## **EXECUTIVE SUMMARY**

### Introduction

"Education is meant as the process by which character is formed, strength of mind is increased, and intellect is sharpened, as a result of which one can stand on one's feet. We need education that forges our life, generates the ideal man, imbibes noble thoughts and develops the abilities in us"- Swami Vivekananda.

Vivekanand Education Society was founded in 1959 by Shri. Hashu Advani, along with ten other members, who shared the dream of providing quality education to the youth of our country. In the beginning, Vivekanand Education Society had a very modest launch, with just 256 students and six classrooms, in the humble barracks of Chembur Camp. But today, it proudly boasts of having 3,75,000 sq. ft. land, housing 12 buildings and 28 Institutions, ranging from a crèche to Ph.D. Centers. It has over 2000 teaching and non-teaching staff, and more than 18,000 students who pass through its hallowed portals each year.

Vivekanand Education Society's Institute of Technology (VESIT) was established in 1984, with the aim of providing professional education in the field of Engineering. This institute is affiliated to the University of Mumbai (UoM) and follows the rules and regulations laid down by the government, AICTE, and University. For admission 51% reserved for Sindhi Linguistic minority and 49% through centralized admission procedure. The management quota has been surrendered to DTE to make admission centralized. The institute has a total of 144 faculty, of which 36 are Ph.D. holders.

VESIT has truly been a learning institute responding to changes, setting newer standards and benchmarks for itself for **continuous improvement with two times Accreditation by National Board of Accreditation in 10 Years for all eligible UG Courses**. Further the process of accreditation has always set the roadmap and challenging milestones to cover.

VESIT has been ranked in the band of 26th - 50th in ARIIA 2019 under SELF-FINANCE/PRIVATE INSTITUTIONS category and Platinum Category in AICTE-CII Industry-linked Technical Institute Survey 2020 & 2016. In the National Institute Ranking Framework VESIT is in the band of 251-300.

#### Vision:

• To create a vibrant knowledge-oriented environment with innovative teaching practices and to inculcate a tradition of socially conscious application of technology.

#### **Mission:**

- To inculcate a culture of value based education.
- To enthuse students to develop in an ambient environment of caring and of sharing information.

• To enable students to work towards excellence in their chosen fields with professional bent of mind.

# Strength, Weakness, Opportunity and Challenges (SWOC)

# **Institutional Strength**

- 1. Effective leadership of the members of the trust with passion towards working for excellence in education
- 2. Constant encouragement and full-fledged support from the Management
- 3. Highly qualified, experienced and competent faculty with Number of doctorates from premier institutions
- 4. Increased interest and effort among faculty towards research and publication in national and international journals
- 5. Mentoring and Monitoring of the students on a regular basis
- 6. Good ambience with well ventilated classrooms, open air amphitheater, modern hi-tech seminar halls, auditorium, modern laboratories with latest equipment, hostel accommodation, ATM banking facility, huge library, sports ground, high speed internet connectivity.
- 7. A well-equipped Learning resource center with a large collection of books and periodicals. It also has various e-learning resources and databases to support academic and research activities
- 8. Extensively contributing towards social change in this region through Unnat Bharat Abhiyan, institutional promoted activities at ground level.
- 9. Fully CCTV monitored the campus for security.
- 10. Exceptional placements.

#### **Institutional Weakness**

- 1. Hostel space is insufficient to cater to demands of students.
- 2. Deficiency in collaborative research leading to start up.
- 3. No established mechanism for technology transfer.
- 4. Inadequacy in alumni association
- 5. Location disadvantage for students.
- 6. Insufficient funded projects and patents.

## **Institutional Opportunity**

- 1. Having an opportunity to become Autonomous Institution enabling design of curriculum as per industry Requirements in line with NEP 2020
- 2. To strengthen Research and Development towards product design.
- 3. Exploring more opportunities for consultancy projects.
- 4. Enhancing contributions to green initiatives.

### **Institutional Challenge**

- 1. Availability of qualified and experienced faculty with PhD
- 2. Attracting good companies offering higher pay packages for core placements
- 3. Quality of students at entry level in recent years due to decrease in engineering admissions due increase in alternative professional education options post Higher Secondary Course
- 4. Motivating students for entrepreneurship.

# Criteria wise Summary

## **Criteria I: Curricular Aspects**

VESIT is affiliated to UoM and it follows the curriculum which is designed by the same. This curriculum is periodically upgraded with the latest developments in technology to meet the requirements of the industry by taking active feedback from the stakeholders such as course instructors, graduates, alumni and industry experts. VESIT prepares its own Academic Calendar in alignment with the University's calendar and strictly adheres to it. For effective planning and implementation of the curriculum, all the course instructors prepare curriculum delivery plans which are approved by the Group advisors and periodically reviewed by the Heads of the department and members of the Programme Assessment Committee.

