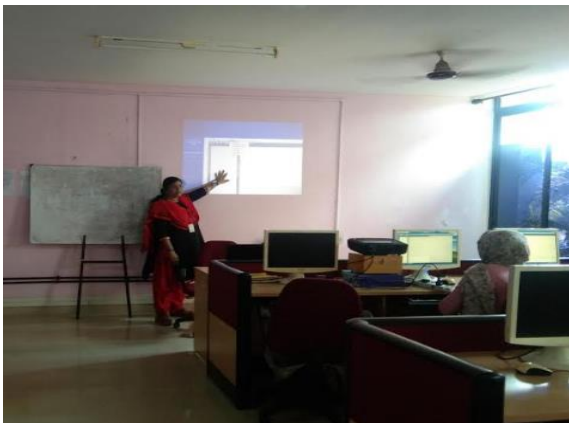# ROYAL COLLEGE OF ENGINEERING AND TECHNOLOGY, AKKIKAVU

ISTE-RCET ACTIVITY REPORT

1. ONE DAY WORKSHOP ON 'DOCUMENT PREPARATION USING LATEX'

The RCET ISTE Staff chapter and ECE department of RCET conducted a one day workshop on 'Document preparation using Latex' on 13th December 2019. The program was held in VLSI lab of ECE department from 9 am to 4 pm. The progam was conducted by Ms Nikhitha V P (AP/ECE), Ms Najiya Abdurahman (AP/ECE), Ms Athira Sankar (AP/ECE), and Ms Athira Krishna (AP/ECE).

The session includes topics like introduction to latex, creating documents, title, font effects, coloured text, font size, lists, comments & spacing, special characters, sections, labeling, typesetting , mathematical formulae, tables, figure insertion, subfigures, captions, customizing latex like spacing, page layout, header and footers, and basics for report making & beamer presentation.

2. ONE DAY FDP ON TEACHING METHODOLOGIES

The ECE department of RCET in association with ISTE has conducted a one day workshop on "Teaching Methodology" on 5th December 2019. The program was handled by Mr Narayanan P P, Asst. Professor in ECE department. The venue for the program was the VLSI lab of ECE department.

The program includes sessions like introduction to teaching, how to handle students, how to prepare for efficient teaching, how to evaluate a student, etc..

3.Two Day Faculty Development Program on "Embedded programming

Two Day Faculty Development Program on "Embedded programming" Date : 22nd & 23rd July 2019 Venue: Royal College of Engineering & Technology, Akikkavu Participants: Faculties from ECE & AIE department Report

Department of Electronics and Communication Engineering (ECE) in association with IEDC & ISTE RCET, conducted a Two day faculty development program (FDP) on "Embedded
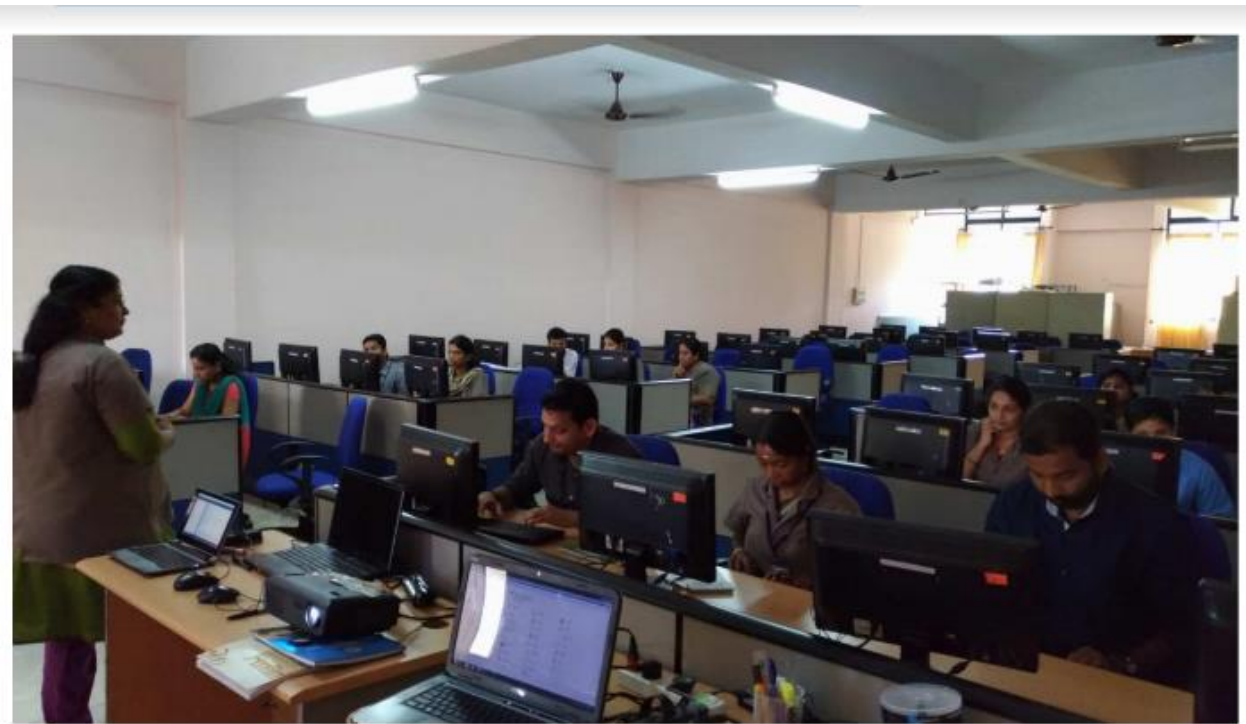
programming", during 22nd & 23rd July 2019. The faculties from Electronics and communication Engineering (ECE) and Applied & Instrumentation Engineering (AIE) departments participated in the program. The sessions were handled by Mr. Narayanan P.P., Mr. Kiran Samuel and Mr. Rahul V, Assistant Professor's, department of ECE, RCET. Day-1 (22/07/2019): The session started after registration at 9:30am. First day of the session concentrated on the various I/O ports configuration and interfacing LCD module with Atmega328 Microcontroller IC. The participants were introduced with the Embedded–C compiler: Atmel Studio. Various programs were compiled and the simulations were done using circuit simulation tool Proteus 8.6v. Department of Electronics and Communication Engineering (ECE) in association with IEDC RCET, conducted a Two day faculty development program (FDP) on "Embedded programming", during 22nd & 23rd July 2019. The faculties from Electronics and communication Engineering (ECE) and Applied & Instrumentation Engineering (AIE) departments participated in the program. The sessions were handled by Mr. Narayanan P.P., Mr. Kiran Samuel and Mr. Rahul V, Assistant Professor's, department of ECE, RCET. Day-1 (22/07/2019): The session started after registration at 9:30am. First day of the session concentrated on the various I/O ports configuration and interfacing LCD module with Atmega328 Microcontroller IC. The participants were introduced with the Embedded–C compiler: Atmel Studio. Various programs were compiled and the simulations were done using circuit simulation tool Proteus 8.6v.

