

### 7.3 INSTITUTE DISTINCTIVENESS

The Institute Vision exemplifies the institute's commitment to Under-Graduate Research, specifically in Sustainable Technologies. The institute has been promoting UG research amongst the students and the faculty. The various initiatives taken by the Management has resulted in substantial gains in terms of research papers published, enhanced quality of under-graduate projects and campus visibility in research. The initiatives and the gains are outlined below:

#### MANDATORY COURSE ON RESEARCH AND REVIEW:

The students of SEM-6 of all branches of engineering undergo a semester long certificate course in Entering Research. In January 2020 a curriculum has been framed for the course along with well-defined modules, clearly stated course outcomes and prescribed pedagogy. Research mentors have been identified in each department for delivery of the various course modules and monitoring of student progress. Faculty is trained in Research Methodologies to guide the students.

The course has been divided into four Modules of total 30 hours duration. After the completion of the course the students will be able to -

- Identify various approaches to research
- Search for relevant literature and select relevant pieces of information and summarise literature review
- Forming teams, evaluating literature, creating task charts
- Draft and present a project proposal

Inspite of the lockdown, students were able to follow the guidelines and work towards identifying and evaluating literature and preparing a literature review summary.

After introduction of the above course there is a marked improvement in the following:

1. Students ability to read and understand research papers
2. Students ability to identify gaps in research
3. Students ability to formulate a research problem
4. Students ability to write a review paper

#### Other gains from the activity:

- Improvement in quality of papers submitted by the students to various conferences. This is seen from an increase in the number of papers being accepted for presentation
- Improvement in quality of papers submitted to the **DBIT Journal of Science and Engineering**, which is an in-house publication containing papers by students and faculty. All papers are peer reviewed.
- Increase in the number of papers being written by students on the project work carried out by them. Each department publishes a **Book Of Papers** which is a compilation of all the papers written by the students on the project work done by them.
- Increased participation of faculty and students in **conferences**.

- More students looking to convert their project ideas into marketable products and become **entrepreneurs**.
- Increase in the number of **faculty members pursuing their Phd** in various universities.
- Increase in number of **research proposals** being prepared by the faculty and submitted to various agencies.
- Increase in number of **consultancy projects** being taken up by faculty.
- Increase in joint research and product development being undertaken by students and faculty with industry.