between theoretical learning and practical application.

#### **5. Orientation Meetings:**

• Head of the Department and class tutors explain various Programme Outcomes to students during department orientation meetings, ensuring students understand the overarching objectives of their programs.

#### 6. Exam Question Papers:

• COs corresponding to eachquestions are included in internal exam question papers, reinforcing the connection between course-specific outcomes and broader program objectives.

#### 7. Classroom interaction:

• Teachers handling various courses actively explain course outcomes and correlate them with POs and PSOs, during the class hour.

#### 8. University Syllabus Integration:

• From the 2019 B-Tech Programme regulation, COs are integrated directly into the university syllabus, emphasizing the importance of these outcomes.

#### 9. Laboratory Manuals:

• POs and COs are thoughtfully included in laboratory manuals prepared by faculty members, providing students with a practical understanding of how outcomes align with their coursework.

In conclusion, Vimal Jyothi Engineering College adopts a comprehensive and transparent approach to communicate and integrate Programme Outcomes and Course Outcomes among stake holders. This commitment ensures that both faculty and students are actively engaged in attaining the COs and POs.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

## 2.6.2

Attainment of POs and COs are evaluated.

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

#### **Response:**

#### **Response:** Affirmative

Vimal Jyothi Engineering College employs a comprehensive and systematic approach to evaluate the attainment of Programme Outcomes (POs) and Course Outcomes (COs) across its academic programs. The institution recognizes the importance of robust assessment methods in ensuring the effectiveness of its educational processes.

#### **Evaluation of COs by the Institution:**

#### 1. Assessment Methods:

• Formal assessment methods, including a continuous evaluation system and end-semester examinations, are utilized to evaluate the attainment of COs for undergraduate programs.

#### 2. Common Assessment Practices:

• The institution employs a common set of assessment methods for most courses, encompassing final university exams, internal exams, assignments, lab exams, seminars, and projects. This standardized approach facilitates the collection of relevant and comparable data across various programes.

#### 3. Data Utilization:

• Student performance data derived from the above assessments form the basis for the computation of the attainment of course outcomes.

#### **Evaluation of POs and PSOs by the Institution:**

#### 1. Mapping with COs:

- POs are evaluated by considering the aggregate attainment of COs for all courses within a program.
- Course outcomes for each course are systematically mapped with both POs and Program Specific Outcomes (PSOs), ensuring alignment with broader program objectives.

#### 2. Direct and Indirect Assessment:

• The attainment of POs and PSOs is calculated using a combination of direct and indirect assessment methods.

#### 3. Weightage Allocation:

• A structured approach allocates 80% weightage to direct assessment and 20% weightage to indirect assessment for evaluating POs and PSOs.

#### 4. Direct Assessment Method:

- Direct assessment is primarily based on the attainment of COs and their corresponding mapping to POs and PSOs.
- The direct PO attainment for a specific outcome is calculated by averaging across all courses mapped to that particular PO or PSO.

#### **5. Indirect Assessment Methods:**

• Indirect PO attainment is gauged through various surveys, including program exit surveys, co-curricular activity surveys, and industrial visit surveys. These indirect assessments provide valuable insights into the broader aspects of program outcomes.

#### **Holistic Evaluation Approach:**

• The institution recognizes that a holistic evaluation approach, considering both direct and indirect measures, provides a more comprehensive understanding of the effectiveness of its academic programs.

#### **Continuous Improvement:**

• The evaluation outcomes serve as a foundation for continuous improvement, allowing the institution to make informed decisions regarding curriculum enhancements, teaching methodologies, and overall program effectiveness.

In conclusion, VJEC's approach to to the calculation of the attainment of POs and COs reflects a commitment to rigorous and meaningful assessment practices. The institution's utilization of diverse assessment methods and a balanced weighting system ensures a thorough understanding of student learning outcomes and program effectiveness, facilitating continuous enhancement in the quality of education provided.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

#### 2.6.3

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

#### **Response:** 80.12

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
262	223	350	366	391

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	
420	298	413	437	419	

File Description	Document
Institutional data in the prescribed format	View Document
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.	<u>View Document</u>
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

# 2.7 Student Satisfaction Survey

2.7.1					
Online student satisfaction survey regarding teaching learning process					
Response: 3.65					
File Description	Document				
Upload database of all students on roll as per data template	View Document				

# **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: 20.34

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
1.0	.975	8.83372	5.88016	3.64640
File Descriptio	on		Document	
File Descriptio			Document   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:**

### **Response: Affirmative**

Vimal Jyothi Engineering College strives to become a beacon for innovation, entrepreneurship, and knowledge dissemination. Our commitment extends beyond academic boundaries, positively impacting the local community, industries, and stakeholders. This commitment is evident through the strategic initiatives in place.

**Institution's Innovation Council (IIC):** The Institution's Innovation Council (IIC), approved by the Ministry of Education, Government of India, plays a central role in fostering innovation and entrepreneurship. IIC organizes various activities, workshops, and seminars, while its Intellectual Property Rights Cell raises awareness about IP generation and filing patents. The formulation and implementation of innovation and start-up policies occur through the National Innovation and Start-up

Policy (NISP) cell.

**Innovation and Entrepreneurship Development Centre (IEDC):** Sponsored by the Kerala Startup Mission, IEDC empowers students and faculty with entrepreneurial skills through training, workshops, and mentorship programs. The center supports individuals in various stages of business development, culminating in the annual Tech FEST. VJEC facilitates knowledge and technology transfer through VJINSPIRE.

**Incubation Facility:** The commitment to fostering innovation extends to VJEC's Incubation Center, offering support and resources to startups and early-stage ventures. Collaborating with the Malabar Incubation Center (MIZONE) and Maker Village enhances our incubation activities.

**Education and Training:** VJEC offers diverse educational programs, including Add-On courses, training programs, and Minor/Honor degrees affiliated with KTU. The Training and Placements Cell ensures students are equipped with soft and domain-specific skills, making them industry-ready upon graduation.

**Unnat Bharath Abhiyan (UBA):** VJEC's dedication to societal development is evident through initiatives like Unnat Bharath Abhiyan (UBA), adopting villages for technology transfer and knowledge sharing. Projects like the Low-cost Egg Hatchery Unit and Hybrid Bamboo Structured Solar Tunnel Dryer showcase our commitment to socially relevant innovations.

**Research Cell:** At the core of VJEC's research initiatives is the Research Cell, actively promoting and monitoring research across departments. The Cell formulates and implements policies encouraging academic pursuits through initiatives like seed funding, the Innovative Research Promotion Scheme (IRPS), and support for publications, grant-in-aid projects, seminars, and conferences.

**Prototyping and Testing Facilities:** VJEC provides cutting-edge prototyping and testing facilities, empowering students to iterate and refine their ideas using state-of-the-art equipments available in various engineering labs.

**Networking and Events:** Regular seminars, workshops, and conferences hosted by VJEC bring together innovators, researchers, entrepreneurs, and industry experts. These events serve as platforms for networking, idea exchange, and collaboration.

