Recognised by GOK, Affiliated to VTU & Approved by AICTE, New Delhi.

# STRATEGIC PLAN OF VKIT

Vivekananda Institute of Technology (VKIT) Strategic Plan is established in consultation with Stake Holders for its long-term success, growth, and sustained impact. The comprehensive plan is established to tailor the specific needs of VKIT.

# About Vivekananda Institute of Technology (VKIT)

Vivekananda Institute of Technology (VKIT) was established in 1997 by Janatha Education Society® a premier institution dedicated to provide quality education in Engineering and Technology. VKIT is affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, and recognized by the All India Council of Technical Education, New Delhi, and the Government of Karnataka. VKIT offers six full-time undergraduate courses (AI and ML, CV, CSE, ECE, ISE, ME) and five Ph.D. programs (ECE, CSE, ME, Mathematics, Chemistry). The institute focuses on academic excellence, with a dynamic teaching and learning process that caters to the evolving needs of society. Boasting a dedicated faculty and staff, VKIT nurtures over 950 students.

VKIT is situated in a serene and pollution-free environment spread across 23 acres and 6 guntas of land at Gudimavu, Kumbalagodu (P), Kengeri (H), Bengaluru – 560074, VKIT's campus is strategically located 65 km from Kempegowda International Airport, 23 km from Bangalore Central Railway and Kempegowda Bus Stand, 9.3 km from Challaghatta Metro Station, and 9.4 km from Kengeri Railway Station. The campus features state-of-the-art laboratories, excellent infrastructure, internet and Wi-Fi facilities, a well-stocked central library with national and international journals and e-books, e-learning facilities, separate hostels for boys and girls, mess, cafeteria, smart classrooms, seminar hall, multi-gym, indoor stadium, and sports facilities such as football, tennis, and basketball courts.

VKIT prioritizes safety and security, implementing CCTV surveillance across the campus. The institute is committed to provide quality education aligned with its Vision and Mission statements. Academic and administrative activities are overseen by experienced and competent faculty members under the guidance of department heads, the Principal, and the

Director. Placement services are managed by a Placement Officer in the Career Counselling and Placement Cell.

Strengthening its industry connections, VKIT has entered into Memorandums of Understanding (MoUs) with various companies. VKIT had established Institute Innovation Council (IIC) to promote innovation. VKIT is an institutional member of ISTE. The alumni association operates in accordance with its bylaws, fostering a sense of community and collaboration among former students. VKIT remains steadfast in its commitment to shaping future leaders and contributing to the progress of society.

# VISION OF THE INSTITUTE

To become an outstanding Knowledge dissemination centre at the cutting edge of Engineering and Technology to produce globally acceptable competent professionals who will be in the forefront of technological innovations for the benefit of mankind.

#### MISSION OF THE INSTITUTE

To be the best at serving society by creating engineering knowledge and educating engineers for dynamic and global careers.

The following strategic characteristics and aspirations enable the college to realize its vision:

- > To provide an excellent infrastructure and conducive ambiance in the Institute.
- > To impart quality technical education combined with ethical values.
- > To produce world class professionals to take up challenging assignments of latest an advancement in technology and engineering.
- > To inculcate attitudes for research and developmental activities.
- > To leave a legacy for development of next level engineers and technologists

#### SWOC ANALYSIS:

# Strength:

- > Located in the pollution free area in the state capital.
- > Institution provides engineering under graduate and research programmes.
- > Admission process is transparent and complies with the regulatory guidelines.
- > The continuous improvement in the teaching learning process is achieved through feedback system in all departments.
- > The curriculum gap between Industry and Institute are enabled through orientation classes and bridge courses.

- Institution is equipped with state of art lecture halls, seminar hall, well-equipped laboratories and digital library.
- Wi-Fi-enabled campus with high-speed Internet.
- Scholarships are provided for meritorious students.
- Qualified and committed faculty.
- Value added information are catered by organizing seminars, workshops, webinars.
- > Excellent facilities are provided for sports, cultural and co-curricular activities.
- Decentralized governance, Internal Quality Assurance Cell (IQAC) are established for quality improvement through feedback mechanism.

#### Weakness:

- Lack of autonomy to introduce new courses.
- Limited number of sponsored research projects, patents and consultancy.

