



Lokmanya Tilak Jankalyan Shikshan Sanstha's

Lokmanya Tilak College of Engineering

Sector-4, Vikas Nagar, Koparkhairane, Navi Mumbai

(Approved by AICTE, Affiliated to University of Mumbai, & Accredited by NAAC)



DEPARTMENT OF COMPUTER ENGINEERING

Innovations by the Faculty in Teaching and Learning

1. ICT enabled Classrooms:

- **ICT enabled Class rooms** and Exclusive seminar halls are available to have interactive sessions .
- All Classrooms are equipped with the required teaching aids, like LCD Projectors, WIFI and Internet facilities. Teachers use ICT enabled tools for effective teaching-learning processes.
- Use of online Videos, PowerPoint Presentations during regular teaching.
- It helps the faculties to represent the content in a more demonstrative manner.
- It helps to Capture attention of students , Clear images for better understanding ,Motivation for students to learn more



Use of ICT tools in Seminar Room for Teaching students.



Teaching using LCD projector in classrooms.

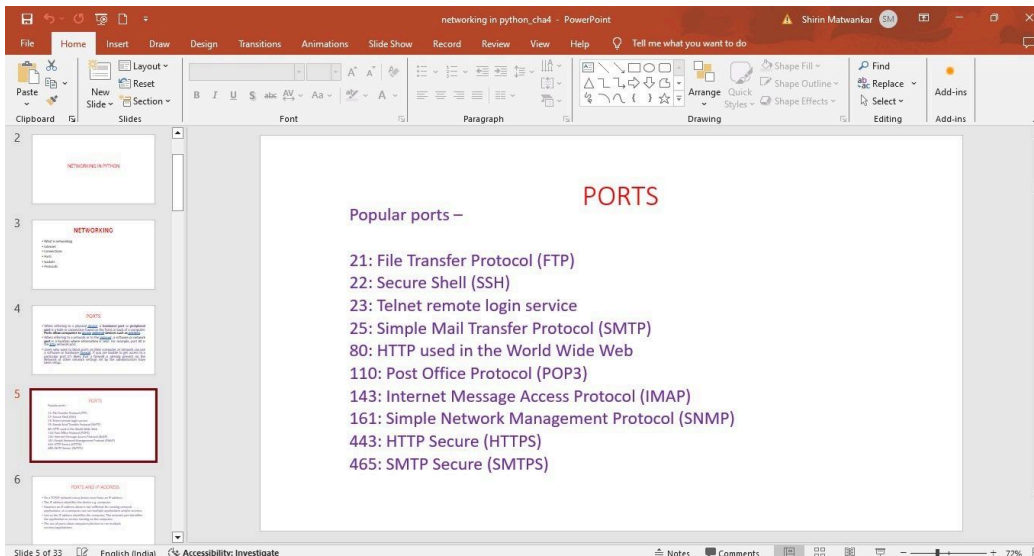
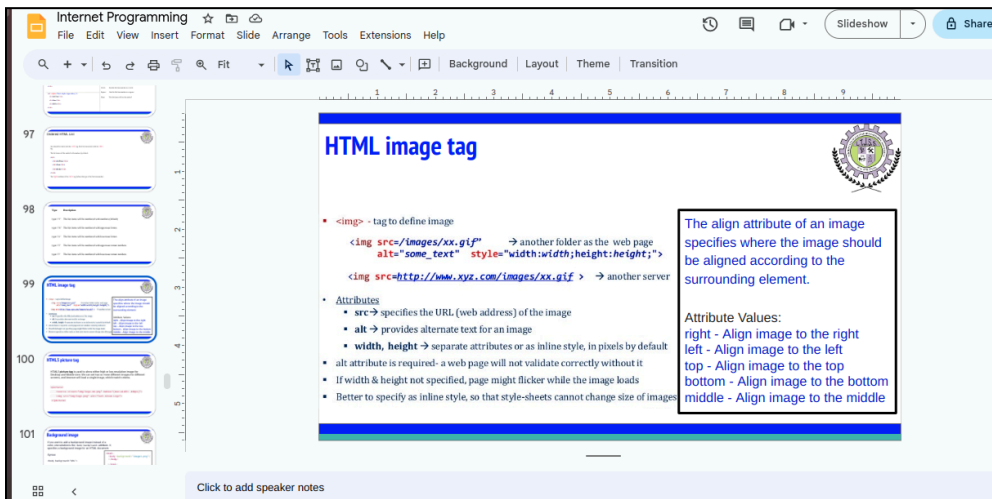