In conclusion, VJEC's ecosystem for innovation stands as a testament to its unwavering dedication to fostering innovation, research, and entrepreneurship. Through diverse initiatives, collaborative efforts, and a commitment to societal impact, VJEC continues to enrich its academic community, contributing significantly to economic growth, technological progress, and societal development.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

## 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: 142

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
12	26	33		45	26
File Descriptio	n		Docum	ent	
File Description				ent Pocument	

## **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: 0.51

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

2022-23 202	21-22 2	2020-21	2019-20	2018-19
15 14	2	26	36	26

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 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: 0.26

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
26	7	3	9	15

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **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:**

#### **Response: Affirmative**

Vimal Jyothi Engineering College places a profound emphasis on holistic development through extension activities that cultivate social responsibility, resilience, and proactive mindsets in students. Engaging students in esteemed organizations like NSS, IEEE, UBA, UNAI, etc., has been a cornerstone of the institution's commitment to shaping well-rounded individuals capable of contributing meaningfully to society.

**Engagement Platforms:** Participation in diverse student organizations provides students with invaluable experiences, fostering adaptability and resilience. These platforms go beyond traditional learning, equipping students to address real-world challenges with creativity and confidence. By navigating dynamic environments through NSS, IEEE, UBA, UNAI, etc., students develop essential life skills.

#### **Social Initiatives:**

#### 1.NSS Activities:

- NSS VJEC engages in various programs like tree plantation, health awareness campaigns, medical camps, consumer awareness programs, wheelchair distribution, and rainwater harvesting initiatives, showcasing a multifaceted commitment to community wellbeing..NSS members actively participate in blood donation camps and awareness rallies, showcasing a commitment to community health and well-being.
- NSS unit conducts a 7 day residential camp for its members serving the neighbouring community in every year.

### 2. Unnat Bharat Abhiyan:

• Adoption of five villages under Unnat Bharat Abhiyan demonstrates a proactive approach in providing technological support to communities, addressing needs such as egg hatching machines, waste management systems, and solar dryers.

#### 3. Swachh Bharat Mission:

• VJEC contributes to the Swachh Bharat Mission through activities like tree plantation, waste plastic management awareness campaigns, and town cleaning, fostering a sense of environmental responsibility.

#### 4. Innovative Projects:

• Encouraging students to undertake innovative projects, both through IEDC schemes and

academic projects, showcases a commitment to solving social problems and meeting essential needs.

#### **5. Technical Awareness Programs:**

• IEEE PES volunteers conduct technical awareness programs for nearby school students and villages, contributing to the dissemination of knowledge and promoting technological literacy.

#### 6. Energy Efficiency Initiatives:

• The institution, through IEEE PES, conducts energy efficiency programs for local communities, raising awareness about energy-saving practices and reducing energy consumption.

#### 7. Flood Relief Services:

• During the floods in 2018 and 2019, students and faculty members actively contributed to flood relief services through NSS units, demonstrating a sense of social responsibility in times of need.

#### 8. Computer Literacy Program:

• IEEE Women in Engineering conducts computer literacy programs to empower women, aligning with broader initiatives for gender inclusivity and empowerment.

#### 9. Charity Pilgrimage:

• The charity pilgrimage to nearby orphanages reflects a commitment to social welfare, with students actively involved in distributing food items and cleaning materials at more than ten centers.

**Conclusion:** VJEC's extension activities showcase a holistic approach to student development, emphasizing social responsibility, community engagement, and proactive problem-solving. Through these initiatives, the institution not only imparts technical knowledge but also nurtures a sense of empathy and responsibility in students, preparing them to be catalysts for positive change in society. The commitment to these activities over the last five years is evident in the tangible impact on both the institution and the communities it serves.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

## 3.4.2

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

#### **Response:**

#### **Response:** Affirmative

Vimal Jyothi Engineering College has garnered numerous accolades and recognition for its exemplary extension activities, reflecting a commitment to social, academic, research, and innovative initiatives. The institute's active engagement with both government and non-government organizations underscores its dedication to serving the community.

#### National Service Scheme (NSS):

The NSS unit at VJEC plays a pivotal role in community service, with a significant focus on the "Charity Pilgrim" initiative. This initiative involves visits to nearby orphanages, where the institute, in collaboration with the management, provides essential food items and conducts cultural and social activities, fostering a sense of compassion and community engagement. The efforts of VJEC were acknowledged and appreciated by esteemed organizations such as Karunya Bhavan Charitable Trust, Theresa Bhavan, Providence Home, HOPE, and more. Additionally, the NSS unit conducted activities addressing crucial issues such as gender equality, road safety, and energy audit, showcasing a multifaceted approach to social responsibility.

#### **Unnat Bharat Abhiyan:**

The institute actively participates in the Unnat Bharat Abhiyan, contributing to various social and community service activities. The project titled "Village Women Economic Empowerment through Low-Cost IoT-Based Hatchery Unit Distribution" received national recognition at the Mahotsav & Expo in March 2023 at IIT Delhi. Currently, the institute is involved in the "Tribal Higher Education and Interactive Ventures for Excellence" (THRIVE) program, designed to inspire aspirations and career goals among tribal students at Model Residential School, Pattuvam, Kannur.

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

VJEC has an active IEEE chapter that organizes and participates in diverse technical activities and events. The IEEE chapter at VJEC has been recognized with various awards, including Outstanding Performance Student Branch Chapter, Outstanding Student Volunteer awards at the Malabar section, Kerala section, and international level. The institute's students, guided by faculty supervision, have excelled in technical competitions, receiving accolades at events such as the Humanitarian Project Contest, Indian Karting Racing, and Idea Fest Contest.

### **Conclusion:**

The multitude of awards and recognitions received by Vimal Jyothi Engineering College reflects its outstanding contributions to extension activities. The institute's proactive engagement with social causes, technological innovation, and community service has garnered praise from both governmental and non-governmental bodies. VJEC's continuous pursuit of excellence in extension activities is a testament to its vision of creating socially responsible and technically proficient individuals.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

## 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: 111

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
31	13	26	22	19

File Description	Document	
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document	
Institutional data in the prescribed format	View Document	
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	<u>View Document</u>	
Provide Links for any other relevant document to support the claim (if any)	View Document	

## **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: 21

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity- wise and year-wise	<u>View Document</u>
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **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:**

#### **Response:** Affirmative

Vimal Jyothi Engineering College is dedicated to providing comprehensive infrastructure and facilities that align with its vision, mission, and the guidelines set by AICTE and Kerala Technological University. Situated in the serene surroundings of Kannur District, Kerala, the sprawling 30.50-acre campus features a built-up carpet area of 34,785.59 sqm, carefully planned to support academic and co-curricular activities.

#### Academic Infrastructure:

The institution has seven different blocks for academic activities, ensuring a conducive environment for teaching and learning. Key academic facilities include:

- **Classrooms:** Equipped with ICT facilities and WiFi, the college provides 50 classrooms to facilitate interactive and technology-enhanced learning.
- Laboratories: With 44 well-equipped laboratories, the institution prioritizes experiential learning.
- **Computing Facilities:** Seventeen computer laboratories and one hardware lab house a total of 586 computers. The infrastructure is supported by licensed software and a 600 Mbps leased line connectivity, offering optimal resources for computer-based education.
- Library: Spanning an area of 1000 sqm, the central library stocks 46,152 copies of books, including 30,181 titles, research reports, periodicals, and magazines. Additionally, a digital library with 16 computers supplements traditional resources.

