



ADDITIVE MANUFACTURING LAB FOR
DESIGN THINKING

Plan for sustenance beyond two years:

TKR Centre for Research & Innovation supports in engaging the phenomenon of life-long learning, in promoting nation-building objectives, emphasizing the serendipitous collision of thoughts. Conveying developed knowledge to the community with the help of workshops, short-term courses, certain skill development activities. Extending the services of human expertise as consultants. Raising the level of laboratory to be test centers for Multidisciplinary and Intra-disciplinary research areas.



TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

(Approved by AICTE. Affiliated to JNTUH. Accredited by NBA)
Accredited by NAAC with A grade
Medbowli, Meerpet (V), Balapur (Mandal) R.R. (Dist),
Telangana – 500 097 www.tkrcet.ac.in



TKR CENTRE FOR RESEARCH & INNOVATION

A CONFLUENCE FOR CREATIVE METAMORPHOSIS



Vision for TKR Centre for Research & Innovation:

TKR Centre for Research & Innovation at TKR College of Engineering & Technology intends to persuade students to be pragmatic by helping them to transform basic scientific, technological and abstract ideas to practical reality. TKR Centre for Research & Innovation will provide an Eco-System for the students to learn by doing and will support them in thinking critically, being innovative, visualizing products and developing and implementing prototypes. The Lab will serve as a cross-disciplinary and multiple stake holders' platform to enable student entrepreneurship, collaboration with the industry and commercialization.

A few of the innumerable facilities provided by TKR Centre for Research & Innovation like

1. A platform to establish industry academia conclave.
2. A Room for knowledge sharing to support the ideas of, innovations, societal needs.
3. A Location for nurturing their curricular knowledge to inculcate entrepreneurs skills.
4. Rapid prototyping facility.
5. Ultra-Modern measuring, metal joining and cutting facilities.
6. Induction furnace for design of materials of choice.
7. Ultra-modern facilities to cater the needs of electrical and electronics hardware assembly and testing
8. To train students to imply design and analysis of various applications using high end computing facilities will go a long way in translating nascent ideas of students to new products and providing solutions to a plethora of technical problems. The workshops/ trainings, competitions and boot camps conducted by TKR Centre for Research & Innovation and the interaction between industry- Institute and linkages among Institutes will aid in bettering confidence among the young student entrepreneurs for

implementing their thoughts and Ideas. Constant mentoring and interactions with other research labs will help students to ingeniously choose raw materials and design products that will create an edge over similar products already available in the market – products that would turn out to be cost effective and environmental and user friendly. TKR Centre for Research & Innovation's aim at collaborating students' activities with larger national goals and missions like serving the disadvantage sections of the society will pave the way for students to enhance their ethical, social and cultural values. This biblical quote summarizes the motto of TKR Centre for Research & Innovation “Give a man a fish He will eat for a Day Teach a man to fish He will eat for the rest of his life”.

Integration of

TKR Centre for Research & Innovation with existing facilities:

The additional equipment which is available in the existing laboratories will be deployed in the new TKR Centre for Research & Innovation for the smooth conducting of experiments. TKR Centre for Research & Innovation at TKRCET will initiate students to come up with new ideas, persuade them to execute and finally integrate innovativeness in to their business. The lab is intended to create willingness to the students to make an effort and take a chance instead of assuming that their efforts won't pay off. The hands-on work culture will train them to learn from mistakes and will make them resilient. Scientific discovery in the past clearly indicate that constant efforts trigger serendipity. TKR Centre for Research & Innovation is a platform for students to think and act relentlessly. Interactions in these labs will orient young student entrepreneur to tap on indigenously available raw material and create products that are cost effective, superior in quality and consumer friendly. Pure cotton text tile material produce in our country is glaring example of how locally available materials can be used to manufacture products that are close to nature and regulates body temperature when compared to synthetic textile material. An entrepreneur creates jobs and doesn't fend for a job. Entrepreneurship can bring about economic and social changes by supporting the government in increasing employment opportunities. Increased employment improves the standard of living and per capita income which would better the national income in the form of higher tax revenue and higher government spending. This revenue can be productively used by the govt. to uplift struggling sector s and human capital. These young student entrepreneurs with the right impetus can revolutionized the use of technology in making quality products that would be accepted not only at the national level but also globally. The national initiatives/ Technology Vision 2035/ SDGs/ MSME are working as torch bearers at providing a platform to a small and medium entrepreneur in India by demanding a radical change in the way production use of raw material and technology, marketing etc. are carried in our country.

