

**College Code: K9** 

#### 7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust

### INSTITUTIONAL DISTINCTIVENESS

#### **1. PRAGMATIC ENGINEERING**

TKR College of Engineering and Technology vouches the concept of 'Pragmatic engineering'. Pragmatic Engineering is about having "an oversized impact on the business by applying the right technology at the right time. It's about creating a technology that has a technical and social impact on the underlying business".

For example building an electric car is cool, but producing a version in which people feel safe travelling is challenging. This is engineering that changes the world forever. Students at TKRCollege of Engineering and Technology are trained in key things that matter in the development and fabrication of various products. While designing a product there should be a balance between form and function. The design should be aesthetically pleasing vs easy to use. Then there is the question of fabrication. "How well can we make it? Can we deliver it quickly?

The college strongly believes that good engineers are always open to learning about what new things are coming out and open to different opinions; frameworks and ways of thinking.

The distinct objective of Pragmatic Engineering supports the existing and upcoming Industrial needs involving technology Students are taught about a kind of tying and the creative enjoyment they get by taping right technology into the business, upholding the principles of engineering in practice.

Students are made to contemplate on different kinds of businesses where technology is being applied now, everything from businesses that are very operations heavy, to selling ads online. They are taught to channelize their technological resources, which creates an impact on their earnings and financials.

#### **Outcome:**

The Students belonging to the mechanical engineering branch (3<sup>rd</sup> year) were motivated to design and develop an electrical vehicle. Electrical vehicles aim to solve problems like air pollution when compared to conventional vehicle emissions. The purchasing and maintenance cost is comparatively less.

The weight of the electrical vehicle designed by the students with the help of the faculty is considerably less when compared to the weight of conventional vehicles. The students completed the project in the fourth year.

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# 2. GREEN SUSTAINABLE ENGINEERING

Green engineering is the design, commercialization and use of processes and products in a way that reduces pollution, improves sustainability and minimizes risk to human health and the environmentwithout affecting the economic viability and efficiency.

Students at TKR College of Engineering and Technology are taught to use life-cycle thinking in allengineering activities. They are taught to ensure that all material and energy inputs and outputs are inherently safe and as benign as possible.

Green engineering develops and applies engineering solutions while being cognizant of local geography, aspirations and cultures. Eco-friendly technology involves some of the following:

- Recycled and biodegradable content
- Using plant-based material
- Reduction of greenhouse gas emissions
- Energy-efficiency

Students are motivated to work on designing products that are environment friendly; does not requirea lot of money for its operation and is never run out because of its renewable technology. For instance

a) Bio-gas plant

## 3. Health Consciousness

At TKRCET We believe that college life is not all about academics, games, friends, and fun. It is also about learning to interact with other people, being aware of social, environmental and gender issues, and inequities in the society. We provide an opportunity to every student to contribute to make the society in which they live a better place and to grow as better individuals.

The TKR College of Engineering & Technology has committed itself to the task of inculcating social values and responsibilities in its students. This society should sincerely serve the cause of the education needs of humans. We believe in high standards of academic, professional, and societal performance.

The TKR society runs a farm of 100 cows and buffaloes in proximity to the Institution. Live stocks provide high –quality milk, cheese, butter, ghee for the needs of the college hostel. The TKR farm and our college have a symbiotic relationship. It has created a lot of employment opportunities and also provides improved nutritional benefits. The milk delivered from this farm provides high food productivity of the students. This dairy farm provides a source of daily income with a relatively low level of risk. This farm which is in the middle of the city is like a jewel in the crown. Even when the farm is taking up a lot of space, collage is getting no profit from it; it is running this farm for community benefit. The increase in human population in the city has a direct effect on the demand for milk. Everyday we notice, and it is evident that a lot of employment generation and potential for entrepreneurial activities exit in this dairy farm. This direct linkage will not only be inclusive for the purpose to have profit but also to have local and safe food consumption by the students.

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