#### Additional Facilities:

The institution provides diverse facilities to support academic and administrative activities:

- Seminar Halls and Board Rooms: Equipped with ICT facilities, these spaces cater to academic discussions and conferences.
- **Multipurpose Hall:** Designed for large gatherings(up to 1500), this hall accommodates various events and activities.
- **Training and Placement Center:** Focused on career development, this center plays a crucial role in connecting students with industry opportunities.
- **Interactive Classrooms:** Specially designed for academic activities and conferences, these rooms enhance engagement and collaborative learning.
- **Sports Facilities:** Outdoor sports amenities include a 200-meter track, football and cricket fields, volleyball and basketball courts, badminton courts, and kho kho grounds.
- **Gymnasium:** A well-equipped gymnasium featuring multi-gym stations, weight training equipment, and facilities for various exercises, promoting physical fitness among students.
- **Hostels:** Separate hostels for boys and girls, along with staff quarters, contribute to a conducive living environment.
- Cafeteria, Parking, and General Stores: Essential amenities for the convenience of students and staff.
- **Industry-Supported Labs:** Collaboration with industries enriches laboratory facilities, ensuring relevance to real-world applications.
- **Infrastructure for Sustainability:** Energy conservation units, including a grid-connected solar power plant(50KW), biogas plant, rainwater harvesting(35L Ltrs), and wastewater treatment plant, underscore the commitment to environmental responsibility.
- Facilities for Differently Abled: Ensuring inclusivity, the institution provides facilities that cater to the needs of differently-abled individuals such as ramps, lift and toilet for for differently abled.

#### **Facilities for Extracurricular and Cultural Activities:**

• Seminar Halls and Auditoriums: Offering ample space for cultural and extracurricular activities, including seminars and conferences.

In conclusion, Vimal Jyothi Engineering College has strategically developed its infrastructure to create a holistic educational environment that nurtures academic excellence, technological proficiency, and overall well-being. The institution's commitment to sustainability, inclusivity, and a balanced curriculum is reflected in its state-of-the-art facilities and resources.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

## 4.1.2

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

**Response:** 17.82

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
354.73478	127.21548	44.55472	102.12294	120.31412

File Description	Document
Institutional data in the prescribed format	View Document
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)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 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:** 

### **Response: Affirmative**

Vimal Jyothi Central Library, spanning 1000 sqm across two floors within the administrative block,

stands as a hub for knowledge and research in the institution. Leveraging digital technology, the library has adopted an Integrated Library Management System (ILMS) and offers seamless access to an extensive array of e-resources, journals, and books. The library is an integral part of the academic ecosystem, fostering a culture of continuous learning and research.

#### **Physical Library Infrastructure:**

The library, with a seating capacity for 200 users, subscribes to 92 journals and has a collection of 46,152 volumes encompassing 30,181 titles across diverse domains of Science and Technology. Organized using the Dewey Decimal Classification Scheme, the library adopts an open access system for easy navigation and accessibility for all users.

#### **Digital Transition and ILMS:**

In a strategic move to enhance library services, the institution transitioned from Del Plus & New Gen Lib to the leading Library Management Software, KOHA, in 2021. This transition, supported by a Cloud Server, has streamlined library operations, including membership registration and the issue/return of books. Barcode technology facilitates efficient tracking, with students using barcoded identity cards for library membership.

### **Online Public Access Catalog (OPAC):**

The library's Online Public Access Catalog (OPAC) is accessible remotely via [https://library.vjec.ac.in/], providing users with the flexibility to explore the catalog and resources from anywhere, both on and off the campus. A Touch Screen Kiosk further enhances accessibility for users seeking information within the library premises.

#### **Digital Library Platform and Connectivity:**

Collaborating with KTU, the library utilizes Knimbus as its primary digital library platform. Sixteen LAN-connected desktops equipped with Wi-Fi and internet facilities provide students and faculty with easy access to a plethora of library links, including DELNET, NDL, and NPTEL. The library ensures comprehensive coverage with a high-quality photocopier and scanner for duplicating hard copy materials.

#### Webpage Integration and E-Resources:

The library has a dedicated webpage integrated into the college's website, serving as a gateway to all subscribed e-resources. This approach enhances visibility and accessibility to digital assets, ensuring that the academic community can seamlessly explore and benefit from the rich collection of online materials.

#### **E-Magazines and Additional Subscriptions:**

The college subscribes to Magzter, offering access to over 7500 online magazines, journals, newspapers, and e-books in multiple languages, including English, Hindi, and Malayalam. This extensive digital repository enriches the academic experience, providing students and faculty with diverse perspectives and contemporary insights.

In conclusion, VJEC Central Library has successfully embraced digital transformation, making scholarly resources easily accessible to its academic community. The integration of ILMS, the adoption of cutting-edge digital library platforms, and the provision of diverse e-resources underscore the institution's commitment to providing a modern, technology-driven learning environment.

File Description		Document
Upload Additional information		View Document
	Provide Link for Additional information	View Document

## **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:**

#### **Response:** Affirmative

Vimal Jyothi Engineering College stands at the forefront of technological advancement, continually enhancing its IT facilities to provide a cutting-edge learning environment for students and faculty alike. The institution has made substantial investments in hardware, software, and networking components to ensure seamless connectivity and robust IT support.

### Network and Connectivity:

VJEC has a substantial IT infrastructure with 700 computers connected to a Local Area Network (LAN). The college is equipped with a high-speed leased line internet connectivity of 600 Mbps and an additional 20 Mbps broadband connection. Security is prioritized through the implementation of the Sophos XG 450 firewall.

#### Servers and Storage:

Six IBM servers and one storage server, employing SAS technology, safeguard critical data within the institution. An Active Directory configured on the Windows 2008 Enterprise Server efficiently manages user accounts, ensuring personalized access to desktops, documents, and network drives. The redundancy and security of data are further ensured by the replication and storage of mirrored copies in two dedicated server rooms.

#### Wi-Fi Infrastructure:

VJEC's Wi-Fi network is managed by an Aruba Instant On-site controller and supported by a core switch comprising Netgear ProSafe M4100-12GF and Netgear ProSafe GS748T switches. With a total of 110 access points, including 11 Aruba and 99 Netgear WAC750 access points, the institution provides extensive coverage for wireless connectivity.

#### **Cloud Storage and Data Protection:**

Academic and administrative data find a secure home in cloud storage solutions, emphasizing redundancy and accessibility. G Suite for Education, Microsoft Office 365, and dhi software play pivotal roles in data backup and protection. Routine backups, including financial statements, are performed on hard disks and stored using Bluehost Shared Hosting service.

#### **Energy Efficiency and Power Backup:**

VJEC is committed to sustainability, generating 50 kW through in-house solar power. Three diesel generators (62.5KVA, 125KVA, and 250 KVA) and an Online UPS of 200 KVA ensure uninterrupted power supply. This commitment to energy efficiency aligns with the institution's broader environmental goals.

#### Year-wise IT Infrastructure Updates:

The institution's commitment to staying current is evident in its regular updates to IT equipment. Notable additions include LED TVs, printers, projectors, monitors, SSDs, and a range of other devices, demonstrating a proactive approach to providing state-of-the-art technology to students and faculty.

