5.5 Innovations by the Faculty in Teaching and Learning

Following activities are done by the faculty members to improve the teaching learning process:

1. Modern teaching techniques such as Power Point Presentation, audio-visual teaching along with the traditional LCD projectors for presentation are practiced in addition to the traditional chalk and blackboard teaching method.
2. Course materialsand hand-outs are made available in online sources (google class room, whatsapp group) to enhance the learning process of the students.
3. The course file including syllabus, lecture plan, tutorial plan, evaluation scheme etc. are provided to the students by the course teacher well in advance of the commencement of the class.
4. The Quality Improvement Cell is initiated to improve quality among the teaching faculty, and motivate them to guide students in their quest for standardized material available free online.
5. Students are encouraged to view video lectures, animations, NPTEL and other MOOCs courses, related to subject concerned to enrich their knowledge on the course.
6. Language lab facility is also available to improve the soft skills of the students.
7. Students are also facilitated by central computing facilities to access the internet to acquire the relevant knowledge. The institute has created Central internet facility with 100 Mbps leased line, Wi-Fi facility and 100 computer terminals facility to promote and motivate students for self-learning.
8. Apart from the central library, digital library facilityand department library also facilitate the students in accessing the books.
9. Department also conduct Expert lectures, delivered by industry person to enrich the knowledge base of the students about the updated technology used in petrochemical industries.
10. Industrial visits, Internships, In plant training are arranged to have hand-on real time experience.
11. Working models are demonstrated to the students for better learning of the concepts.
12. Students are motivated by frequent interaction with alumni of the department

13. Students are also encouraged to organize and participate in various technical events, aptitude test, personal interview, group discussions, and debate etc., conducted by various academic institutions for their overall development.
14. QIC Bharathidasan Institute of Technology has been identified as Nodal Centre and has been given the responsibility for assisting engineering colleges by undertaking activities leading to ensure that colleges produce enough engineers in tune with global trends.
15. QEEE - Quality Enhancement in Engineering Education Cell is available in the institute focus on pedagogical activities in the faculties.
16. EDUSAT facility provided by the Centre for Faculty Development of Anna University Chennai conducts the live/recorded audio-video lectures and soft skill training programmes. Anyone can utilize our web content lecture by clicking at the e-learning link.
17. **Interpersonal Skill Development:** Creativity, lateral thinking and communication / people management skills are imparted through goal setting exercises, group discussions, mock interviews and presentations. Interested students can also learn French / German / Japanese on campus.
18. Opportunities for higher studies in abroad for students provided by International Affairs Cell of our institute.
19. Soft skill training programmes conducted by TITAN industries / Rotaract/ Placement cell for third year and final year students.
20. Undergraduate students are encouraged to write project proposals to various funding agencies such as TNSCST/CTDT-Anna University Chennai to augment their knowledge and skills.
21. Undergraduate students are encouraged to become a member of professional bodies such as IIChE, SPE and to build their team spirit and leadership qualities.
22. Undergraduate students are encouraged to undergo industrial projects to hone their technical skills and practical knowledge.
23. Entrepreneurship Development Cell offers training and assistance to develop their ideas to product and to become an entrepreneur funded by EDC hub, TN govt.

5.5.A. Information and communications technology (ICT) tools:

Following Information and communications technology (ICT) tools are adopted by the faculty members to improve the teaching learning process:

5.5.A.1. Canvas:

Canvas is a web-based learning management system, or LMS. It is used by learning institutions, educators, and students to access and manage online course learning materials and communicate about skill development and learning achievement.

5.5.A.1.1 Basic Canvas Features

Canvas includes a variety of built-in course construction and management tools that can be customized to create unique and accessible teaching and learning experiences. Instructional designers and instructors may create and share course content using Assignments, Discussions, Modules, Quizzes, and Pages. They may also choose to foster a collaborative learning experience using Collaborations, Conferences, and Groups. Depending on course settings, students can access these areas in Canvas to find learning materials and interact with other course users.

