



# VARDHAMAN COLLEGE OF ENGINEERING, HYDERABAD

Autonomous institute affiliated to JNTUH

## INSTITUTIONAL DISTINCTIVENESS

Vardhaman College of Engineering has a clear Vision statement: *To be a pioneer institute and leader in engineering education to address societal needs through education and practice.* We have always aspired to be distinctive using a variety of aspects such as interdisciplinary research, motivating startups, inovative teaching pedagogy, value-based education, empowering society through introducing projects and motivating entrepreneurship.

### Interdisciplinary Research

Designing curriculum in a way to introduce and train studnets through interdisciplinarity is an approach practiced in Vardhaman College of Engineering. This type of study allows the student to learn by making connections between ideas and concepts across different disciplinary boundaries. Students learning in this way are able to apply the knowledge gained in one discipline to another different discipline as a way to deepen the learning experience. The most effective approach to interdisciplinary study enables students to build their own interdisciplinary pathway between the courses offered in their respective semesters. A carefully facilitated induction programme in the first year ensures that students are educated on the benefits of inter-disciplinary studies in the first year itself.

Vardhaman College of Engineering strives to achieve true interdisciplinarity through collaboration of educators. Professionals from different disciplines are often brought to the education environment of Vardhaman College of Engineering for an effective facilitation of interdisciplinary teaching and learning. Such interaction supports the constructive paradigm which allows for new knowledge construction and a deeper understanding of ideas.

Making connections between different concepts is essential in interdisciplinary study;

- Students are highly motivated as they have a vested interest in pursuing topics that are interesting to them. As a result, the content is often rooted in life experiences, giving an authentic purpose for the learning and connecting it to a real world context.
- Students cover topics in more depth because they are considering the many and varied perspectives from which a topic can be explored.
- Critical thinking skills are used and developed as students look across disciplinary boundaries to consider other viewpoints and also begin to compare and contrast concepts across subject areas.
- Exploring topics across a range of subject boundaries motivates students to pursue new knowledge in different subject areas.

- Interdisciplinary knowledge and application of different disciplines can lead to greater creativity.

### **Motivating Startups**

Following the footsteps of the policy drafted by the AICTE, Vardhaman College of Engineering has a policy of promoting Start-Ups in its academic environment. Students are introduced to this policy through the First Year Induction programmes. Start-up Policies play a vital role in the economic and social development of a nation. In developing economies, these policies extend support to entrepreneurs and start-ups in overcoming the numerous barriers while trying to promote their start-ups. Vardhaman College of Engineering strongly believes that technical education institutes play an imperative role in shaping the Start up movement of a nation. We also have college students who have taken their business ideas to the next level and started out on their own as entrepreneurs. We have fully supported them in their journey and on the way both have gained from it. These startups have mentored and supported the campus companies and done honorary related work for Vardhaman Start-Up community as well.

### **Innovative Teaching Pedagogy**

Vardhaman College of Engineering has adopted innovative teaching pedagogy using Smart Classrooms to help teachers in delivering the concept better, and produce more meaningful learning experiences by using audio/visual aids from various sources.


- **Group Classroom Experiments:** A number of students work in groups on carefully designed guided inquiry questions.
- **Role Plays:** Role Plays are an effective method of getting the message across. Students take on the role of a person affected by an issue and studies the impacts of the issues on human life and/or the effects of human activities on the world around us from the perspective of that person. More rarely, students take on the roles of some phenomena, such as part of an ecosystem, to demonstrate the lesson in an interesting and immediate manner.
- **Projects and Models:** Known as the effective teaching tools, models and projects are used as demonstrative tools to explain a particular concept. Once the child creates his/her own project, it is easier for the child to internalize the concept by 'learning by doing'.
- **Context rich problems:** Short realistic scenarios giving the students a plausible motivation for solving the problem. The problem is a short story (beginning with "you") in which the major character is the student. Context rich problems reflect the real world, and may include excess information, or require the student to recall important background information.
- **Interactive Lectures:** Easy way for instructors to intellectually engage and involve students as active participants in a lecture. Students are encouraged to participate in an activity that lets them work directly with the material.
- **Questioning:** This approach turns a lecture into a guided discussion wherein the instructor poses thoughtful questions to students.
- **Comprehensive and Continuous Assessment:** Provides educators with a better understanding of what students are learning and engages students more deeply in the process of learning.

## **Societal Consciousness**

Social awareness and consciousness serve as a precursor to social movement. Educational institutions build moral essence and ethical values to produce socially desirable behaviour, personality and character which promote innovation, peace, equal opportunities and justification among individuals, society and nation. Vardhaman College of Engineering strives to attain its Mission statement: *To train the students to meet dynamic needs of the society.* VCE, through its curriculum, aims to focus on dynamic needs of the society through a variety of courses such as Gender Sensitization, Engineering Exploration, Social Innovation, etc. RWT is a DST funded project undertaken by Vardhaman College of Engineering to improve economic conditions of Telangana Farmers. The project leverages women empowerment and education to efficiently transform the society. As part of the RWT Project, women farmers in rural areas have been given an opportunity and training to engage in the cultivation of Quinoa and Chia seeds.

## **Motivating Entrepreneurship**

Vardhaman College of Engineering considers entrepreneurship education very important to the educated youth. Taking in to consideration the decreasing number of opportunities and the increasing number of skilled youth, VCE strives to produce the best to the entrepreneurial world. Believing in the fact that educational institutions should adopt entrepreneurship educational strategies for promoting self-reliance among the students and persuade them with innovative ideas, VCE draft its policies and curriculum to give its students maximum exposure to the entrepreneurial sector. The college aims to meet new ventures and new techniques to match the global challenges in the contest of new demand. Understanding the need of the hour to wash out the old methods of teaching entrepreneurship education, VCE has introduced direct relationship between students and entrepreneurs in chalking out a plan for the future of entrepreneurship.

  
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