Innovations by the Faculty in Teaching and Learning (ECE Department @RCCIIT, Kolkata)

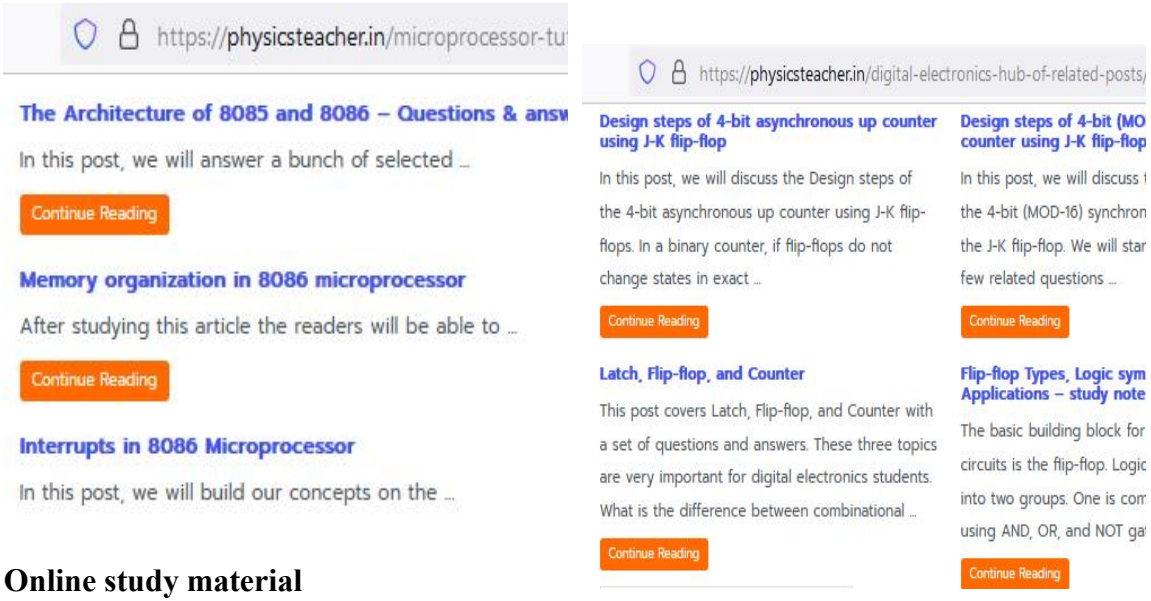
<table>
<tr><th>SL. No</th><th>Pedagogical Methods</th><th>Sample Activities</th></tr>
<tr><td>1.</td><td>Method :

Flipped Classroom

Faculty :
Mrs. S. Saha
Assistant Professor

Sem : 4th Sem
Course Code/Course:
EC403 Microprocessor and Micro controller

And

Sem : 3rdSem
Course Code/Course:
EC 302 Digital System Design</td><td>


Online study material
Faculty: Mrs. Saraswati Saha

Digital Electronics articles:

https://physicsteacher.in/digital-electronics-hub-of-related-posts/

Microprocessor and Micro controller article:

https://physicsteacher.in/microprocessor-tutorials-hub/

Study material is made available in online mode through website to the students prior to teaching.
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<td rowspan="3">2.</td>
<td rowspan="3">Method:
Interaction with outside world

Faculty:
Dr. A. Deyasi,
Assistant Professor

Mode:

Guided students to participate in different competition such as Bengalathon, Big Dream championship, etc.</td>
<td>


Award in Bengalathon
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<td>


Internship received from Internshala
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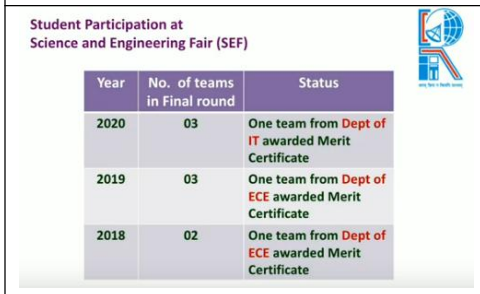
<td>


Participation at Science and Engineering Fairs(SEF)
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Student Participation at Big Dream championship
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<tr>
<td colspan="2">Details of student participation in different competition
Link: https://www.youtube.com/watch?v=xPJpUJg3hkA</td>
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<td></td>
<td>Method :

DEMONSTRATION THROUGH WORKING MODELS
Mode:
Live demonstration
Faculty :
Mr N. Bhattacharya
Assistant Professor</td>
<td>The students of second year were taken to explain about the principles of working of Digital Storage Oscilloscope by Asst. professor Mr.Nandan Bhattacharya. Also they were shown different types of waveform and measuring the various parameters.