5.5.A.1.2 Canvas Links of Faculty:

https://canvas.instructure.com/courses/3512483/pages/assignment-2

https://canvas.instructure.com/courses/3392744/pages

https://canvas.instructure.com/courses/3524019/assignments/25209875

https://canvas.instructure.com/courses/3503112/assignments/25149481

5.5.A.2Voice Thread:

- Voice Thread is a web administration that enables clients to transfer PowerPoint slides, recordings, photographs, et al. also, add voice portrayal to make an interactive media introduction.
- Voice Thread is an application that keeps running inside your internet browser and it enables you to change accumulations of media, similar to pictures, recordings, reports, and introductions, into a spot for a discussion.
- Instructors use Voice Thread for a wide range of reasons, from expanding and reporting classroom discussions, web-based mentoring, virtual class spaces, proficient improvement preparing, and a thousand things in the middle.

5.5.A.2.1 **Salient Features:** Communicate, Collaborate and Connect

VoiceThread is used from any computer and web browser.

VoiceThread is a cloud application, so there is no software to install. The only system requirement is an up-to-date version of Google Chrome or Mozilla Firefox. VoiceThread will run in your web browser and on almost any internet connection.

VoiceThread is used on the iPad, iPhone, or iPod touch.

With VoiceThread Mobile, all of your content is available on your iOS or Android mobile device. Whether you're working from the mobile app or from your web browser, experience the simplicity and flexibility you expect from VoiceThread.

VoiceThread can Integrate seamlessly with our LMS.

Seamlessly integrating VoiceThread into your Learning Management System (LMS) is the key to user happiness. VoiceThread works well within a broad range of systems, but the most powerful option is the standard developed by the IMS Global Learning Consortium called Learning Tools Interoperability (LTI). LTI allows VoiceThread to integrate into most major Learning Management Systems, including but not limited to Blackboard, Sakai, Canvas, Desire2Learn, BrainHoney and Moodle.

Accessibility: Invite participation and collaboration from anyone, anytime, anywhere.

Analytics: Track and monitor your organization's use of VoiceThread.
Reporting and Analytics provides the who, what, when, where, and how much, with customizable charts and graphs.
Custom Homepage: Create your own VT portal or showcase.
The custom homepage provides a dedicated, customizable website for license holders to create a frontpage for their VoiceThread work.
Security:VoiceThread is committed to keeping your data secure.
VoiceThread employs world-class, highly secure data centers that utilize state-of-the-art electronic surveillance and multi-factor access control systems. The data centers employ environmental systems designed to minimize the impact of disruptions to operations.

In addition, VoiceThread utilizes Amazon Web Services. The AWS cloud infrastructure that powers the platform has been designed and managed in alignment with standard regulations and best practices.

5.5.A.2.2 Voicethread Links of Faculty:

https://voicethread.com/share/18243578/

https://voicethread.com/myvoice/thread/18274598/116132452/108059446

https://voicethread.com/share/18432490/

5.5.A.3Padlet-learning tool:

- Padlet an educational tool promotes creativity and collaborative learning among students and serves as a valuable learning resource. Advances in technology have created a space in which faculty members can communicate, collaborate, and share resources.
- Padlet is an online post in wall. It allows individuals (and large/ small groups) to post their comments, questions, and resources in one place that is easily accessible to everyone. Padlet can be a good way of gathering students' ideas during either a recorded lecture
- Padlet can offer a quick anonymous way of collecting student feedback at crucial points in time.

5.5.A.3.1 Padlet Links of Faculty:

