

Vidya Vikas Institute of Engineering & Technology

Mysuru - 570028



## **CONTENTS**

1. TEACHING AND LEARNING	1
2. INCUBATION CELL	4
3. RESEARCH AND DEVELOPMENT	7

## 1. TEACHING AND LEARNING

The distinctive performance of the Institute is aligned with Vision of the Institute, which is excellence in education and research. Teaching - learning process is the main thrust area to achieve excellence in education. The Management of the Institution ensures effective and efficient teaching learning process by providing State-of-the-Art infrastructure conducive to intellectual growth and all round personality development.

A teaching-learning process (TLP) manual designed and developed under the Principal's guidance is focused towards creating an amicable learning atmosphere among the students. Few of the other measures adopted in implementing an effective teaching and learning process include:

- Providing diverse opportunities by creating Wi-Fi facilities in the campus/hostels.
- Recruiting highly qualified and competent teaching faculties.
- Encouraging the faculty to pursue Doctoral degrees.
- Promoting professional development of faculty by providing support to undergo refresher courses to equip themselves in using modern pedagogical tools.
- Attend and organize National and International Seminars/conferences and also to publish papers
- Preparation of academic calendar well in advance before the start of the semester, considering Govt./University holidays, including specific dates for conduction of three Internal Assessments for theory and labs.
- Planning co-curricular & extra-curricular activities, student counseling during the semesters.
- Subjects are allotted to the faculty members for the forthcoming semester immediately after the end of the previous semester looking into the faculty specialization, experience and workload.
- Contact hours is maintained as per university scheme.
- Faculty members adopt group discussions, relevant videos, seminars, mini
  projects, case studies, PPTs, real time examples, simulations, Quizzes, depending
  on the course and create the best learning environment for the students to make
  them think analytically.

- Tutorial classes are conducted for analytical subjects or as suggested by the university curriculum.
- Each class room is equipped with LCD projectors, & furniture to have a conducive ambiance.
- Institute has seminar halls and an auditorium with state-of-the-art facilities.
- An excellent library with good number of books, journals and separate departmental libraries made available.
- Career Guidance training programs are conducted for students to help them explore various career options.
- Departments recognize toppers of every academic year and mementoes are given as a token of appreciation.
- A Total Student Development Program (TSDP) Manual has been designed by the
  Institute under the guidance of the Principal and motivates the students and
  faculties to adopt new teaching and learning methodologies like Collaborative
  learning, Project based learning, Blended learning and Experiment based learning.



**Experiment Based Learning Activity** 













Blended Learning adopted as a part of TSDP





LCD Projectors facilitated Classrooms

Seminar Hall





Award Presentation to Meritorious students

## 2. INCUBATION CELL



The Entrepreneurship Development Cell (EDC) was started in October 2015 with the objective of empowering students with entrepreneurship skills and making them job creators instead of job seekers. In continuation with this, a need for a dedicated center to foster the Ideas into Products (I2P) was felt and this gave rise to the establishment of an Incubation cell at the Institution level.

A business incubator facility in the college enables the students to transform their innovative ideas into prototypes and also facilitate to find a platform to sell their product in marketplace. The incubator is all about supporting technology transfer, sharing learning experiences with students, providing financial support, and facilitating partnerships and collaborations with other groups on campus.

Innovation is a way of life. The incubator gives students a chance to learn through experience with opportunities to work through a business concept in the campus, get involved with start-ups, and take part in competitions and conferences for entrepreneurs.

The incubation cell was started at VVIET with the following objectives:

- Encourage Entrepreneurship and innovation in the campus.
- Incubate innovative projects each year.
- Execute each project by a team of entrepreneurs (students or alumni).
- Encourage student entrepreneur to carryout projects (problem can be from any discipline) and to provide complete solution to the selected problems (local & global problems and needs).

With all these above said benefits and objectives VVIET has taken appreciable measures in setting up an Incubation Cell at the campus level. In continuation to this, VVIET is proud to announce the setup of New Age Incubation Network at its campus under the NAIN Scheme, by the Dept. of IT, BT and S&T, Govt. of Karnataka.



NAIN was formulated by the Karnataka ICT Group with a vision to encourage entrepreneurship and innovation, it is proposed to establish incubation centers in ICT sector in association with selected engineering colleges at district headquarters.