Demonstration Video Link:
https://drive.google.com/drive/folders/1tA-Du5Hxlt51cHLfZlqCGj0c8VCyu_7O</td>
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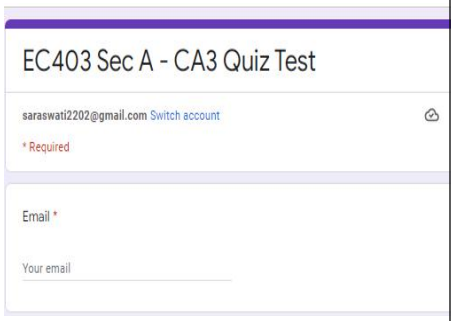
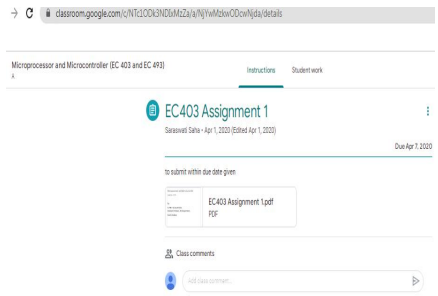
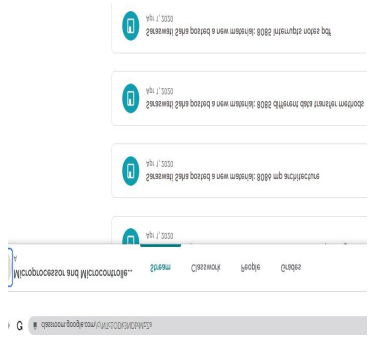
<td>4.</td>
<td>Method : GOOGLE CLASS ROOM

Mode:
QUIZ/ASSIGNMENT

Faculty : Mrs. S.Saha
Assistant Professor

Sem : 4th Sem
Course/Course Code:
EC403 Microprocessor and Micro controller</td>
<td> 

Taking Quiz for continuous assesment . Posted Assignmenmt</td>
<td> 

Students are made to join as members of the Google class room. Study materials, Assignments, Quiz questions are posted in the app.</td>
<td> 
Posted Study materials.</td>
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<td>5.</td>
<td>Method :

E-Learning:

Mode :
NPTEL/UDEMY/
COURSERA</td>
<td> 
</td>
<td>Expected Outcomes: Upgrade the quality of engineering education on tip compatibility & resources for beyond curriculum.
 
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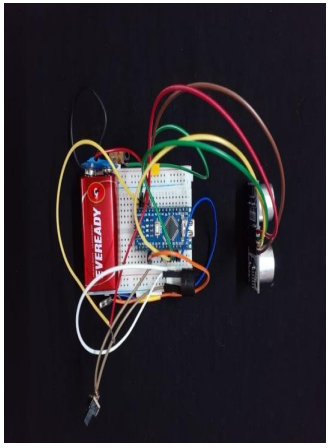
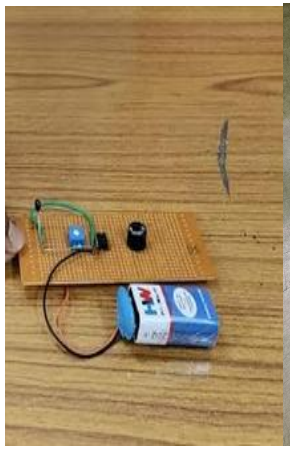
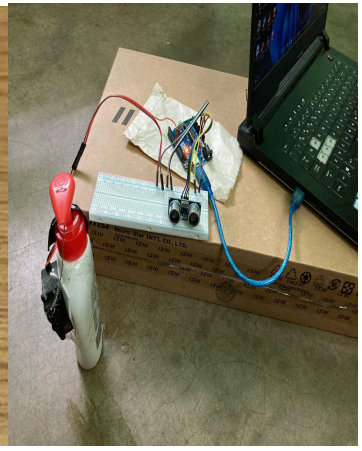
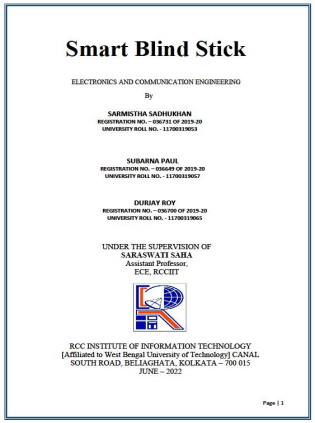
6.	Method :**WIT & WIL**, Mode: **Presentation**	A presentation is designed and created using ICT tools in order to present the teacher's perspective ("WIT") about scenario of the respective subject. The presentation is designed such that it maps every topic of the prescribed syllabus to the real world, in order to give the students a tangible experience of understanding the underlying engineering concepts to perceive for themselves ("WIL"). Course Booklet Link for B.Tech courses available at college website https://rcciit.org/academic/download/ece/booklets/1%20st%20year%20course%20booklet%20new.pdf https://rcciit.org/academic/download/ece/booklets/2nd%20year%20Course%20Booklet_new.pdf https://rcciit.org/academic/download/ece/booklets/3rd%20year%20Course%20Booklet_new.pdf https://rcciit.org/academic/download/ece/booklets/4th%20year%20Course%20Booklet_new.pdf **Execution Plan:** Every faculty has to explain the overview at the commencement of the schedule. Expected Outcomes: Students can understand the objective and outcome of the subjects.
7.	Method : **PROJECT ASSIGNMENTS** Mode: The students will be given the project topics and made them to present Hardware model and submit the project report in write up. Faculty : **Mrs. S.Saha** Assistant Professor Faculty : **Mrs. A. Banerjee Roy** Associate Professor	The students will be given the project topics and made them to present Hardware model and submit the project report in write up.     **Smart Blind Stick** ELECTRONICS AND COMMUNICATION ENGINEERING By SARMISTHA SADHUKHAN REGISTRATION NO. – 096731 OF 2019-20 UNIVERSITY ROLL NO. - 11700319053 SUBARNA PAUL REGISTRATION NO. – 096649 OF 2019-20 UNIVERSITY ROLL NO. - 11700319057 DURJAY ROY REGISTRATION NO. – 096709 OF 2019-20 UNIVERSITY ROLL NO. - 11700319065 UNDER THE SUPERVISION OF SARASWATI SAHA Assistant Professor, ECE, RCCIIT RCC INSTITUTE OF INFORMATION TECHNOLOGY [Affiliated to West Bengal University of Technology] CANAL SOUTH ROAD, BELIAGHATA, KOLKATA – 700 015 JUNE – 2022 Page | 1