https://padlet.com/jayaonlinecourses/1i8ycsd612xipvcp

https://padlet.com/mrengasamy40/Padlet_mrengasamy

https://padlet.com/pm_nitttr/swayam2

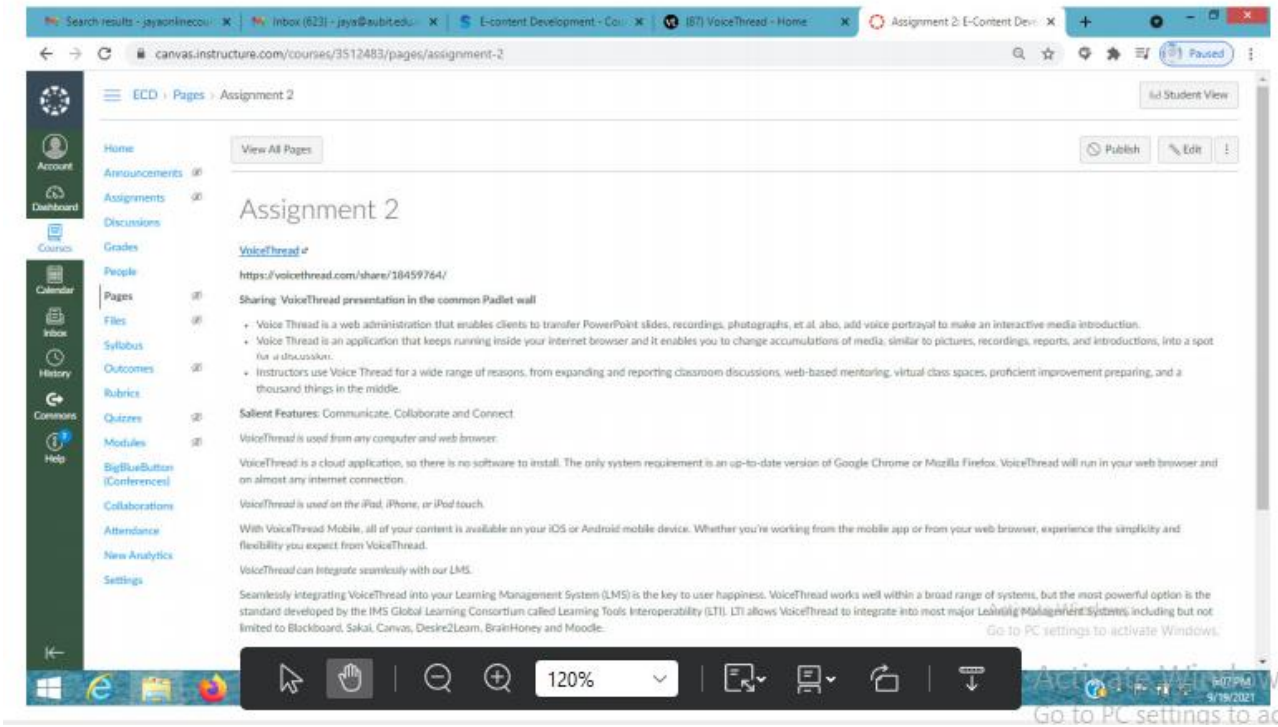
5.5.A.4. ThingLink tool:

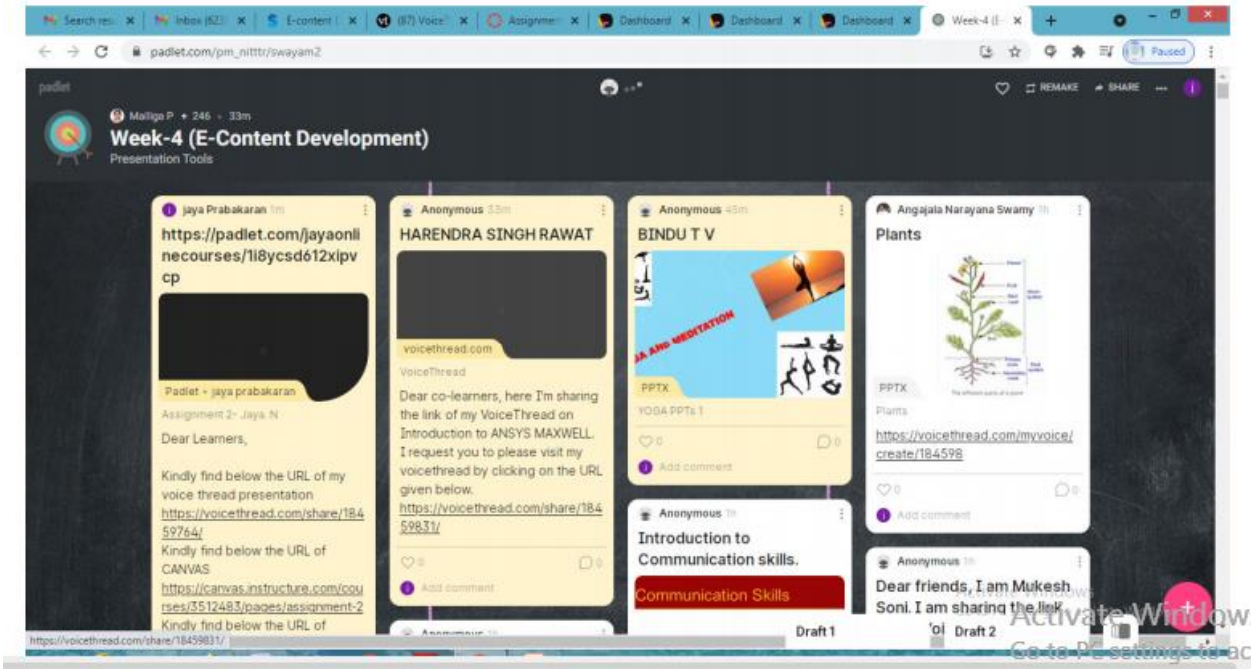
- ThingLink is a tool for creating interactive images and videos by adding tags. Tags can link to websites, social media pages, videos, maps, images, and audio. Interactive Thinglink images can be shared on social networks, including Facebook, Twitter, Pinterest.