As VESIT follows the UoM curriculum, it has limited academic flexibility. Hence it tries to achieve curriculum enrichment through its various certificate and value added courses being offered to the students. These add-on "programs help" in improving the technical and soft skills of students and to bridge the gap between the industry and academia.

Institute addresses "cross-cutting" issues like Gender, Environmental Sustainability, Human Values and Professional Ethics through various specially constituted committee activities which contribute to sensitizing students, through seminars, case studies, awareness drives and projects, in addition to addressing them through certain curricular courses "and effective teaching learning methods". All these efforts support in creating a vibrant knowledge-oriented environment.

Finally, for identifying and filling up the gaps in curriculum, the institute takes structured feedback from the stakeholders which are analyzed and corrective measures are taken for improving content delivery and content modification.

### **Criteria II: Teaching-learning and Evaluation**

Institute strictly follows all the eligibility criteria, rules and regulations of admission laid down by the Directorate of Technical Education (DTE)/CET Cell, Maharashtra, Govt. of Maharashtra for admissions. VESIT surrenders institute quota seats allowed by norms and vacant minority seats to the centralized pool of admission process. All admissions are through the Centralized admission process. Part payment facility for fees and no capitation fee charged/levied.

Teaching learning is not limited to effective curriculum delivery but is structured through various methods. To cater to student diversity VESIT has a well-defined mechanism in place for assessing the learning levels of the students and for improving their academic performance. This includes remedial course and bridge course (need based) for slow learners and hackathons for advanced learners. Appropriate help is given to differently abled.

Professional societies, skill enhancement, training and placement, research forum, co-curricular as well as extra-curricular activities and faculty mentoring together ensure an effective learning ecosystem for students. Institute continuously strives to improve effectiveness in teaching, learning and evaluation process. Planning, dissemination, implementation and monitoring of various components is carried out in adherence with academic calendar. Well qualified and dedicated faculty, low alteration rate, rule based recruitment process, felicitation of teachers completing 20 years of service are some highlights for maintaining teacher quality.

Examinations are conducted as prescribed by university norms. The evaluation scheme is communicated to students through orientation programmes. There is a scope for grievance redressed through method of revaluation/reverification.

#### Criteria III: Research, Innovations and Extension

VESIT encourages and promotes research, innovation, and extension activities for students and faculty. The institute has a dedicated *Research & Development (R and D) cell* that combines both basic and applied research that aims at providing innovative and indigenous solutions to critical design issues in engineering systems. The R and D cell is well equipped with state of the art hardware and software resources. The institute encourages collaborative research and is a recipient of prestigious grants from the BRNS, ISRO, MCGM, AICTE, University of Mumbai (UoM) and many. Students and faculty are encouraged to publish research papers and participate in project competitions based on their project outcomes.

VESIT offers a research program leading to the Ph.D. Degree in Electronics Engineering of the UoM. The institute encourages its faculty to pursue their doctoral degree. To upgrade the knowledge of the faculty and encourage industry-academia interaction the institute organizes various *AICTE funded*, *AICTE-ISTE approved* Short Term Training Programs and Faculty Development Programs in the domains of recent trends in the technology.

The Institution's Innovation Council of VESIT, an initiative supported and guided by AICTE, has been awarded a 4.5 Golden Star Rating. VESIT-Aditya Jyot Eye Innovation Centre facilitates collaborative research on various methods to detect eye diseases using Artificial Intelligence and Image Processing. In addition to this, the institute also has various initiatives to support and facilitate research and innovation.

SoRT (Social Responsibility Team) conducts a plethora of extension activities and events including UBA (Unnat Bharat Abhiyan) that bear testimony to this.

### Criteria IV: Infrastructure and Learning Resources

The institute fulfils maximum norms specified by the statutory bodies in terms of land requirement, instructional, administrative and various other amenities. All classrooms and laboratories are well equipped with good internet access, projectors, laptops and a public address system.

Various indoor and outdoor sports activities are conducted for the students to keep them physically agile. VESIT has a modern amphitheater where various cultural, musical and literature fests are conducted.

It has a huge library with a diverse collection of more than 49,000 text books and reference books. It also has subscribed to the Knimbus platform and subscription of eminent journals. VESIT has been using LiBSUITE, a Library Automation Software since 2010. Users can issue/return and search the books online through WEBOPAC.

VESIT has a well equipped Server Room which comprises Server, Firewall, Access Points, and Computing facilities. The Institute has 21 state of the art high configuration servers viz, 1483 computers of various manufacturers, that are connected through LAN, 108 LaserJet Printers and five Scanner and two 3D printers. It also has 60+ licensed application softwares. All staff and students are provided with "@ves.ac.in" domain for email ids through G suite.

The Maintenance Department of VESIT has a designated officer and six skilled staff members. It looks after activities related to building maintenance and repair-work. It also gives contracts to an outside agency for house-keeping. Firefighting drills are also conducted regularly to ensure the safety of students and staff during unavoidable emergencies.