Teaching using LCD projector in classrooms.

2)Teaching through PowerPoint presentation:

To develop the comprehension of students and to learn effective ways to use visual aids while working on their presentation and public speaking abilities. It provides the ability to equip the presentations with different types of media – including images, sounds, animations and much more. It enhances the students’ abilities to retain what they are being taught, especially those who are visual learners

Outcome: Students will be able to easily understand the concepts when the content are presented to them.



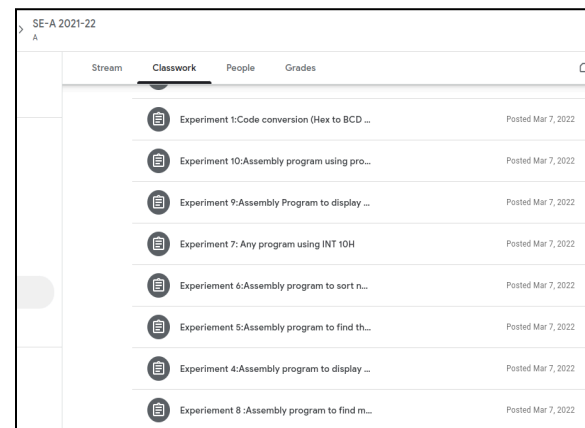
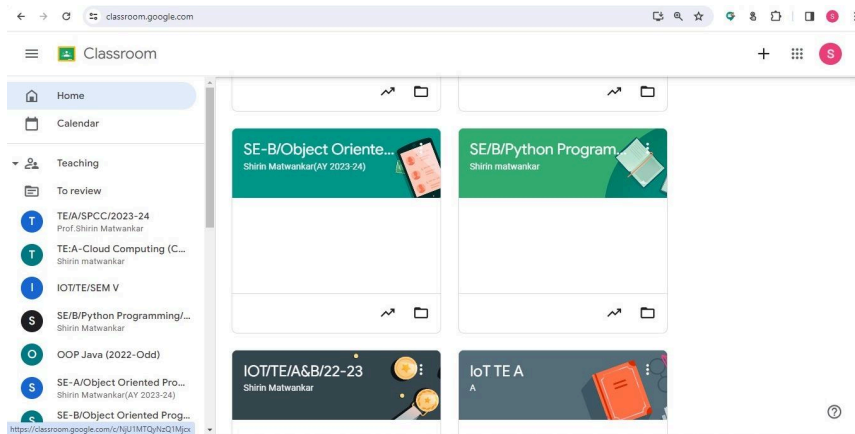
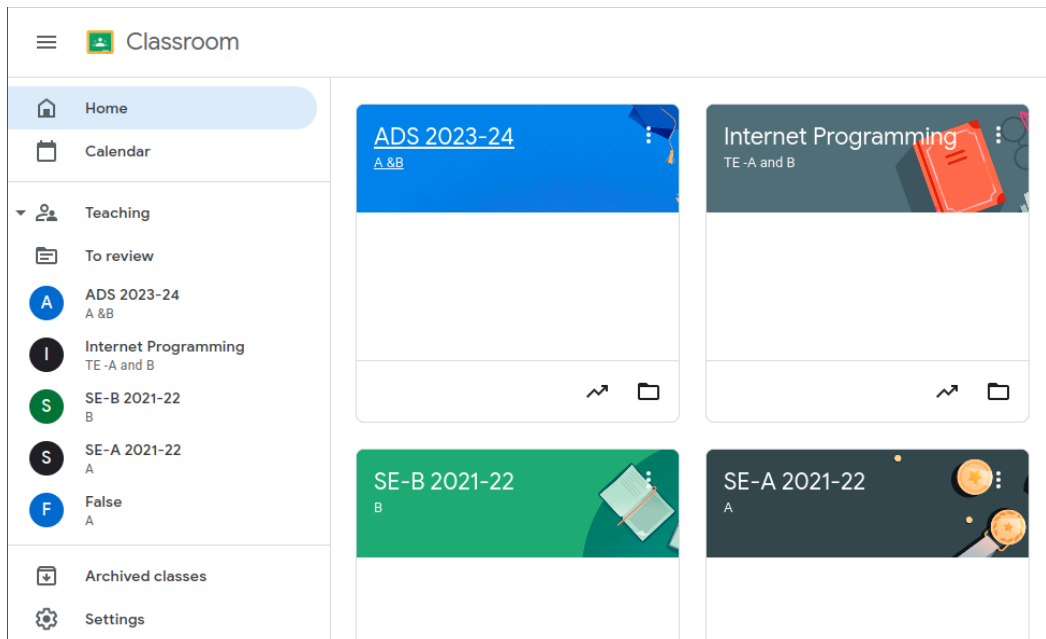
Teaching through Powerpoint presentation