#### Wi-Fi Details:

The Wi-Fi infrastructure, managed by Aruba, encompasses a sophisticated setup, with a total of 110 access points strategically placed across the campus. The core switch configuration ensures reliable and high-speed connectivity, meeting the demands of a technologically driven academic environment.

In conclusion, VJEC's IT facilities reflect a forward-looking approach, ensuring that students and faculty benefit from a technologically enriched academic experience. The institution's investment in robust connectivity, cloud storage, and renewable energy solutions positions it as a pioneer in providing a modern and sustainable learning environment.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

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

#### Response: 3.22

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

Response: 586

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### 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: 38.52

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
285.38477	307.89042	299.71806	370.63368	355.74261

File Description	Document
Institutional data in the prescribed format	View Document
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)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **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: 54.29

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
643	802	728	1297	1029

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).	<u>View Document</u>
Upload policy document of the HEI for award of scholarship and freeships.	<u>View Document</u>
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### 5.1.2

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

Soft skills
Language and communication skills
Life skills (Yoga, physical fitness, health and hygiene)
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)	<u>View Document</u>
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 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: 66.77

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
1440	1380	669	959	1085

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

## 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:** A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **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: 56.72

# 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
143	136	183	277	164

#### 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
262	223	350	366	391
			·	

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)	<u>View Document</u>
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)	<u>View Document</u>
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 5.2.2

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

### Response: 1.74

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
1	2	1	4	4

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	<u>View Document</u>
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **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: 41

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
9	4	0	23	5

File Description	Document	
Upload supporting document	View Document	
list and links to e-copies of award letters and certificates	View Document	
Institutional data in the prescribed format	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

### 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:** 41

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
50	50	31	31	43

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

## 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:**

### **Response: Affirmative**

Vimal Jyothi Engineering College takes immense pride in fostering a vibrant and supportive alumni community that significantly contributes to the institution's growth and development. The Alumni Association, registered under the District Registrar Office in Talasseri with Reg No: KNR/CA/382/2018, plays a pivotal role in fostering enduring connections between the alma mater and its graduates.

#### Alumni Association Structure:

The Alumni Association is inclusive, encompassing all former graduates of VJEC, and is governed by a General Body led by an Executive Council comprising of 19 members, including key office bearers - President, Vice President, Secretary, Joint Secretary, and Treasurer. Ex-officio membership is extended to all teaching faculty members. Annual meetings, characterized by formal sessions, entertainment programs, and dinner, serve as platforms for alumni engagement and networking.

#### **Activities and Contributions:**

The Association actively engages in several initiatives, demonstrating a commitment to the institution's holistic development:

- 1. **Internship and Project Support:** Alumni provide valuable internship training and project support to interested students in their 3rd and 4th years of B.Tech. Certificates of merit and cash awards for successful completion further motivate and recognize student achievements.
- 2. **Membership and Chapters:** Final-year students automatically become associate members, ensuring a seamless transition into the Alumni Association. Additionally, VJEC's global reach is strengthened by dedicated alumni chapters in the UAE and Canada.
- 3. **Honorary Membership:** Former teaching staff with five years of service become honorary members, fostering a sense of lifelong connection.
- 4. **Executive Leadership:** The Principal of the institute serves as the President of the Association, with other Executive Council members appointed by the General Body, ensuring a leadership

structure that aligns with the institution's goals.

The Alumni Association, through its various endeavors, showcases a commitment to both financial and intellectual contributions:

- 1. **Financial contribution:** Financial contributions, such as the generous Rs. 1 Lakh donation during the Covid-19 pandemic for a remote-controlled medicine dispensing robot, exemplify the alumni's commitment to impactful initiatives.
- 2. Scholarships and Awards: Deserving students benefit from scholarships funded by alumni, emphasizing the association's commitment to supporting academic excellence.
- 3. **Reference Book Bank:** The alumni, including faculty members, contribute to the college Central Library's Reference Book Bank, ensuring the availability of diverse learning resources.

#### **DAB Involvement and Placement Readiness:**

Alumni are integral part of the DAB (Department Advisory Board), actively contributing valuable insights that aid the institution's development and students' welfare. Additionally, alumni share their professional experiences during the Placement Readiness Programme, enhancing the employability of final-year BTech students.

#### Alumni Newsletter and Teaching Appointments:

A dedicated Alumni Newsletter, released biannually, serves as a comprehensive update on the association's activities. Alumni with a passion for teaching are appointed as faculty members, bringing their real-world experiences to the academic realm.

In conclusion, VJEC's Alumni Association stands as a beacon of engagement, fostering lasting connections that extend beyond graduation. The Association's multifaceted contributions, from financial support to mentorship, exemplify a shared commitment to the institution's continued success and the holistic development of its students.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# **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:**

#### **Response:** Affirmative

Vimal Jyothi Engineering College, established in 2002 under the visionary guidance of the Archdiocese of Thallassery and governed by the Meshar Diocesan Educational Trust, is committed to imparting quality technical education while instilling human values in its students. The institution, affiliated with APJ Abdul Kalam Technological University (KTU), operates under a decentralized and participative governance model that aligns with its vision and mission.

#### **Governance Structure:**

- Meshar Diocesan Educational Trust: The foundation supporting enhanced learning, fostering human values, and providing world-class technical education.
- **Board of Trustees:** Establishes directive principles, policies, and oversees overall administration. Archbishop Mar Joseph Pamplany serves as the Patron, and Rev. Fr. Antony Muthukunnel is the Chairman of VJEC since May 14, 2019.
- Governing Body: Guides academic, research, and student/faculty development.
- **Departmental Advisory Boards:** Monitor academic performance and encourage innovative ideas for each department.
- College Council: Oversees the teaching-learning process, results analysis, and suggests corrective measures.
- Internal Quality Assurance Cell (IQAC): Monitors and improves the quality of academic and administrative activities within the college.
- Committees, Clubs, and Organizations: Engage teachers in various aspects of institutional life.
  - College Student Union: An elected body conducting student-centric activities.
  - **Sports, Art Committees, Placement Cells, NSS:** Collaborative bodies providing diverse opportunities.

• Women Cell: A platform for women to express needs and priorities.

#### **Outcomes of Effective Leadership and Governance:**

The institution's decentralized governance and effective leadership contribute to:

- Academic Excellence: A commitment to fostering multidisciplinary education, skill development, and character-building.
- **NEP 2020 Implementation:** VJEC actively embraces the National Education Policy (NEP) 2020, recognizing its transformative potential. Initiatives include consultations, workshops, and faculty and student development programs to align curriculum, pedagogy, and assessment with NEP's vision.

#### **Assessment Process:**

VJEC's assessment process is comprehensive, incorporating various criteria:

- Subject Proficiency: Evaluated through written exam to gauge students' knowledge.
- Comprehension Skills: Assessed through assignments to measure critical thinking abilities.
- **Regularity:** Attendance records are monitored to ensure students' consistent engagement.
- **Demonstration Abilities:** Seminar presentations are used to evaluate students' presentation skills.
- Viva Voce Sessions: A platform for interactive assessments.

This multifaceted approach ensures a holistic evaluation of students, promoting a comprehensive understanding of their capabilities.