## **Criteria V: Student Support and Progression**

VESIT focuses on the holistic development of its students by working on both their hard and soft skills. To increase opportunities for economically weak students, the college provides various scholarships which are sponsored by both the government and college. It also has robust support of alumni who contribute to ensure smooth learning by taking lectures, giving active feedback for enrichment of curriculum to promote industry ready students.

To make the students corporate ready and augment the placements various sessions are conducted by TPO and other keynote speakers on Presentation Skills, Goal-Setting, Resume Writing, Interviews, Cracking Competitive exams like (TOEFL, GRE, GATE, CAT SET), Civil service exam preparation and Army Recruitment.

Special sessions are conducted in Language Lab to hone English Communication Skills of students. VESLit Circle and VESlang also conduct various events/sessions to hone the English proficiency in collaboration with prestigious groups like UBI, TOI. Yoga and Meditation sessions are also organized regularly along with counseling sessions by VESLARC. Events like Hackathons, Praxis, programs like E-Disha, activities conducted by Code Cell, Tinkerers Lab. promote the usage of ICT to polish the technical skills of students.

The Institution also has a transparent mechanism for timely redressal of student grievances / prevention of sexual harassment and ragging. Students have outstanding councils like Cultural, Sports, Music Council, SORT, VESLit Circle, VESIT Photo circle, E-cell, and also participate in academic and administrative bodies like DAB, VESIT-IIC,CR,VESIT-AI Club, Placement Committee, IEEE, ISA, CSI and ISTE, College Development Committee and ICC.

# Criteria VI: Governance, Leadership and Management

VESIT focuses on imparting value based education and holistic development of its students. The established policies and procedures in the Institute ensure the integrity and effectiveness in its governance and administration.

The Institute promotes decentralisation and believes in participatory management by involving faculties in various administrative and academic activities. Perspective plans are framed with goals in adherence to Vision and Mission statements of the Institute, setting newer standards and benchmarks for making itself a center of excellence.

VESIT nurtures open and healthy communication between its employees that results in a free, fair, transparent and conducive work environment. Several welfare schemes are in place for the benefit of teaching and non-teaching staff. The Institute encourages the entire workforce to upgrade their technical and soft skills which is evident through their Performance Appraisal form.

Being a self-financed organization, the Institute has laid down processes for effective utilization of financial resources. The system of internal and external financial audit has helped to monitor available financial resources.

Since inception, the institute has been applying innovative plans to create a vibrant knowledgeoriented environment. These plans are executed and evaluated through different committees to ensure quality measures at the institute.

Internal Quality Assurance Cell(IQAC) is established by the Institute and has initiated several quality reforms for academic and administrative excellence. IQAC focuses on improving its teaching-learning processes, brand building, research and innovations, infrastructure and academic developments to ensure the quality culture at VESIT.

#### Criteria VII: Institutional Values and Best Practices

#### **Institutional Values and Social Responsibilities:**

VESIT gets its values from the great Hindu spiritual leader Vivekananda. We are working towards attaining the Sustainable Development Goals set by the United Nations. VESIT provides a **safe atmosphere for both genders** by having mandatory committees and organizing regular awareness programs, separate washrooms and common rooms for both genders and a creche.

Conscious of its environmental and societal obligations, VESIT has taken active steps towards achieving these objectives by replacing tube-lights with LED bulbs, Solid, Liquid, E-Waste, Hazard's chemicals waste managements, Waste water recycling system, Waste water recycling, Rainwater harvesting, maintenance of water bodies and distribution in the campus. Green campus initiatives like restricted entry of automobiles, ban on use of plastic, landscaping with trees and plants and Energy audits, beyond campus environmental promotion activities are carried out enthusiastically. For differently-abled students and staff, lift, ramp barrier free access to toilets, restrooms are available.

**Inclusivity** is practiced by celebrating festivals of different religions, regions and linguistics with equal vigor. Staff and students are periodically sensitized towards their constitutional obligations and are encouraged to exercise the right to vote.

In the last 37 years VESIT has identified and adopted many **best practices**, two of which are Looking beyond Syllabus and Campus to Corporate.

By providing a conducive atmosphere for holistic development and education, VESIT is known for creating highly competent technocrats with social consciousness which is the most **Distinctive feature** which makes our institute **a leader in technical education.** 

# **Conclusion**

Institute has well defined mechanisms for effective planning and implementation of curriculum that provides diverse learning opportunities and multiple avenues for continuous staff and student development. The Research and Development cell is well equipped with state of the art hardware and software resources always ready to welcome interdisciplinary projects. VESIT follows rule based transparent and participative administrative practices. The Institution also has a transparent mechanism for timely redressal of student grievances / prevention of sexual harassment and ragging. This makes VESIT a sought after destination for Engineering and MCA courses in Mumbai and surrounding areas. We are proud of our Alumni, who are also working as our ambassadors across the world.

In our mission for working towards excellence in chosen fields we are reminded of thoughts of Robert Frost, but I have promises to keep and miles to go before I sleep and miles to go before I sleep.