2. Google Classroom creation E-resource sharing:

Faculty members involve the students in an active learning mode through **Google Classrooms**. The faculty share their lecture notes, lab manuals, PPT slides, and other resources through Google Classrooms.

Outcome: Students get better understanding of concepts and as well as get knowledge of how to use online tools for the subject. It also ensures that students who have missed class either for illness or any other reason stay updated at all times. It eliminates the need for lugging around heavy textbooks and allows students to learn at a time, place and pace that they are comfortable with.

This method has facilitated teacher student interaction along with online distribution of notes and communication of assignments.



Google Classroom and Classwork

3. Learning through e-content (ppt ,online notes),YouTube channel,recorded online lectures

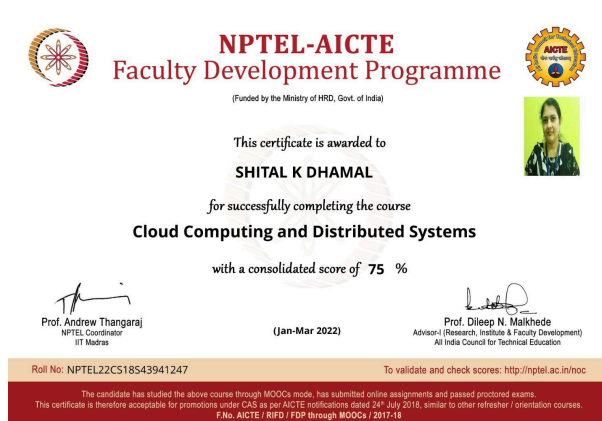
- The subject teachers have prepared subject related e- content and uploaded in slideshare etc., and in their Class room and developed videos based on syllabus for students and uploaded either in youtube channel or shared drive link .
- These Videos and E-learning materials are circulated by the course in charges to the students that helps in providing exposure to domain expertise of the faculty members from various reputed institutes like NPTEL etc

Outcome: The students were able to attend lectures at any place and at any time. Also they would explore and learn from more lectures available for all the new technologies and frameworks

4. Learning through online certification courses like NPTEL,coursera

Students and faculty members are encouraged to register for the NPTEL program/ online certification courses of their own areas of teaching and research interests, for enhancing their teaching skills, smooth conduct of the teaching process in the regular classroom teaching and for understanding the potential concepts much more effectively.