4. TWO DAY WORKSHOP ON 'DOCUMENT PREPARATION USING LATEX'

Mrs. Nikitha V P, Mr. Shehin A U, Mr. Narayanan P P and Ms. Sangeetha Gopinath handled sessions in a two-day FDP on "Document Preparation using LaTeX" organized by the department in association with ISTE from 19th to 20th July 2018

A hands-on workshop was conducted by the Department of ECE for the all faculties of RCET on 19th – 20th July 2018. The workshop was handled by Ms.Nikitha V P.(AP, Dept of ECE) and Ms. Sangeetha Gopinath(AP/Dept of ECE).. The session commenced at 9:00 AM. Mr. Radhika E R (AP, ECE) welcomed the gathering. The workshop started with a brief introduction about LATEX tool and covered basic document preparation constraints like selection of typeface fonts, font size, text alignment etc. The session then stepped onto advanced options like inserting bullets, lists and equations. The afternoon session stressed on report preparation, inserting tables and images. The session was wound up by 3:00 PM. One of the staffs, who attended the workshop delivered a vote of thanks. The staffs got a good idea about how to prepare project/seminar reports in LATEX tool and the many conveniences in using this tool.

5.DOCUMENT PREPARATION USING LATEX

A hands-on workshop was conducted by the Department of ECE for the final year students of the Department of Mechanical Engineering on 12th January 2018. The workshop was handled by Mr. Narayanan P.P.(AP, Dept of ECE) and Mr. Shehin A.U. (AP/Dept of ECE). A total of 25 students of 8th Semester Mechanical Engineering attended the workshop. The session commenced at 9:00 AM. Mr. Prasad (AP, ME) welcomed the gathering. The workshop started with a brief introduction about LATEX tool and covered basic document preparation constraints like selection of typeface fonts, font size, text alignment etc. The session then stepped onto advanced options like inserting bullets, lists and equations. The afternoon session stressed on report preparation, inserting tables and images. The session was wound up by 3:00 PM. One of the students, who attended the workshop delivered a vote of thanks. The students got a good idea about how to prepare project/seminar reports in LATEX tool and the many conveniences in using this tool.

6.MOTIVATIONAL SESSION

Department of Electronics and Communication Engineering conducted a Motivational session for ECE students on 27/09/2017 at Seminar hall from 10 AM to 12:30AM on behalf of Department Association RECSA & ISTE. Mr. Vignesh M K, Training Quality Manager, Seventh Sense Solutions, Bangalore handled the session. The Program started with Prayer .Mr. Rejeeb from S5ECE delivered the welcome speech. The talk started from 10.15 Am .Main topics covered are Motivation & Skills Development, Communication, and Career orientation. End of the session feedback from students were collected. Program ended with the National Anthem.Afternoon session was an Online Assessment test provided by seventh sense solutions at IITBombay lab for final year ECE students from 2 PM to 4:20 PM. There they were under gone 45minutes online test including Verbal, Analytical and reasoning type of questions and result wereprovided at the end.At the end of the session 5 students those who are qualified in the test awarded by Seventh sense solutions and the Prizes were handed over by Respected Principal Dr S P Subramanian.