In conclusion, Vimal Jyothi Engineering College exemplifies visionary leadership and decentralized governance, fostering a conducive environment for academic excellence, skill development, and holistic education. The institution actively embraces the transformative NEP 2020, aligning its practices with the evolving landscape of higher education in India.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

## **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:** 

#### **Response: Affirmative**

At Vimal Jyothi Engineering College, our commitment to delivering excellence in all academic programs is central to our vision. Our pursuit of becoming a center of excellence in technical education is manifested through a strategic and effective deployment of the institutional perspective plan, highlighting our dedication to quality education and training.

#### Leadership and Oversight:

- 1. Governing Body: Guides the institution in academics, research, and student and faculty development, providing strategic direction.
- 2. **Principal:** Entrusted with overseeing the institution's daily operations, conveying timely instructions through meetings, and ensuring periodic monitoring and evaluation of all institutional activities.
- 3. **College Council:** Oversees the teaching-learning process, conducts result analysis, and suggests corrective measures, ensuring academic excellence.
- 4. **Internal Quality Assurance Cell (IQAC):** Continuously monitors and enhances the quality of academic and administrative endeavors across different domains within the college.
- 5. Committees and Cells: Orchestrates and manages academic, co-curricular, and extracurricular activities, fostering a holistic educational environment.
- 6. Grievance Redressal System: Addresses concerns through a multi-tiered approach involving tutors, Heads of Departments (HoDs), and the principal. Specialized bodies handle issues like Anti-ragging, Anti-sexual Harassment, and Disciplinary matters.

#### **Recruitment, Promotion, and Service Rules:**

Adheres to AICTE, KTU, and Kerala Government guidelines, ensuring fair and transparent processes in line with statutory regulations.

#### Committees, Clubs, and Organizations:

1. Mentoring, Sports, Arts, Placement Cell, and NSS: Collaborate to offer students diverse

opportunities and resources, providing foundational training for higher studies and career prospects.

#### **Communication Strategies:**

1. **Communication Channels:** Vision and mission statements are communicated through circulars, notices, boards, and websites. Modern tools like e-mail, SMS, and WhatsApp are utilized for efficient information dissemination.

#### **Policies, Service Rules, and Procedures:**

1. **Policy Framework:** Different policies covering research, academics, and more are in place, reflecting our commitment to maintaining a structured and transparent operational framework.

In essence, the institutional perspective plan at Vimal Jyothi Engineering College is effectively deployed through a well-defined leadership structure, active monitoring bodies, and comprehensive communication strategies. Our commitment to excellence is reflected in our adherence to established norms and our continuous efforts to provide a holistic educational experience.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

Administration
Finance and Accounts
Student Admission and Support
Examination

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

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 6.3 <u>Faculty Empowerment Strategies</u>

#### 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:**

#### **Response:** Affirmative

Vimal Jyothi Engineering College recognizes its employees as invaluable assets and is committed to fostering a nurturing environment for both teaching and non-teaching staff. The institution places a strong emphasis on welfare measures and has implemented a comprehensive performance appraisal system to ensure the continuous development and well-being of its staff.

#### **Employee Welfare Measures:**

*Leave Measures:* The College provides a range of leave options, including Medical Leave, Duty Leave, Compensation Leave, Maternity Leave, Casual Leave, Early Leaving Permission, Leave Without Pay, Special Casual Leave, Vacation Leave, and Study Leave.

#### Monetary Welfare Measures:

- 1. Gratuity: Awarded to employees with over five years of service.
- 2. **Provident Fund (PF):** Ensuring compliance with statutory provisions, both the organization and employees contribute to the provident fund.
- 3. **ESI for Non-Teaching Staff:** Employees benefit from the Employees' State Insurance.
- 4. **Staff Association for Mutual Empowerment (SAME):** Provides personal loans with low interest for staff.
- 5. Medical Insurance: Ensures the health and well-being of staff.
- 6. Laptop Loan without Interest: Facilitates accessibility to technology.
- 7. Seed Money for Research: Financial support to undertake research.
- 8. **Incentives for Faculty:** Rewards for paper publication, financial support for patent filing, incentives for pursuing Ph.D.

General Welfare Measures:

- 1. **Staff Club:** Fosters a sense of community among employees.
- 2. Accidental Insurance: Comprehensive coverage for employees.
- 3. Gymnasium: On-campus fitness facilities.
- 4. College Bus Facilities: Convenient transportation for staff.
- 5. Separate Dining Facility and Parking Area: Dedicated spaces for staff convenience.
- 6. Faculty Rooms with Cubicles: Equipped with private workspaces.
- 7. Hostel Facilities and Family Quarters: Offered at a subsidized rate.
- 8. Restroom for Staff: Ensures comfort and convenience.
- 9. Recreation Tours: Opportunities for leisure and team-building.

#### **Performance Appraisal System:**

The institution employs a robust faculty performance appraisal system overseen by the College Principal. Key components include:

- 1. **Self-Appraisal Report:** Faculty prepares self-appraisal reports covering teaching, professional development, research, and personality traits.
- 2. **Student Feedback:** Students provide valuable input through an online feedback system twice in a semester.
- 3. **Peer Review:** A policy for peer observation is in place, with experienced faculty members observing and advising newly joined faculty.
- 4. Advisory Meeting: Regular meetings gather feedback from students, ensuring continuous improvement.

Increments and promotions are determined based on comprehensive scores generated through the Spaneos system, aligning with AICTE guidelines. Technical staff are evaluated by their Heads of Departments using a structured format.

This integrated approach to employee welfare and performance appraisal at Vimal Jyothi Engineering College reflects the institution's commitment to creating a supportive and growth-oriented environment for its valuable staff.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

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

#### Response: 41.9

# 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
133	7	64	70	0

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	<u>View Document</u>
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 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: 55.19

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
131	73	87	84	61

2022-23	2021-22	2020-21		2019-20	2018-19
28	27	27		27	27
Descriptio	on		Docume	ent	
ogrammes as	se/Faculty Orientatic per UGC/AICTE st icipated by teachers	ipulated	View Do	ocument	
Institutional data in the prescribed format			View Document		
Copy of the certificates of the program attended by teachers.			View Do	ocument	
Annual reports highlighting the programmes undertaken by the teachers			View Do	ocument	
Provide Links for any other relevant document to support the claim (if any)			View Doc	ument	

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

#### 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:**

#### **Response:** Affirmative

Vimal Jyothi Engineering College has devised strategic approaches for the mobilization and optimal utilization of resources and funds, demonstrating a proactive stance in financial planning, auditing, and resource management.

**Resource Mobilization Strategy:** To ensure adequate resources for the optimal functioning and growth of the institution, every department proactively prepares advance budgets for the upcoming academic year. These budgets encompass requirements for laboratory equipment, infrastructure, and IT facility. The compilation and normalization of departmental budget plans are based on the anticipated total income from students' tuition fees.

In cases of emergencies or shortages, the institution has established a mechanism to mobilize additional funds through loans from banks. Furthermore, departments are encouraged to explore grant opportunities

from various sources, such as consultancies and seminar/workshop grants from prestigious organizations like AICTE and KSCSTE. The collaborative negotiation process for equipment procurement involves a committee comprising the Bursar, Administrator, Principal, Head of the Department, and the faculty in charge of the laboratory.

The institution emphasizes efficient utilization of resources, instructing staff to maximize the use of equipment within the established college time framework. Inter-departmental coordination is actively promoted to enhance the effective use of laboratory equipment and seminar halls, fostering a collaborative and resource-efficient environment.

