Highlights of the Department activities

- MoUs of the Department
- Conferences/Workshops organised
- IEEE
- III Cell
- EEE Association
- Industrial Visits, Internships and tours
- Interaction with the Society
- Innovation in Teaching and Learning
- NSS
- Sports

1. MoU of the Department

*MoU with CDAC Entuple Technologies, Bangalore*
MoA with CDAC under NaMPET Phase-II

MoU with Ottotraction, Accredited Energy Auditor, BEE (2015)
2. Conferences, workshops organised

ICNGIS 2022 in association with IEEE IAS Kerala Section
3. IEEE Activity

Weekly talk Series organised by IAS Chapter

Inauguration of state wide event REX 2.0 organised by IEEE RAS Chapter
Participants of REX 2.0 organised by IEEE RAS Chapter, funded by IEEE

Career Mentoring by 2021 IEEE President and organised by IAS Chapter
4. Industry Institute Interaction Cell

All Kerala IAS Student Conclave at RIT

Expert from Ministry of Railway delivering a talk
Expert talk on digital editing

Expertise from Reliance Industries
Faculty visit to National Power Training Institute, Cherthala

5. Electrical Association

Technical talk on Power System stability
Intellectual Property Rights (IPR) by National Intellectual Property Awareness Mission (NIPAM), Chennai

Project Exhibition of 2022 batch
Project Exhibition of 2022 batch

Students participation in Power Quiz by KSEB
Prize distribution of Power Quiz in association with Kerala State Electricity

6. Industrial Visits, Internships and Tours

Students at Neriamangalam Hydro Electric Power Station, Idukki
Industrial Visit to RubCo Industries, Kottayam

Industrial Visit to RubCo Industries, Kottayam as part of Student Conclave
Industrial Visit to 220kV Switching station, KSEB substation, Pallom

Internship program at 400kV substation, Maddakathara, Thrissur
Internship program at KSEB, Pallom

Internship program at KSEB, Pallom
Industrial Visit and tour to Karnataka, Goa

Industrial Visit to Dolphin Industries, Kottayam
6. Interaction with Society

Inauguration of training program to Self help groups of Meenadom Panjayath
Students leading training program to Self help groups of Meenadom Panjayath
### 7. Innovation in Teaching and Learning

**Table: Some Innovations by the Faculty in Teaching and Learning**

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Pedagogical method</th>
<th>Activity description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flipped classroom</td>
<td>Study material made available in online mode through google classroom to the students prior to teaching. Additional tests are conducted and solutions are made available online for self verification.</td>
</tr>
</tbody>
</table>

Faculty: Dr. A. Dolly Mary  
Course: Industrial Instrumentation and Automation  
Semester: S8  
Academic year: 2019-20
| 2 | **Collaborative learning**  
Faculty: Dr. A. Dolly Mary  
Course: Sustainable Engineering  
Semester: S3  
Academic year: 2020-21 |
|---|
| The students were divided into teams and activities and presentations which is a great tool for helping students learn to work together, listen carefully, communicate clearly, and think creatively was carried out.  
They also give your students the chance to get to know each other and work on an activity. |

| 3 | **Think Pair Share**  
Faculty: Dr. A. Dolly Mary  
Course: Circuits and Networks  
Semester: S3  
Academic year: 2020-21 |
|---|
| Think-pair-share (TPS) is a collaborative learning strategy where students work together in team to solve a problem or answer a question about an assigned reading. This strategy requires students to  
1. tackle a question individually.  
2. then discuss the solution among the group assigned.  
3. A student mentor is assigned for each group to report the progress of the group. |
| **On site learning**  
Faculty: Dr. A. Dolly Mary  
Course: Basics of Electrical Engineering  
Semester: S2  
Academic year: 2019-20 | On site learning is an effective tool where students get to know the working of electrical equipment used in field of Electrical Engineering. |
| --- | --- |
| **Team based activity**  
Faculty: Dr. Johnson Mathew  
: Prof. Sheron George  
Course: Circuits and Measurements lab  
Semester: S3  
Academic year: 2020-21 | Team based activities are a great tool for helping students learn to work together, listen carefully, communicate clearly, and think creatively. They also give your students the chance to get to know each other and work on an activity. Multiple course projects like Radar detection system are carried out as part of team based activity. |
Demonstration of laboratory course is a powerful method where the laboratory experiments of the Machines lab were shown with step by step procedure to be done. Here synchronisation was demonstrated to students. It helped the students to understand the need of synchronisation with the grid.