Outcome: It gives students confidence that they have learned and passed their test. This experience gives exposure to ideas and approaches outside their comfort zone. In addition, they are being able to think outside their experience which is an ingredient of leadership



NPTEL-AICTE
Faculty Development Programme
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
SHITAL K DHAMAL

for successfully completing the course
Cloud Computing and Distributed Systems
with a consolidated score of **75 %**

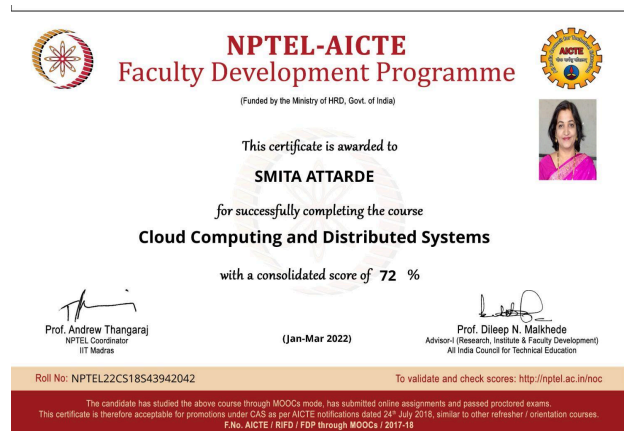
Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jan-Mar 2022)

Prof. Dileep N. Malkhede
Advisor (Research, Institute & Faculty Development)
All India Council for Technical Education

Roll No: NPTEL22CS18543941247 To validate and check scores: <http://nptel.ac.in/noc>

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



NPTEL-AICTE
Faculty Development Programme
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
SMITA ATTARDE

for successfully completing the course
Cloud Computing and Distributed Systems
with a consolidated score of **72 %**

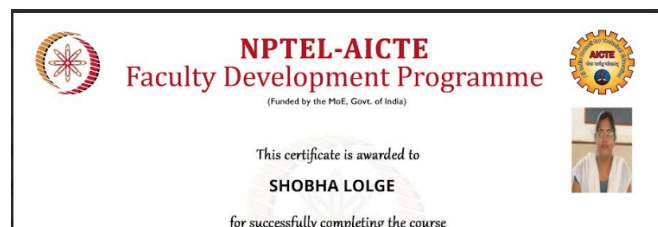
Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jan-Mar 2022)

Prof. Dileep N. Malkhede
Advisor (Research, Institute & Faculty Development)
All India Council for Technical Education

Roll No: NPTEL22CS18543942042 To validate and check scores: <http://nptel.ac.in/noc>

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



NPTEL-AICTE
Faculty Development Programme
(Funded by the MoE, Govt. of India)

This certificate is awarded to
SHOBHA LOLGE

for successfully completing the course


Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jan-Mar 2022)

Prof. Dileep N. Malkhede
Advisor (Research, Institute & Faculty Development)
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NPTEL Online Certification

(Funded by the MoE, Govt. of India)




This certificate is awarded to
SANJIVANI TUSHAR DEOKAR
 for successfully completing the course

Data Base Management System


with a consolidated score of **52** %


Online Assignments	17.5/25	Proctored Exam	34.5/75
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Total number of candidates certified in this course: **2095**



Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Mar 2022
(8 week course)


Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL22CS51S43941766 To validate and check scores: <https://nptel.ac.in/noc>

Fig 6 : Faculty NPTEL certification



Elite NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
KHAN RAMZAN ALI MEHBOOB
 for successfully completing the course



Deep Learning

with a consolidated score of **82** %

Online Assignments	22.38/25	Proctored Exam	59.38/75
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Total number of candidates certified in this course: **1474**


Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Jul-Oct 2022
(12 week course)


Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL22CS1245S53580825 To validate the certificate  No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to
SARVESH SANDIP MANTRI
 for passing the course



Programing in Java

with Score* **91** %

NPTEL Certificates by Students



NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to
ANISHA ARUN SHINDE
for passing the course
Programming in Java
with Score* **98** %

Covid-19 impacted January 2020 semester

A. Goswami
Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

Jan-Apr 2020
(12 week course)