**Financial Audits:** The financial health of the institution is subject to regular audits, ensuring transparency and accountability. M/s Jacob & George Chartered Accountants conduct external audits, providing an unbiased evaluation of the income and expenditure. The absence of major audit objections underscores the institution's commitment to financial integrity.

In addition to external audits, the institution employs an internal auditing system for certain minor expenses. The accounts department plays a pivotal role in this internal auditing process, ensuring that financial transactions align with established norms and regulations.

**Annual Budget Preparation:** As a self-financing institution, Vimal Jyothi Engineering College meticulously prepares its annual budget well in advance, aligning it with expected income, primarily derived from tuition fees. This proactive approach minimizes the likelihood of financial deficits, showcasing prudent financial planning.

In instances where a deficit may arise, the institution adopts a proactive approach by seeking support from suitable banks through loans. Notably, the repayment of loans takes precedence in subsequent budgets, reflecting a responsible and sustainable financial strategy.

In conclusion, Vimal Jyothi Engineering College's comprehensive approach to resource mobilization, financial management, and auditing demonstrates its commitment to ensuring financial sustainability, transparency, and efficient utilization of resources for the benefit of its academic community.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

#### 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:**

#### **Response: Affirmative**

Vimal Jyothi Engineering College has made significant progress in institutionalizing quality assurance strategies and processes through the dedicated efforts of its Internal Quality Assurance Cell (IQAC).

**Quality Assurance Initiatives:** IQAC is committed to systematically initiating quality improvement strategies and ensuring the effective functioning of various institutional activities. Such as:

- 1. **Monitoring Curriculum Delivery:** The IQAC actively monitors syllabus coverage, assesses question paper quality, and collects valuable student feedback, creating a feedback cycle for faculty improvement.
- 2. Academic Calendar Planning: An academic calender is prepared, ensuring a well-structured teaching plan in alignment with Program Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs).
- 3. Certificate Courses: The institution bridges the gap between industry and academia by offering 23 add-on courses in the academic year 2022-23, enhancing students' skill sets.
- 4. Learning Outcomes Assessment: Quantitative assessments of learning outcomes are conducted through outcome mapping, audits, and feedback mechanisms, contributing to the enhancement of teaching methodologies.
- 5. Faculty Development Programs: Workshops and programs on various topics, including mentoring, online teaching, ICT-enabled teaching, soft skills, and research methodology, empower faculty members to stay updated with evolving educational practices.
- 6. **Support Initiatives for Students and Faculty:** Initiatives like Lab to Home, Innovative Research Promotion Scheme (IRPS), KSCSTE Student Project, and CERD Project support students' practical knowledge and research endeavors. Faculty research is encouraged through funding initiatives.
- 7. **Mentoring System:** The IQAC's Mentoring System fosters a strong bond between teachers and students, enriching the learning environment.

**Review Mechanism:** The IQAC ensures a robust review mechanism to assess the effectiveness of quality initiatives:

- 1. **Regular Meetings:** At least two IQAC meetings are conducted per semester to oversee and assess the progress of quality initiatives.
- 2. Academic Audits: 2 internalaudit and 1 external audit per semester is coordinated by IQAC to evaluate progress in academic accomplishments, student progression, academic mobility, and placement.

- 3. Accreditations and Certifications: The IQAC meticulously monitors and coordinates various quality assurance accreditations and certifications, such as NBA, NAAC, ISO, Green audit, and QS I GUAGE E-LEAD Certificate, to uphold the highest quality standards.
- 4. **Feedback Collection:** The IQAC collects and analyzes feedback from different stakeholders to gauge progress and identify potential areas for improvement.

**Continuus Improvement:** The IQAC has been instrumental in driving continuus improvements, as evidenced by various achievements:

- 1. Enhanced Documentation: Rigorous planning and documentation of curricular, co-curricular, and extra-curricular activities contribute to comprehensive quality assurance.
- 2. **Recognition and Rankings:** Active participation in NIRF, AISHE, and ARIIA Rankings reflects the institution's commitment to continuous improvement and national recognition.
- 3. **Research and Publications:** Growing number of supervisors, research scholars, and numerous publications underscore the institution's commitment to research excellence.
- 4. **Infrastructure and Technological Advancements:** Continuous improvements include the establishment of new computer labs, 100% ICT-enabled classrooms, free Wi-Fi, NPTEL certified subject experts, and the introduction of four new B.Tech programs.
- 5. **International Recognition:** Achieving the QS I Guage E-Lead Certification highlights the institution's commitment to global educational standards.

IQAC at VJEC has been instrumental in fostering a culture of quality assurance, driving incremental improvements, and positioning the institution as a leader in engineering education.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

#### 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

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

### **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:**

#### **Response: Affirmative**

Vimal Jyothi Engineering College is steadfast in its commitment to ensuring the safety, dignity, and equal opportunities for all students and staff, irrespective of gender, creed, or religion. The institution has undertaken several initiatives over the last five years to promote gender equity and sensitivity.

**Egalitarian Practices:** The spirit of equity is embedded in the college activities, fostering a culture of egalitarianism. The institution conducts various gender sensitization programs to create awareness and induce positive behavioral changes among students, ensuring their comfort within the campus.

**Representation and Committees:** Gender equity is reflected in the representation across academic and administrative responsibilities, with women constituting 49% and 40% in students. Committees such as the Students-Grievance-Redressal-Cell, Staff-Grievance-Redressal-Cell, Student Welfare Committee, Student Discipline Committee, Anti-Narcotic Cell, and Anti-ragging Committee include members from both genders, addressing a spectrum of issues.

**Women's Cell and Celebrations:** The Women's Cell plays a crucial role in empowering young women, conducting programs to build self-confidence, and in creating awareness about feminine potential. Annual celebrations of Women's Day appreciate the talents of women staff, students, and workers, reinforcing their significance in the institution.

**Student Induction Programs:** The institution integrates gender equity sessions in Student Induction Program, sensitizing new entrants to the concept and informing them about grievance redressal mechanisms. Health and nutrition awareness sessions covering diverse topics like breastfeeding, Breast Cancer, Premarital guidelines, and diet patterns for transgender individuals contribute to holistic education.

Safety and Security Measures: Ensuring the safety and security of female students is paramount:

- Separate Facilities: A dedicated ladies hostel equipped with essential requirements, separate medical room facilities with a visiting lady doctor, and a 24-hour nursing service.
- Accompaniment: Female students participating in extracurricular activities outside the college are accompanied by lady staff members.
- Student Representation: Active involvement of female students in leadership roles, including

the position of Student Vice-Chairman.

- Transport Facilities: Providing safe transport for all ladies hostel inmates during outings.
- **Campus Security:** Well-lit campus with CCTV cameras, well-trained security personnel, and controlled entry and exit points.

**Counseling Services:** The institution prioritizes mental well-being:

- **Mentoring:** Faculty members act as mentors, providing guidance on psychological issues, depression, and gender-related concerns.
- **Professional Counselors:** Professional counselors are available on campus to offer additional guidance.

**Common Room Facilities:** The provision of common room facilities in every block, along with separate toilets for men and women on each floor, ensures that the campus infrastructure is conducive to gender inclusivity.