<table>
<thead>
<tr>
<th></th>
<th>Demonstration of Case studies/Lab</th>
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<tbody>
<tr>
<td>Faculty:</td>
<td>Dr. A. Dolly Mary Dr. Shanifa Beevi</td>
</tr>
<tr>
<td>Course:</td>
<td>Electrical Machines lab II</td>
</tr>
<tr>
<td>Semester:</td>
<td>S6</td>
</tr>
<tr>
<td>Academic year:</td>
<td>2020-21</td>
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</tbody>
</table>
Seminar (Be an Evaluator)

Faculty: Dr. A. Dolly Mary, Dr. Prince A.

Course: Seminar
Semester: S7

Academic year: 2021-22

Here a panel of students were made to act as evaluators for each presentation, other than than the faculty assigned. This helped the students think and critically evaluate the presentations thereby improving their ability to ask questions.

Design Project Exhibitions

Faculty: Dr. A. Dolly Mary
Dr. Sunilkumar P.R

Design Project exhibitions were held after the completion and evaluation of the same. This helps the other batches of students to get motivated and develop new ideas on viewing the exhibition.
<table>
<thead>
<tr>
<th>Video demonstration</th>
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</thead>
</table>
| Faculty: Dr. A. Dolly Mary  
Dr. Shanifa Beevi |
| Course: Electrical Machines lab I |
| Semester: S4 |
| Academic year: 2021-22 |

Video Demonstration of laboratory course is an effective method where the laboratory experiments of the Machines lab were shown with step by step procedure to be done. It helped the students to understand the basics of the lab.
<table>
<thead>
<tr>
<th>Number</th>
<th>Lecture Title</th>
<th>Faculty</th>
<th>Course</th>
<th>Semester</th>
<th>Academic Year</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td><strong>Flipped classroom</strong></td>
<td>Raji Reghunathan</td>
<td>Digital Signal Processing</td>
<td>S8</td>
<td>2019-20</td>
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<td>Some algorithms must be studied for doing problems related to that topic, then students are provided with pre-recorded videos covering the algorithms and given sufficient time to go through the video. The classroom slot is then utilised for discussion on the topic and questions based on these algorithms.</td>
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<td>11</td>
<td><strong>Surprise Test</strong></td>
<td>Raji Reghunathan</td>
<td>Basics of Electrical Engineering</td>
<td>S2</td>
<td>2020-21</td>
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<td></td>
<td>For some very important topics after discussing the theory and related problems in one online session, on the very next day a surprise test based on this topic will be conducted. This will help to understand the regularity of the students in their studies.</td>
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<tr>
<td>12</td>
<td><strong>Flipped Classroom</strong></td>
<td>Raji Reghunathan</td>
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<td></td>
<td>Numerical questions and their solutions were given to students in online mode through pre recorded videos</td>
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<td><strong>Faculty:</strong> Ansu Thomas</td>
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<tr>
<td><strong>Course:</strong> Advanced Control Theory</td>
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<td><strong>Semester:</strong> S6</td>
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<td><strong>Academic year:</strong> 2020-21</td>
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prior to teaching. Then on class time interactions and problem discussions were done to make the concepts more clear to students

<table>
<thead>
<tr>
<th><strong>13 Videos</strong></th>
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</table>

NPTEL videos were shared among students to enhance the quality of engineering education by developing concepts using video and web based courses.

<table>
<thead>
<tr>
<th><strong>14 Online class with offline effect</strong></th>
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<tbody>
<tr>
<td><strong>Faculty:</strong> Dr Johnson Mathew</td>
</tr>
<tr>
<td><strong>Course:</strong> Internet of Things</td>
</tr>
<tr>
<td><strong>Semester:</strong> S8</td>
</tr>
</tbody>
</table>

Streamed the live classes using google meet. Conventional type of scribbling on Samsung flip intelligent display has been used, power point presentations and supporting videos from internet also been streamed from flip board after video captured using
HD web cam (Xiaomi make). Students could able to get the feeling of live class room effect.

8. National Service Scheme (NSS)

Seven day camp of NSS at Government High School, Vazhoor
Interaction with the Energy Swaraj team led by Prof Chetan Singh Solanki of IIT Bombay

9. Sports

APJAKTU 2019C Zone champions in football
Students participation in dropshot, an intra college event

APJAKTU 2022C Zone champions in Kabbadi