

EE_ISQIP

A week long training programme to all the Electrical & Electronics Engineering students was organised from July 10th to July 16th under the banner of IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur, offering both technical and managerial session for the overall development of the students. The main objective of the ISQIP:

- Initial aim of the session was to motivate the students in exploring practical side of the knowledge acquired from the syllabus.
- This workshop can also serve as a platform for exposing topics that appear in greater depth in later courses.

The week long workshops covered the sessions - Electrical CAD & machines drawing on the 1st and 2nd days, Fundamentals of Electrical garage on 3rd & 4th days and Installation & Design of solar system on the 5th day. Finally providing a practical exposure of learning the working of the Solar system at Cochin International Airport, Ernakulam.

Impact on Participants

The Proposed EE_ISQIP have made the following impacts on the society and student community.

- EE_ISQIP have improved the technical knowledge of the attendees and open them up to further learning in the Electrical Engineering field.
- Increased the membership retention and active PES & IAS volunteers partaking in every activity or event organised afterwards.
- Had successfully instructed and trained young professional students in various aspects of Electrical Engineering.
- Provided a solid platform for students to enhance their skills and to showcase their abilities.

Electrical CAD (Day 1,2)

On July 10th 2018 IEEE Power and Energy Society & Industry Applications Society College of Engineering Chengannur conducted the 1st day workshop on Electrical CAD. Workshop was conducted Sadique Ali P, Civil Engineer at Dream Arch and his team. Started with a keynote on 'Introduction to CAD and Machines drawing' and then presented simple applications of CAD in the afternoon session. Around 40 students attended the workshop. In the second day the students got familiar with the CAD, its functioning, different aspects of machines drawing and

informative projects were shown to the participants. In the last part of the session more applications were explained and shown to the participants .

Electromine (Day 3&4)

Electromine - a two day practical workshop on electrical garage was conducted by the expertise, Sir Benny Mathew, who took the students on a journey to their overall development. He started off the workshop by giving a brief introduction regarding the basics of electrical. The workshop covered both theoretical and practical aspects and the huge number of questions from the student community showed their keen interest. At the end of the two day workshop, a demonstration on using a fire extinguisher was manifested to upgrade the skills of students. All in all the workshop went off very well and was appreciated by one and all.

Solar FAB(Day 5)

Solar Fabrication session was given on the last day of EE_ISQIP by Er. Mohammad Rabeeh. The class emphasized on the need of changing to renewable energy resources and the ill effects if we continued our energy production through fossil fuels. The class started with the an introduction about renewable energy sources and the ways to harness them. Solar Energy was the main topic of discussion and talks we're conducted on the solar energy, its applications, ways to harness them, designing and construction of Solar Power plants for various projects, both residential and commercial. The class on Solar Energy was divided into different section ranging from introduction to design and implementation for optimum yield and minimum cost and also about ways to make revenue by connecting it to the 'GRID'. The class was very interactive and we had the opportunity to see, feel and know some major parts used in Solar plant assembly and the overall success of the class was further ensured on the Industrial Visit conducted at CIAL, Cochin wherein we saw the rest of the components in the field and immediately recognized them. The class ended with the delegates successfully designing various Solar projects based on given conditions and constraints.

Participant Demographics

Total Number of Participants : 40

Total Number of Volunteers : 15

Prof Benny explaining about the functioning of certain electrical machines during the session.



Theory session on Solar installation & Design by Mohammad Rabeeh



Industrial Visit at CIAL - first fully solar powered airport in the world.

.Workshop At BOSCH REXROTH- CET EI-IAS ISQIP

IEEE Instrumentation and Measurement Society Student Branch Chapter College of Engineering Chengannur in association with IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur conducted a two day workshop on,

'Hydraulic and Pneumatic Circuitry' and 'Programmable Logic Controllers' at BOSCH Rexroth Centre of Excellence in Automation Technologies, College of Engineering Trivandrum on 11th and 12th (Wednesday & Thursday) July, 2018 as a part of EI ISQIP. The session on the first day mainly focused on Programmable Logic Controllers (PLC) and Hydraulic actuators. An introductory presentation on PLC was shown, which gave the participants an introduction to the components of PLC such as controllers, sensors, actuators (Hydraulic, Pneumatic and Electric) and switching elements (Relays). In the afternoon session, the participants were explained about hydraulic circuitry in detail and they were given hands-on experience on various Hydraulic apparatus. The session on the second day dealt with Pneumatic circuitry. Different types of control valves such as Direction Controlled Valves, Flow Controlled Valves and Pressure Controlled Valves were familiarized. In the afternoon session, the participants were given training on Programmable Logic Controllers using IndraLogic software. The workshops were enthusiastic and enjoyable