Indian Institute of Technology Kharagpur



NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to
RAHUL MAHANTY
for passing the course
Programming in Java
with Score* **98** %

Covid-19 impacted January 2020 semester

A. Goswami
Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

Jan-Apr 2020
(12 week course)



Indian Institute of Technology Kharagpur



*Continuous online assessment score

To verify the certificate, please visit <https://npTEL.in>

NPTEL Certificates by Students

5 .Students are exposed to latest developments through visits to industry and exhibitions:

Industrial visits are organised so that students can receive real-world experience and hands-on learning that are crucial for a better grasp of their professional roles, procedures, and duties. Such knowledge aids pupils in developing their abilities and skills

Outcome: The students were very involved and learned how the industry works, what practices are followed there and how to prepare for working in IT field



Reliance Jio Infocomm Limited on 18th January 2020



7. Learning by Research Paper : In order to encourage the students to get acquainted with reading and understanding research papers and technical terms given in quality literature and understand its implementation in emerging technologies and recent advancement. Also how to write quality content for IEEE transactions and International Journals.

Outcome : The students developed their habit to refer to classic papers from reputed journals and transactions like IEEE Transaction on Machine learning, IOT and many other fields of technology. They developed their understanding over the recent advancement in the field; knew the peer community and got familiar with technical ways of documentation.

Sr No	Name Of Student	Name Of The Award/ Recognition /Participation For Institution	Name Of The Award/ Government/ Non Government Recognised Bodies	State/National/International
1	Ms. Kalyani S. Singh Ms. Pratiksha R. Jondhale Ms. Srushti A. Suryavanshi Mr. Kishan R. Gupta		Best student Research paper Award Runner Up TIES 2023 conducted by Vivekanand Institute of Management and studies Mumbai	International Conference
2	Debagnshu Saha	IJARSET	Technical Paper in Indexed CROSSERF	International Conference
3	Karle Swayam Yadav Abhishek	OSCILLATION 2023 Vasantdada Patil Pratisthtan's College of Engineering & Visual Arts	First Prize in Technical Paper Presentation	International Conference
4	Karle Swayam Naidu Anuradha	Participated in National level Technical Paper Presentation Competition	Participated in Technical Paper Presentation	International Conference

	Yadav Abhishek	held at KJSomaiya college of Engineering		
5	Ms. Kalyani S. Singh Ms. Pratiksha R. Jondhale Ms. Srushti A. Suryavanshi Mr. Kishan R. Gupta	Best student Research paper Award Runner Up TIES 2023 conducted by Vivekanand Institute of Management and studies Mumbai	E-Voting System Using Blockchain	International Conference
6	Samiksha Bopardikar	IJRSET	Participated in Technical Paper Presentation	Journal
7	Abhishek Singh	XZIBIT	Participated in Technical Paper Presentation	National
8	Sapna Vishwakarma	IJSRD	Technical Paper: Biometric the need of security	National
2019-20				
9	Sapna Vishwakarma	IJSRD	Technical Paper: Keyword Extraction using Python	Journal
10	Sapna Vishwakarma	TCET	Technical presentation	State

7. Teaching Through Group discussions:

Subject-specific GDs provide a variety of advantages, including bettering students' articulation, bettering topic research, bettering knowledge of a concept with its practical applications, reducing students' shyness, and enhancing their communication skills. As GD is one of the most commonly used interview-specific tasks, it also helps people land jobs at respectable firms.

Students are divided into groups. Each group is assigned a name based on the topic selected. Students are asked to give their views on the concept.

Outcome: Bringing out the creative thoughts of students





Group discussions for the topic : Are vitamins and food supplements helping your body?

8) **Teaching through Flipping Classroom** : It involves encouraging students to present different concepts from the syllabus as a part of revision. Flipping the classroom is an effective teaching method. In this technique, the students are made active participants of the learning process by passing the onus of learning on them, it requires the teachers to relegate to the role of resource providers and the students take the responsibility of gathering concepts information. Using various tools of technology the students are encouraged to construct knowledge, fill in the information gaps and make inferences on their own as and when needed.