# **Opportunity:**

- Work towards accreditation and ranking.
- > Autonomous status for better academic freedom and flexibility.
- ➤ Implementation of NEP 2020 policy.
- Increase number of skill development, training and certification programs for better placements.
- Collaborate with industries through MoUs.
- > Encouraging faculty for major research-funded projects in emerging areas.

# Challenges:

- > To build a strong Alumni to provide internship, placements and peer-to-peer learning.
- Improve the communication skills of students since maximum students are from rural areas.
- Attraction towards deemed, state/private universities.

#### SHORT TERM GOALS

- > To introduce students to contemporary technological advancements and breakthroughs in their respective disciplines and related fields.
- Foster student participation in national and international events within their field of study.
- > Enhance the existing capacities of research centers and laboratories.
- > Conduct regular faculty development programs to continuously upgrade their skills.
- Provide online access to teaching and tutorial materials for each subject, facilitating flexible and self-paced learning for students.
- Organize short-term courses for technicians to broaden their knowledge base and deepen their understanding of the latest trends and developments in the field of Engineering.

#### LONG TERM GOALS

- ➤ Evolve the institute into a multidisciplinary hub, fostering collaboration among students across various departments for impact full research initiatives.
- ➤ Cultivate an entrepreneurial spirit among students, empowering them to venture into innovative pursuits within their respective fields.
- Broaden the horizons of faculty members by supporting them in exploring cross-disciplinary research areas.
- ➤ Establish and reinforce Industry-Institute Interaction, positioning the institute as a key contributor and solution provider for industry challenges.
- Attain the status of an Autonomous institution.
- ➤ Establish a business incubation center aimed at enhancing the competitiveness and viability of Micro, Small, and Medium Enterprises (MSMEs) and fostering a culture of entrepreneurship among students.

# Teaching Learning Process(TLP)

The college inculcates in its students the discipline in maintaining the schedule of the class. The teachers strictly adhere to the academic and evaluation plan as notified.

#### Academic Plan:

- The Principal notifies the academic calendar at the beginning of the semester.
- > The teachers are strictly adhered to the academic calendar.

- The calendar includes the schedule for commencement of classes, internal tests, workshops to be held, Parent Teachers meeting, college level activities and end of the semester.
- Based on the college academic calendar, each department prepares the department academic calendar which includes the departmental activities.

# **Curricular Development:**

- ➤ To enhance the capabilities of the student's caliber, various workshops, expert lectures on recent / subject related technologies will be held at once in each semester.
- ➤ For the improvement of faculty performances and knowledge sharing, faculty development programs will be frequently organized by the departments at various stages of the curriculum.
- The library has an online catalogue which helps students to browse books of their interest.
- > Students can access e-journals and e-books made available by the digital library facility.

# Teaching and Evaluation plan:

- ➤ At the beginning of each semester, lecture plans are prepared by faculty members and strictly followed through the semester. The teacher explains the course structure and scope of the topics to be covered during Orientation program.
- > The plan ensures that the teacher can reschedule a certain missed classes.
- Faculty members adopt various Innovative methods for effective teaching in the form of power point presentations, video lectures etc.
- Faculty members refer open courseware's made available by reputed international and national institutes.
- Mechanism for evaluation of teachers by the students / alumni achieving qualitative improvement in the teaching-learning process.
- > Mechanism of evaluation of teacher is done by obtaining feedback from students.
- Feedback is analysed by Departmental HOD and by the Principal.
- > Necessary counselling is done to faculty by the HOD of respective departments.
- > For laboratory courses the students are given a detailed schedule of the experiments to be performed and outlines the methods to be followed.
- > The Head of the department reviews syllabus coverage in Departmental meetings.

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- > The students are informed of the academic plan and examinations through notices.
- Examination schedules are announced by the coordinator of examinations of institute.
- > To maintain transparency, answer scripts of internal tests are shown to the students.
- > The final marks of the internal assessment tests are then sent to the examination section through the head of the departments.
- > The teaching plan ensures control on the total syllabus and its timely completion.
- Methods of learning experiences provided to students in most theoretical courses, the lecture method is followed.
- Lectures are explained on black boards and white boards. Some classes have LCD projectors, which forms another convenient medium to impart instructions.
- > Students are encouraged to participate in seminars / conferences and contribute through poster and paper presentations.
- > Seminars/Workshops on recent developments in technology and management are frequently organized with speakers from academia and industry.

