



Thakur Dnyanesh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai

Approved by All India Council for Technical Education (AICTE) and Government of Maharashtra (GoM)

Conferred Autonomous Status by University Grants Commission (UGC) for 10 years w.e.f. 01.01.2019-20

Amerit Top 200 Colleges in the Country, Ranked 197th in NIRF India Ranking 2019 in Engineering College category

• ISO 9001:2015 Certified • Programme Accredited by National Board of Accreditation (NBA), New Delhi

• Institute Accredited by National Assessment and Accreditation Council (NAAC), Bangalore

Website : www.tcetmumbai.in

TCET/FRM/IP-10/10

Date: 26th April 2022

National Initiative Program (Student Exchange Program)

Report on Collaborative Research Paper Writing

1. Program Details:

Thakur College of Engineering & Technology organized Collaborative Research Paper Writing activity from September' 2021 to March' 2022.

2. Event Details:

TCET NIP Collaborative research paper writing activity was planned to carry out collaborative research activity with partner college faculty & students. Collaborative research activity was started with group formation, heterogenous groups were formed by adding students and faculty members from host and partner colleges. After group formation title finalization is carried out by conducting brainstorming sessions through online platform zoom. Group mentors conducted online session to give guidance about research paper format and how implementation can be done based on project title. Project work is divided among the group members. Individual group members carried out project work by using various popular research tools and implementation/simulation technology tools and integrated together. Groups further reviewed the work from their mentor faculty members. Also accommodated the suggested changes in it. Project groups started writing paper after project work. All project groups completed collaborative research paper writing activity within 3 month span.

3. Planning:

Collaborative Research Paper Writing activity was planned to complete within 3 month durations. Two project groups started project work in month of September'22 and completed work in the month of November'22 and published paper in TCET's E-conference'21. 7 project groups started project work in month of November'22 and completed work in the month of February'22 and published paper in TCET's MulticonW-22. 1 project group started writing book chapter for initiative of Vardhaman College of Engineering Scrivener Publisher Wiley in month of January'22 and completed work in the March' 22.

4. Event Schedule:

2 groups who published paper in Technology Conference November 22 started work from September 2021. 7 groups worked in the span November 2022 to February 2022 and published paper in MulticonW-



22. 1 group whose abstract accepted for book chapter worked from January 2022 to March 22 submitted paper for book chapter initiative of Vardhaman College of Engineering Scrivener Publisher Wiley.

Week 1	Week 2-7	Week 8	Week 9-11	Week 12
Title Finalization	Project Work	Mentor review for Project Work	Research Paper Writing	Mentor review for Project Work

5. Objective:

- To develop a platform for students to work collaboratively with other institute students on common problem statement by knowing emerging technology, modern tool usage, societal and environmental problems, project management and professional ethics.
- To give students an exposure to the skills such as team work, communication and lifelong learning.
- To adopt the national initiatives under EBSB: Students exchange program at institute level.

6. Expected Outcome:

10 collaborative research papers will get published through this program.

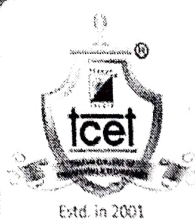
Participants: Participants were undergraduate Engineering students & faculty from Host College and Partner Colleges

Host College (Thakur College of Engineering & Technology) & Partner Colleges:

1. Giet University, Gunupur, Odisha
2. Government Engineering College Nawada, Bihar
3. Muthayammal Engineering College, Rasipuram, Namakkal, Tamilnadu
4. Dr. Daulatrao aher college of engineering, vidyanagar extn. Banawadi, satara, karad
5. NDMVP's K.B.T. College of engineering, Nashik

7. Collaborative Research Work Mentors:

- Dr. Lochan Jolly (Dean SSW)
- Dr. Megharani Patil (Activity Head- National Initiative Program)
- Ms. Niki Modi (COMP Dept)
- Mrs. Sonali Singh (E&TC Dept)
- Ms. Jalpaben D. Pandya (ELEX Dept)
- Mrs. Amruta Gokhale (Mech Dept)
- Mr. Arpit Vyas (Civil Dept.)



Tatyasaheb Kore Charitable Trust's (Regd.)

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8. Highlights:

Student collaborative research work was based on various branch specific domains. There were different type of papers such as Review papers/Case Study Papers/Experimentation based papers.

9. Author Count:

Student participated (Partner collage & TCET)	
Thakur College of Engineering & Technology	31
Giet University, Gunupur, Odisha	1
Government Engineering College, Nawada, Bihar	1
Dr. Daulatrao aher college of engineering, vidyanagar extn. Banawadi, satara, karad, maharashtra 415124	1
NDMVP's K.B.T. College of engineering, Nashik	2
Muthayammal Engineering College, Rasipuram, Namakkal, Tamilnadu, India	9
Total Authors	45

10. Evaluation and Assessment of Program:

Out of 18 groups formed 10 groups successfully completed the collaborative research work and published paper.

11. Outcome:

There were Exchange of knowledge between researchers of different institute. Also improved understanding of trending technologies in various domains and disciplines. It also promoted collaborative research culture amongst student communities. 10 collaborative research work paper were published in conferences and as a part of book chapter.

12. Problem faced and solutions suggested:

Coordination among the groups due academic and personal commitments. Initially group can decide particular week-day slot and stick to it throughout the program.



13. SWOT analysis:

Parameter	Strength	Weakness	Opportunity	Threat
Collaborative Research Work	Project groups selected problem statements from TV2035.	Weak coordination among the group, as authors were from different institutes.	Bright groups with diverse skillsets can work collaboratively and produce good quality transaction papers.	Non responsiveness of some of the group members leads to trouble in integration of work.

14. Key Differentiator:

6 institute were involved in this program, heterogeneous groups worked on problem statements from TV2035 and published research papers.

15. Scope for Improvement:

Bright groups with diverse skillsets can work collaboratively and produce top indexed journal papers or even transaction papers.

16. Conclusion:

This collaborative research activity was conducted as a part of EBSB student exchange program along with paired state institute Giet University, Gunupur, Odisha other partner college students and faculty members were included as an author in research paper writing. 10 groups i.e 45 participants from host and partner colleges including paired state institute Giet University, Odisha successfully completed Collaborative Research Paper Writing activity.

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