The Main objectives of NAIN are:

- To encourage students, research scholars and alumni to share their ideas to solve chosen problems which are local centric and to validate, Refine and Nurture the ideas.
- Incubation Center shall provide an eco-system to covert the ideas in proof of concept and upgrade them to a level of commercial value.
- After successful incubation, encourage and lead the teams towards setting up a Business enterprise.

The process flow of the Incubation Cell of VVIET is in line with that of NAIN and is as follows:

NAIN Center, VVIET



#### 1. Project Sourcing:

- ❖ The students, Research Scholars and Alumni's have to come up with the ideas which will solve the local problems and also which might lead to the startup.
- Problems are solved by the project team with the encouragement of mentors and the solutions are submitted.

#### 2. Project Life Cycle:

❖ Ideas are refined and a formal proposal is made followed by its evaluation and the product developed is validated and a prototype is made if necessary.

#### 3. Monitoring:

The project is monitored by team of experts (faculties/alumni/industry experts) for its fulfilment of the defined objectives.

#### 4. Fund Disbursement:

On successful evaluation of the project's objectives and its validation, the fund shall be disbursed in adherence to the project plan.

VVIET has signed a MoU with NAIN and is one among the Phase 3 colleges in the Mysuru Region and is also awarded a grant of ₹ 1,20,00,000 for setting up a well-established Incubation center in the Institution. Some of the projects developed by the students of the institution that have been recognized under the incubation cell include:

- i. Bore well rescue Robot: A robot designed and deployed to rescue the kids or animals that are trapped in the un-closed bore wells.
- ii. Smart vision for blind: The proposed system is based on Global Positioning System (GPS) and Obstacle detection and object avoidance technologies, that aims to improve the visually impaired person's mobility.



Bore well Rescue Robot - A project nurtured under Incubation Cell, VVIET



Smart Vision for Blind - A project nurtured under Incubation Cell, VVIET

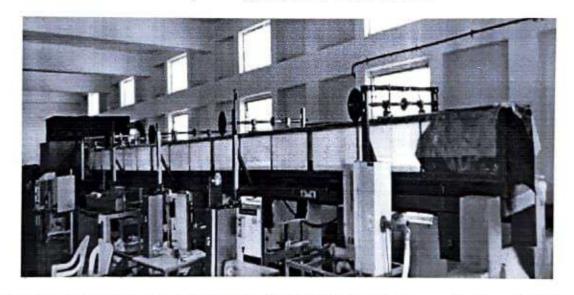
### 3. RESEARCH AND DEVELOPMENT

VVIET is committed to long term research in emerging domains of engineering and technology. The Institution is creating a very amiable atmosphere to the faculty members to involve themselves in research activities that caters to face the challenges of the modern world which is again in line with the Institute's vision. The Institution has established Research and Development Cell to promote research attitude among the faculties and students with the following activities.

- Students and faculties are motivated to conduct research in thrust areas of engineering.
- Faculties and students are encouraged to involve in publishing research papers, in national and international journals.
- Eminent scientists and speakers are invited for technical talks to understand and the research activities being conducted at eminent research institutes.
- Industry stalwarts are invited to interact with students and provide exposure to help them imbibe the entrepreneurial skills.
- 5 faculties completed their research program with deputation from the Institution, 48 have registered themselves for doctoral programs. Some of them are almost on the verge of completion of their Ph.D.
- Recognized research centers for CV, ME, EEE, ECE, CSE, MBA, Physics, Chemistry & Mathematics have been provided in the Institute.
- VGST has sponsored ₹30 Lakh for Research Project to Dr. Padmini, Professor & Head, ISE.
- Dr. Sheshaprakash M.N, Professor and Head, Civil Engineering department has been awarded a grant of ₹14 Lakh from VTU for installing a simple and accurate flow measuring device in industry and agriculture applications.
- Department of Mechanical Engineering has a facility for Centrifugal casting for carrying out research in processing of metals.
- Motivating faculties and students to attend and contribute to seminars, workshops, refresher courses and International/ National Conferences.
- Providing the facility of VTU consortium for subscription of online journals.



Centrifugal Casting Equipment - Mechanical R&D



Simple and accurate flow measuring device in industry and agriculture applications -Civil R&D