# Participatory learning activities

- Regular student seminar presentations.
- > Presentation of technical papers in conferences and seminars of repute.
- > Internships in industries and training institutes during summer and winter recess.

### Student projects: a mandatory part of the learning program

- The project is a part of the curriculum and this mandatory subject is in the final year for all streams.
- In our institution, we consider project work as a very important part of students' learning program at the UG level. Student project work covering in last year have been made mandatory in the course curriculum (As per affiliating university VTU)
- Individual projects are undertaken by the students of small groups under the guidance of faculty members. The projects undertaken are judicious mix of theoretical as well as practical work and the quality/ grade of the project work is adjudicated by an internal faculty team along with an expert external member. Quite a few output of these project works are published in national and international journals and conferences.

# Library supports the teaching -learning process in the following ways

> Books are procured as per the requirements of the students and teachers.

- Books are catalogued and processed.
- Online journals and online databases can be availed in the digital library.
- Reprographic (Xerox) and scanning services and printout services from online resources are available.
- After the admission of new batch of students, they are made acquainted with the library systems.

# Teaching-learning methods

- Teacher prepares the lesson plan and accordingly the lectures will be designed after adhering to the syllabus.
- > Teacher explains the utility and application of the subject taught in the due course of career of the students.
- > Reference books, text books and their usefulness are covered.
- Classroom teaching with chalks and conventional methods are followed on different topics taught.
- ➤ LCD projectors are used during discussion at the time of seminars and classes, where the students and teachers are discussing on advanced topics.
- Exposure to external sources of information like e-journals/journals, open sources are advised by the teachers to the students during the execution of the projects.
- Content / knowledge management.
- > Conducting workshops/seminars.
- Conducting Guest lectures.
- > Teaching innovations made during the last five years.
- > The concepts of outcome based education have been brought in all departments.
- Faculties are aware of the Programme Educational Objectives (PEOs) and Programme Outcomes (POs) in order to ensure the course outcomes served.
- > Course files are maintained with the lesson plans.
- Assessments are evaluated through weightage given to indirect and direct assessment tools.
- ➤ Internal Quality Assurance Cell (IQAC)has been established to monitor and report on various aspects affecting student performance.

# Research, Innovations and Extension

# **Promotion of Research**

The institute plays a very proactive role in promoting this culture. The faculty is encouraged to pursue and complete doctoral/post-doctoral work and publish paperse in peer reviewed journals.

#### Resource Mobilization for Research

- > Innovation Ecosystem.
- The Institution has created an ecosystem for innovation including initiatives for creation and transfer of knowledge. The institution conducts workshop/seminars as Innovative practices.
- > Faculties are granted special leave for attending conferences to present papers. The College management provides financial assistance in the form of TA, Registration fees etc.
- The library is equipped with a large number of Text Books and Research Journals online (digital library facilities available) both for the faculty and students. Students participate in research programmes organized by various Universities, Research Institutes and Organizations.
- > The institution encourages research projects and publications by the faculty.
- > Faculty members are acting as guides and co-guides of research scholars pursuing their Ph.D. programmes.
- > Students actively participate in research, seminars, paper presentations and Publications.

# **Extension Activities and Institutional Social Responsibility**

- > Community and extension service is integrated with the curriculum as extended opportunities to help, serve and learn.
- The expertise and specialized knowledge base of faculty helps in consultancy service and collaborative research activities.

# **Human Resource Planning and Development**

Faculty development programmes are organized by inviting Experts from related fields. Inhouse faculties who have achieved some experience also share their experiences with junior faculties.

The College believes in excellence in all spheres so that the students and faculty of the college gets high class infrastructure and opportunity to learn new skills to deal with global challenges. To make this possible and effective, the institute divided the workloads into various committees so that proper strategies can be developed.

# Statutory Committees/Cell:

- 1. Anti-Ragging
- 2. Grievance Redressal Committee
- 3. SC/ST Cell
- 4. Minority Cell
- 5. CICC Committee
- 6. OBC Cell

**IOAC Coordinator** 

**Principal** 

Bangalore - 560 074

Principal
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