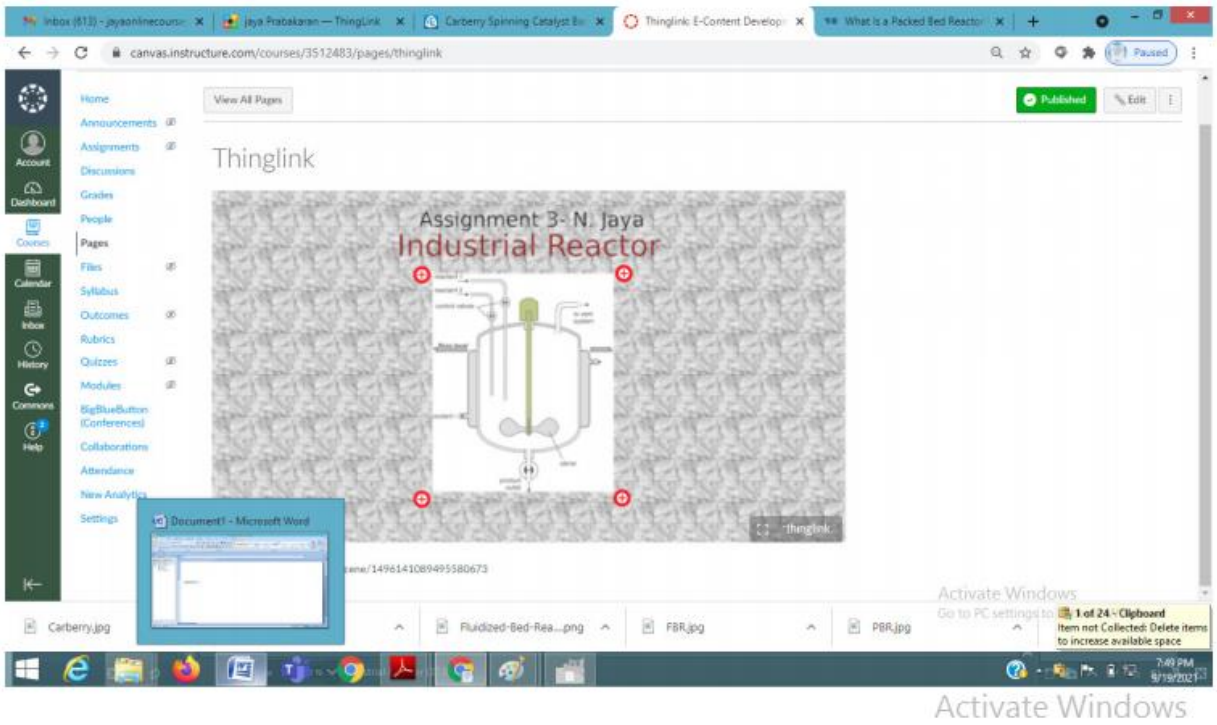
5.5.A.4.1 ThingLink of Faculty:

https://www.thinglink.com/scene/1496141089495580673

https://canvas.instructure.com/courses/3512483/pages/thinglink


canvas.instructure.com/courses/3512483/pages/assignment-2
ECD › Pages › Assignment 2
Assignment 2
VoiceThread
https://voicethread.com/share/18459764/
Sharing VoiceThread presentation in the common Padlet wall
Salient Features: Communicate, Collaborate and Connect
120%


padlet.com/pm_nitttr/swayam2
Week-4 (E-Content Development)
Presentation Tools
jaya Prabakaran
https://padlet.com/jayaonlinecourses/1i8ycsd612xipvcp
Anonymous
HARENDRA SINGH RAWAT
Anonymous
BINDU T V
Angajala Narayana Swamy
Plants
Introduction to Communication skills.
Communication Skills
Dear friends, I am Mukesh Soni. I am sharing the link
Draft 1
Draft 2



5.5.A.5. Google classroom

Google form links of the faculty:

https://forms.gle/qP9njCmaAJNJZ59e8?authuser=1

https://forms.gle/ntVKdgNb3pVYzMty9

https://forms.gle/X4NJqYs53dX5eZ788

https://forms.gle/99B8yH21QgR765eb6

5.5.A.6. Trainings attended by the faculties in ICT Tools:

MOOCs NITTTR Credit courses:

1. Two Credit course NITTTR Exclusive MOOC "Fundamentals of Outcome-Based Curriculum in Engineering Education", September – November 2020.
2. Two Credit course NITTTR Exclusive MOOC "Managing Learning Resources", July – November 2020.
3. Three Credit course NITTTR Exclusive MOOC “E-content Development”, July – September 2021.

4. Three Credit course NITTTR-AICTE FDP Exclusive MOOC “Student Assessment and Evaluation”, January – April 2022.
5. Two Credit course NITTTR-AICTE FDP on “Communication Skills, Modes & Knowledge Dissemination”, July-November 2022.
6. Two Credit course NITTTR Exclusive MOOC, "Laboratory and Workshop based Instruction and Learning", July – November 2020.
7. Three Credit course NITTTR Exclusive MOOC, "Integrating Educational Technology into Teaching", September – November 2020.
8. Two Credit course NITTTR Exclusive MOOC, "Graphics and Animation Development”, January – May 2022.

NITTTR 8 Module Courses :

1. Module 1 - Orientation Towards Technical Education and Curriculum Aspects – Completed in Sep-2024.
2. Module 2 - Professional Ethics & Sustainability - Completed in Feb-2024.
3. Module 3 - Communication Skills Modes & Knowledge Dissemination - Completed in Sep-2024. Module 4 - Module 4 Instructional Planning and Delivery - Completed in Feb-2024.
4. Module 5 - Technology Enabled Learning & Life-Long Self Learning - Completed in Feb-2024.
5. Module 6 - Student Assessment and Evaluation - Completed in Sep-2024.
6. Module 7 - Creative Problem Solving Innovation and Meaningful R&D - Completed in Sep-2024.
7. Module 8 - Institutional Management & Administrative procedures - Completed in Sep-2024.

MOOCs PMMMNMTT courses Completed:

1. Two-Week Refresher Course on Managing Online Classes & Co- creating MOOCS 24.0 from 11 - 25 March, 2023 and obtained Grade A+ organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING.

FREE ONLINE EDUCATION
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NITTTR
Kolkata