In conclusion, Vimal Jyothi Engineering College's commitment to gender equity goes beyond policies, manifesting in inclusive practices, dedicated committees, celebratory events, and comprehensive safety measures, fostering an environment where every individual can thrive irrespective of gender.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

#### 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.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	<u>View Document</u>
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 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

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	<u>View Document</u>
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 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:** 

#### **Response:** Affirmative

Vimal Jyothi Engineering College is dedicated to cultivating an inclusive environment that promotes tolerance, harmony, and an understanding of constitutional obligations among its students and employees. The institution adopts a multifaceted approach to achieve these goals.

**Curriculum Integration:** A dedicated course on the Constitution of India (COI) is offered to all students, ensuring a comprehensive understanding of citizens' rights, duties, and responsibilities. This includes an assessment through internal tests, assignments, and a university exam. The program delves into the roles of key figures in the Indian political landscape, fostering awareness of constitutional principles. The observance of Constitution Day on November 26th further reinforces the significance of the COI, with activities like displaying the preamble and encouraging students to explore its importance.

Additionally, The organization makes use of APJ Abdul Kalam Technological University's (KTU) resources, which provides courses on professional ethics, human values, human rights, life skills, and sustainable engineering. These courses contribute to instilling constitutional values, rights, duties, and responsibilities among students.

**Student Induction Program:** The institution places a strong emphasis on universal human values during the Student Induction Program, promoting a sense of duty, responsibility, and commitment. This foundational approach sets the tone for students' academic journey and their roles as responsible citizens.

**National Service Scheme (NSS):** The NSS activities reflect democratic living and selfless service. Programs on AIDS prevention, anti-drug campaigns, anti-ragging initiatives, traffic safety awareness, and blood donation camps are organized. Special camps in rural areas encourage students to contribute to society's well-being, fostering teamwork and a sense of responsibility.

**Cultural Celebrations:** Cultural celebrations, such as Onam, showcase the unity among students of various religions. The institution organizes events where students and teachers engage in traditional music performances, enjoy Onam-Sadya, and appreciate Kerala's diverse culture. This inclusive celebration enhances cultural understanding and promotes a sense of unity among students from different backgrounds.

**Commemoration of Key Events:** The institution actively participates in commemorating key events such as Unity Day (Sardar Vallabhbhai Patel's birthday), International Day of Non-violence (Gandhi Jayanti), National Voters Day, and Netaji Subhas Chandra Bose's birthday. These events serve as platforms for promoting values of unity, non-violence, democratic participation, and patriotic fervor.

**Social Outreach Programs:** Charity pilgrim visits to old age homes and other social outreach initiatives provide students with opportunities for community engagement. Beyond academics, students interact with the elderly, extend small acts of kindness, and foster a sense of community and belonging.

In conclusion, Vimal Jyothi Engineering College's commitment to inclusivity extends from its academic

curriculum to cultural celebrations and social outreach programs, by integrating constitutional values into education and fostering a diverse and respectful environment. The institution actively contributes to the holistic development of its students and promotes a sense of responsibility and citizenship.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

#### 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:** 

#### **Response:** Affirmative

#### **Best Practice 1: Concurrent Employment Enhancement Programme**

**Objectives:** The Concurrent Employment Enhancement Programme at Vimal Jyothi Engineering College aims to significantly improve employment opportunities for final-year students. The practice focuses on providing students with training on current industry practices beyond the standard curriculum, enhancing their job-specific skills, obtaining industry-relevant certifications, and fostering self-confidence for successful employment.

**Context:** This practice is strategically designed to prepare students for the dynamic demands of the job market, contributing to the overall growth and relevance of the institution. By fostering collaboration between academia and industry, the college aligns its offerings with the latest trends, technologies, and job market requirements.

#### **Key Elements:**

#### 1. Effective Development:

- The collaboration between industry and academia contributes significantly to the growth and development of the institute.
- Maintaining close ties with industries ensures the institution stays updated with the latest trends, technologies, and demands of the job market.

#### 2. Competency Building:

- Industry-academia interactions provide valuable insights shaping the curriculum and teaching methods.
- Faculty members and students are equipped with relevant skills and knowledge matching industry requirements.

#### 3. Enhanced Employability:

- Graduates well-aligned with industry needs experience improved employability.
- Special activities beyond traditional classroom learning, such as workshops, seminars, internships, and projects, provide practical exposure and real-world experience.

#### 4. Globalization Impact:

• Market globalization has increased industry competition, prompting industries to seek solutions and skilled professionals globally.

#### **Practice Implementation:**

- Various professional body chapters set college and department strategies.
- Industry professionals identify content and methodology gaps in the curriculum.

#### Industry-Interaction Initiatives:

- Industrial representatives serve on the Department Advisory Board.
- Industrial experts are invited to speak.
- Industry Memorandums of Understanding (MOUs) are signed.
- Students attend industrial training and visits for technical updates.
- The Innovation and Entrepreneurship Development Cell (IEDC) develops entrepreneurs.
- Consultants are hired externally.
- Information Technology (IT) is an integral part of the university curriculum.
- Industrial training deadlines are clearly communicated.

#### Industry-Institute Interaction Cell (IIIC):

- Organizes industrial visits, internships, and training programs.
- Formalizes MOUs with major industries.

#### Alumni Interaction and Technical Talks:

• Encourages students to interact with alumni having knowledge and experience.

#### Innovation and Entrepreneurship Development Cell (IEDC):

- Turns technology-based business ideas into socially important and commercially viable products and services.
- Hosts technical talks, workshops, idea fests, and Faculty Development Programs (FDPs).

#### **Evidence of Success:**

- Courses offered based on student volunteers.
- Positive feedback from students.
- Successful placement of all eligible students in industries.

#### **Best Practice – 2: Booster Class for Slow Learners**

**Objectives:** The Booster Class for Slow Learners is designed to create a personalized learning environment, identify individual learning needs, inspire empowerment, and facilitate collaboration between slow and advanced learners. The practice aims to help slow and transitional learners become advanced learners and meet their educational needs effectively.

**Context:** Faculty at Vimal Jyothi Engineering College manage a diverse mix of learners, including smart, fast learners, and slow learners, each with unique learning styles. The practice emphasizes flexible teaching methods to engage slow learners without alienating advanced ones, ensuring a balanced approach to education.

#### **Identification Procedure:**

- Utilizes inputs like preceding university exam results, current semester exam marks, other assessments, and teacher assessments.
- Classifies learners into slow, advanced, and transitional categories based on performance.

#### **Implementation of Slow Learner Interventions:**

- Involves booster classes lasting 1–2 hours, addressing specific learning gaps and challenges.
- Provides additional hours for problem-solving, revision, and lessons.
- Guarantees individual attention to slow learners, addressing questions and concerns.

#### **Evidence of Success:**

- Impact analysis conducted after each session.
- Improved academic performance among slow learners.
- Smooth conduction of academics.
- Enhanced team spirit among faculty and students.

In conclusion, these best practices showcase Vimal Jyothi Engineering College's commitment to innovation and inclusivity in education, nurturing an environment where students are equipped with both industry-specific skills and a personalized learning experience.