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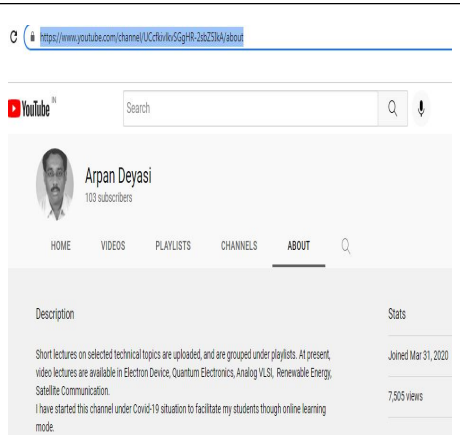
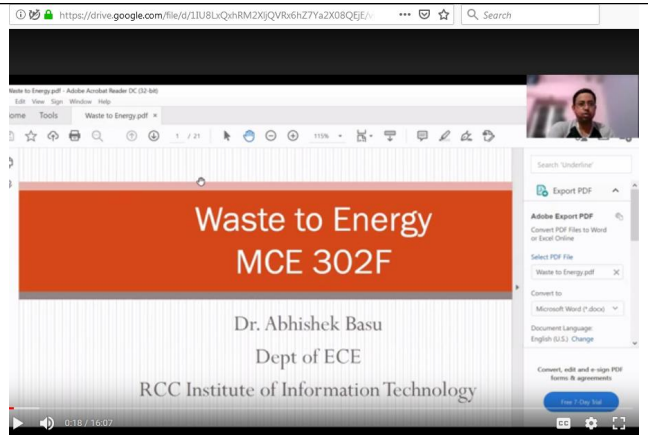
<tr>
<td>8</td>
<td>YouTube VIDEO
Faculty:
Dr. A. Deyasi,
Assistant Professor

At present, lectures are available in
Electron device, Quantum Electronics, Analog VLSI, Renewable Energy, Satellite-communication

Faculty:
Dr. A. Basu
Associate Professor</td>
<td colspan="2"> 



YouTubeVIDEO Lecture Link
Faculty: Dr. Arpan Deyasi
https://www.youtube.com/channel/UCcfkivlkvSGgHR-2sbZ5IkA/about
Faculty: Dr. Abhishek Basu
VLSI Design lab II: https://bit.ly/3jtaOH0
Digital VLSI Circuits & Systems Unit 6: https://bit.ly/3gQJ
Waste to Energy:Unit-1 : https://bit.ly/3kA1kce</td>
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<td>9.</td>
<td>Method : NPTEL VIDEO CLASS ROOM

Dr. A. Deyasi,
Assistant Professor
Guided students for participating in MOOCs courses through NPTEL , Swayam.</td>
<td>  </td>
<td>Execution Plan:
The students who have enrolled for different certification courses can use the infrastructure available in the department/institution during the college timings for completing their courses and some respective faculty members are allotted for supporting them.

Time schedule for MOOCs reflected in theclass routine
Link for class routine:
https://rcciit.org/academic/download/ece/routine/odd2021-22.pdf
https://rcciit.org/academic/download/ece/routine/even2021-22.pdf</td>
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<td>10.</td>
<td>EMPLOYABILITY SKILLS</td>
<td colspan="2">Training on Technical Skills & Soft Skills for awareness and readiness for employability.
Hard copy attached for student participation in coding class and soft copy of rest.</td>
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