Outcome: Teaching using this technique, responsibility is on the group of students where the educators play the role of guides, mentors, supervisors for the students. It also teaches students empathy, negotiation skills, teamwork, and problem -solving.



9) **Teaching through Alumni Interaction and sessions by them:** It involves sharing knowledge by alumni working as software engineers in the IT Industry with their juniors on practical grounds. How to apply the principles of software engineering to the design, development, maintenance, testing, and evaluation of software can be learned. There is much discussion about the degree of education and or certification that should be required for software engineers.

Outcome : Teaching using this technique, various aspects of the subject actually how they are used while developing a project is easily understood by the students.

their knowledge and explore the latest developments and trends in these fields.

LOKMANYA TILAK COLLEGE OF ENGINEERING
Vikas Nagar, Gyan Vikas Road, Sector 4, Kopar Khairane, Navi Mumbai, 400709

COMPUTER SOCIETY OF INDIA

ALUMNI TALKS
THE GREATER PURPOSE OF ENGINEERING

DISCUSSIONS ON:

- JOB SKILLS & PLACEMENTS
- METAVERSE
- 5G TECHNOLOGY

SPEAKER
MUKUND KHAW
R&D ENGINEER,
TEJAS NETWORKS

About the Speaker:

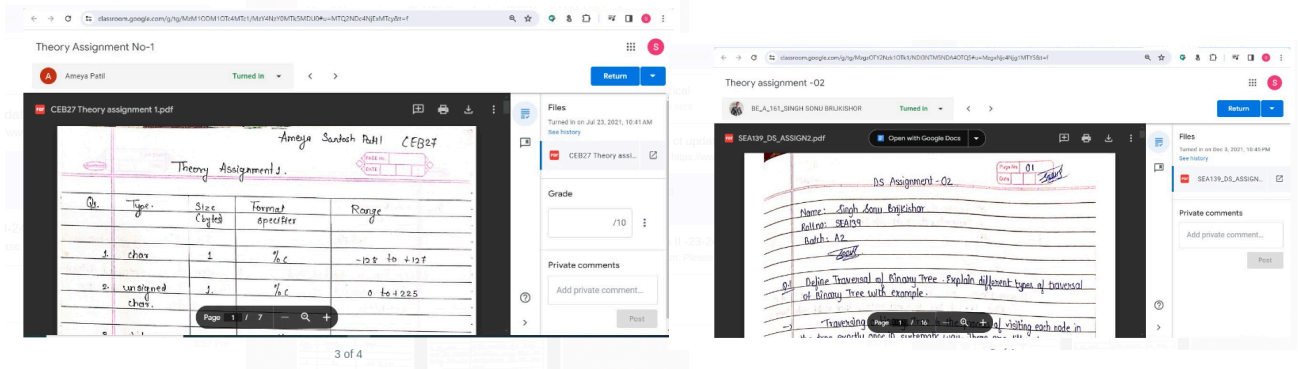
- Computer Engineer from LTCE, 2020
- Worked at Accenture as an ASE
- Pursuing MBA from Liverpool Business School
- Past President of CSI
- Worked in ELC, CESA, Zephyr, Placement Cell
- Is an Entrepreneur and Social Activist

AUGUST 10, 2022 | 2:00 PM
@ C-510, SEMINAR HALL



9. Assignment Practices : - Assignments are given to students for their better preparations and academic performance. To make students more attentive in class, students are asked to summarize the topic at the end of the lecture. Question banks are also given to students for their better preparations and academic performance.

Execution Plan : Two assignment during the semester



10. Learning through Project exhibition/competition : Faculty members organize Exhibition for the project done by students . The 3D models prepared by the students were utilized to teach the undergraduate students.

Outcome : It significantly helps the students to better understand the concept besides using blackboard teaching.