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	View Document

#### 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:** 

#### **Response:** Affirmative

#### **Centre of Excellence in a Rural Area:**

Nestled in the rural Eruvessi Village, our institution, Vimal Jyothi Engineering College, stands as a beacon of education and empowerment. Distanced from any other engineering college by 30 km, our roots run deep in the Thalachery Archdiocese's vision to serve the rural society. Since its inception in 2002, the college has grown from offering 3 B.Tech. programs to 10 B.Tech. and 2 M.Tech. programs, with a remarkable total of 2450 students and 720 annual admissions.

Approximately 80% of our student body hails from rural backgrounds. To facilitate their education, our college bus covers a distance of 60 km, ensuring access to quality education. Recognizing the financial constraints faced by our students, we actively facilitate government scholarships for merit, BC, MBC, SC, and ST categories. Additionally, our administration provides exclusive scholarships for rural students, further empowering them to pursue engineering education.

#### **Environmental Sustainability and Community Engagement:**

Vimal Jyothi Engineering College embraces a commitment to environmental sustainability and community engagement. The sprawling campus boasts a solar field, solar water heaters for hostels, a biogas plant, an exemplary rainwater harvesting and storage system, an efficient water treatment plant, and a lush green environment covering 2/3 of the campus. These initiatives align with our dedication to environmental sustainability and development.

Participating in the NSS, UBA, and other community-focused programs, our institution extends its impact beyond the campus boundaries. These initiatives exemplify our dedication to contributing to the welfare of the community.

#### A Helping Hand for Rural Women: IoT Based Hatchery Unit Distribution:

Understanding the economic challenges faced by rural women, particularly during the COVID-19 pandemic, Vimal Jyothi Engineering College initiated a low-cost IoT-based Hatchery Unit distribution project. This project not only supports village women in generating revenue through poultry farming but also promotes self-sufficiency. The low-cost incubator is designed to produce 100 chicks from a single unit, potentially generating up to 30,000 per month.

#### **Texpo22: Showcasing Technical Ingenuity to the Community:**

Vimal Jyothi Engineering College organized "Texpo22," a science and technical exhibition at the Government Technical High School in Naduvil. This event showcased various technical projects developed by our students. The exhibition aimed to bridge the gap between the academic and local community, with villagers and nearby school students visiting the stalls to witness and appreciate the technical innovations.

#### **THRIVE:** Transformative Education for Tribal Students:

In collaboration with the Kannur District Development Commissioner, Vimal Jyothi Engineering College actively participates in THRIVE (Tribal Higher Education and Interactive Ventures for Excellence). This initiative, conducted at Model Residential School, Pattuvam, ignites the aspirations and career goals of tribal students. Through virtual classrooms and hands-on learning, students are exposed to modern workforce skills. Our institution actively contributes to the THRIVE project coordination, ensuring the holistic development of tribal students.

#### Pen Booths Assembling and Distribution: Reducing Plastic Waste:

Taking a stand against the throw-away culture and environmental pollution caused by plastic pens, Vimal Jyothi Engineering College initiated pen booths in every classroom. This initiative encourages students to deposit unused pens in these booths rather than discarding them on the campus. This small yet impactful step contributes to reducing environmental pollution and instills a sense of responsibility among students.

#### **Covid Buster: Non-Contact Temperature Assessment Device:**

In response to the COVID-19 pandemic, the college developed a low-cost IoT-based device for noncontact temperature assessment. Installed in schools and hospitals in villages, this device ensures a safe screening process, minimizing direct human intervention. The initiative demonstrates our commitment to community welfare and leveraging technology for public health.

#### Social awareness through the National Service Scheme (NSS):

NSS forms an integral part of our curriculum, instilling a sense of social responsibility in our students. Annual Charity Pilgrimages, visits to orphanages and old age homes, blood donation camps, tree planting drives, plastic waste awareness programs, cancer awareness campaigns, and more are organized. These activities not only raise awareness but also contribute to the holistic development of our students.

#### **Outcomes & Achievements:**

The efforts of our institution have been recognized and acknowledged on various platforms. The "Lowcost Egg Hatching Unit" project was selected for presentation at the IIT Palakkad project expo and showcased at the "UNNATI' Mahotsav & Expo" at IIT Delhi. In addition, our students participated in the SIEP E-bike Challenge, showcasing the college's encouragement for students' innovativeness.

The NSS activities have not only led to social awareness but have also contributed to life skill development, fostering socially responsible engineering practitioners. Our students have been exposed to various social problems, building an attitude towards selfless service to society.

In conclusion, Vimal Jyothi Engineering College's commitment to empowering rural excellence extends

beyond the academic realm, actively engaging with the community and addressing real-world challenges. These distinctive initiatives exemplify our institution's dedication to holistic education, social responsibility, and environmental sustainability.

File Description	Document
Appropriate web in the Institutional website	View Document
Any other relevant information	View Document

# **5. CONCLUSION**

## Additional Information :

Vimal Jyothi Engineering College has applied for the conferment of Autonomous Status to the University Grants Commission (UGC) on 24.08.2023 through the UGC portal as we are meeting the following eligibility conditions stipulated by the UGC.

- 1. Recognized under Section 2(f) of the UGC Act.
- 2. College has been in existence for more than 10 years (Established in 2002)
- 3. Six programs offered by the college are accredited by the NBA

We hope to become an autonomous college in the near future and by attaining a good grade in the NAAC accreditation, we hope to attract talented student and faculty to accelerate our voyage towards excellence. We have been continuously participating in NIRF and we are working towards remarkable position in the NIRF.

### **Concluding Remarks :**

Vimal Jyothi Engineering College (VJEC) strives for academic excellence, innovation, and societal commitment in the field of Engineering education. The institution's unwavering dedication to its mission and vision is vividly encapsulated in the comprehensive Self-Study Report (SSR), demonstrating a steadfast pursuit for holistic development, innovation, and continuous improvement.

VJEC's commitment to academic excellence is demonstrated through a robust curriculum, a team of committed and experienced faculty, and an array of academic initiatives fostering an environment conducive to learning and skill development. The institution's focus on academics, innovation, and knowledge application is evident in the academic results, campus placements and collaborative ventures with industry and research organizations.

Dedication to inclusivity, diversity, and societal responsibility is a cornerstone of VJEC's identity, evidenced by initiatives promoting an inclusive environment, social awareness, and community engagement through various outreach programs through professional body chapters such as IEEE and NSS. Notably, the institution's efforts in creating a sustainable and environmentally friendly campus underscore its commitment to global concerns and responsible citizenship.

VJEC's Infrastructure and Learning Resources contributes to a conducive academic ecosystem with state-of-theart laboratories, modern classrooms, and a technology-enabled campus. Student Support and Progression prioritize overall well-being through counselling, mentorship, and holistic development initiatives. Governance, Leadership, and Management demonstrate effective practices, fostering transparency and participative decisionmaking. Institutional Values and Best Practices, rooted in ethicality, inclusivity, and environmental sustainability, are evident in innovative programs like the Concurrent Employment Enhancement Programme.

Furthermore, VJEC's active pursuit of NAAC second cycle accreditation serves as a testament to its unwavering commitment to quality education, transparency, and accountability. This SSR serves as a

comprehensive overview of VJEC's strengths, achievements, and areas for enhancement.

As VJEC embarks on the journey of NAAC second cycle accreditation, we hope to ascend to greater heights, making significant contributions to the Engineering education landscape of rural India.