SWAYAM ONLINE COURSE CERTIFICATION

This certificate is awarded to

KUMARAGURU K

for successfully completing the **Two** *credit course*

Exam ID: 4010214949

MANAGING LEARNING RESOURCES

with the consolidated score of **62%** *marks*

in the proctored examination held on **26.03.2021**

offered by **Dr UDAY CHAND KUMAR**

Ushapalesan

National Coordinator
Director
NITTTR, Chennai

Director
NITTTR, Kolkata

Date of Issue: 16/08/2021

To validate and check scores: http://swayam.gov.in/

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NITTTR
Chennai

SWAYAM ONLINE COURSE CERTIFICATION

Roll No: TN05002090

This certificate is awarded to

JAYA NAGENDRAN

for successfully completing the **Three** *credit course*

E-CONTENT DEVELOPMENT

July to September 2021

with the consolidated score of **88%**

in the proctored examination held on **21.02.2022**

offered by **Dr P. MALLIGA**

Ushapalesan

NATIONAL
COORDINATOR
Director NITTTR, Chennai

COURSE COORDINATOR
NITTTR, Chennai

To validate and check scores: http://swayam.gov.in/; Date of Issue: 18.05.2022

FREE ONLINE EDUCATION swayam

NITTTR Chennai

SWAYAM ONLINE COURSE CERTIFICATION

This certificate is awarded to

M.RENGASAMY

Exam ID: 4010214322

for successfully completing the **Three** *credit course*

INTEGRATING EDUCATIONAL TECHNOLOGY INTO TEACHING

with the consolidated score of **81%** *marks*

in the proctored examination held on **26.03.2021**

offered by **Dr. G. JANARDHANAN**

Urhapalesan

National Coordinator
Director
NITTTR, Chennai

Course Coordinator
NITTTR, Chennai

Date of Issue: 16/08/2021

To validate and check scores: http://swayam.gov.in/

Teaching Learning Centre

Ramanujan College, University of Delhi
(Accredited Grade 'A++' by NAAC)
under the aegis of
MINISTRY OF EDUCATION
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

सत्यमेव जयते
Ministry of Education
Government of India

This is to certify that

Dr. E. GOMATHI, Assistant Professor

of

Department of Petrochemical Technology, University College of Engineering - BIT Campus, Anna University, Tiruchirappalli

successfully completed a 4-Week Faculty Induction/Orientation Programme for

"Faculty in Universities/Colleges/Institutes of Higher Education"

from *22 March – 20 April, 2023* and obtained

Grade A+.

Blockchain Hash: 0xde3704eebe5c2fc5eb8efc23405a805f83bf53e6a4ec686b7697697963100c47

Prof. S. P. Aggarwal
(Principal & Director)
TLC, Ramanujan College

Dr. Nikhil Kr Rajput
(Convener)
Ramanujan College

Teaching Learning Centre

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MINISTRY OF EDUCATION
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

Ministry of Education
Government of India

This is to certify that

DR.K.ANBARASI

of
UNIVERSITY COLLEGE OF ENGINEERING, BIT CAMPUS,ANNA UNIVERSITY,TIRUCHIRAPPALLI.
has successfully completed online Inter-Disciplinary Two-Week Refresher Course on
"Managing Online Classes & Co- creating MOOCS 24.0"
from *11 - 25 March, 2023* and obtained
Grade *A+*.

Blockchain Hash: 0x020e548e30a7754ebc87b43f9309c30ec5e9302990d07dcc225912feb7b9c601

Prof. S. P. Aggarwal
(Principal & Director)
TLC, Ramanujan College

Mr. Vipin Rathi
(Convener)
Ramanujan College

Teaching Learning Centre

Ramanujan College, University of Delhi
(Accredited Grade 'A++' by NAAC)
under the aegis of
MINISTRY OF EDUCATION
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

Ministry of Education
Government of India

This is to certify that

Dr.N.STALIN

of
Department of Petrochemical Technology, UCE-BIT Campus, Anna University, Tiruchirappalli - 620024
has successfully completed online Inter-Disciplinary Two-Week Refresher Course on
"Managing Online Classes & Co- creating MOOCS 24.0"
from *11 - 25 March, 2023* and obtained
Grade *A+*.

Blockchain Hash: 0x6da7c78ebbfe6ebb2e83ab84e3c35fa36597c18b03072adc0005a65bb427b8a0

Prof. S. P. Aggarwal
(Principal & Director)
TLC, Ramanujan College

Mr. Vipin Rathi
(Convener)
Ramanujan College

Video Lectures and Course Materials:

https://docs.google.com/spreadsheets/d/1yrRnsKT_XoNSWsLaBnsqLn0ihnejaBjQjsUleuF7MmY/edit?gid=0#gid=0