7. INTERNSHIP PROGRAM JULY 2017

Department of ECE in association with ISTE student's chapter of RCET conducted a Five day internship program for Third year students of ECE during 10th to 14th July of 2017. The Program was coordinated by Mr. Narayanan P.P. (Asst. Professor, ECE) and Mr.Dileep M. (Lab Instructor, ECE). The Program aimed to develop technical skills of the students by learning and implementing simple but real time projects during the internship period. Number of Students who attended the Internship program: 40 no.Details of Program on each day are as follows:

Day-1: (10th July 2017)

Program started at 9.30am at PG Research lab. Mr. Shehin A.U (Asst. Professor, ECE) handled the one day session on "Familiarizing the circuit simulation tool: Circuit maker". The students were familiarized with the tool by simulating various analog and digital circuits. Students were given assignment for simulating complex circuits and they submitted the same before the next day session.

Day-2: (11th July 2017)

Program started at 9.30am at PG Research lab. Mr. Narayanan P.P. (Asst. Professor, ECE) handled the one day session on "Familiarizing the circuit simulation tool: Proteus". The students were familiarized with the tool by simulating various analog and digital circuits. Students were given simple projects to simulate in Proteus.

Day-3: (12th July 2017)

Third day Program was conducted at venues: PG Research lab during the Forenoon session and Digital systems lab during Afternoon session. The session aimed at PCB layout making and fabrication. Mr. Narayanan P.P. (Asst. Professor, ECE) and Mr. Dileep M. (Lab Instructor, ECE) handled the session. The Students were taught to how to make PCB layout using Proteus during forenoon session by making PCB layout of an Astable Multivibrator. During Afternoon session the students were taught how to develop the PCB. Students developed the PCB of an Astable Multivibrator and tested the output.
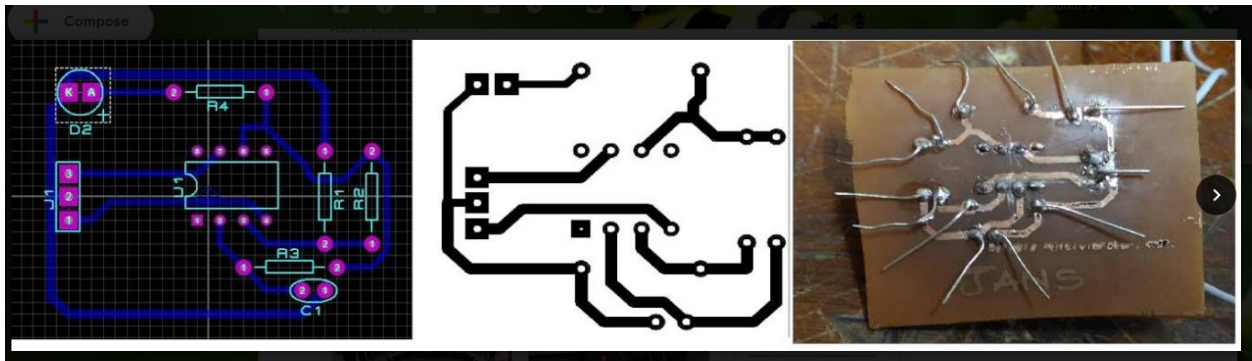
Day-4: (13th July 2017)

The fourth day was handled by Ms. Sangeetha Gopinath (Asst. Professor, ECE). The students were introduced to the document preparation software tool: LaTeX. The students were familiarized with the tool and were instructed to write a 4 page report using the same tool.

Day-5: (14th July 2017)

The last day session was handled by Mr. Narayanan P.P. (Asst. Professor, ECE) and Mr. Dileep M. (Lab Instructor, ECE). Students were taught to how to test and Service various electronic equipment's. Most of the Equipment's present in the laboratories was tested and sorted properly by the students.The Valedictory function of the Internship program was held on 14th July 2017 During Afternoon at RCET. Ms. Shobi N. Shaji (Asst. Professor, ECE) welcomed the staffs and students present at the function. Dr. S.P. Subrahmanian (Principal RCET) addressed the gathering and mentioned the importance of internship program for the students pursuing Technical Education. Students were awarded the Certificates of Internship by Dr. S.P. Subrahmanian(Principal RCET), Mr. Krishnakumar R.(HOD ECE) and Mrs. Vidya P. (Staff in-charge, ISTE). The function ended by the vote of thanks by Mr. Dileep M. (Lab instructor, ECE).

8.WORKSHOP ON ROBOTICS AND EMBEDDED SYSTEMS

On 12th September 2015, Department of ECE in association with ISTE conducted a one day workshop on "Robotics and Embedded Systems". The workshop was coordinated by Mr. Kiran Samuel, AP/ECE and Mr. Kamal Gangu K, AP/ECE. Around 35 students participated in this workshop. The resource persons explained the basic components that are used in robotics and embedded systems. Trainer kits like Arduino boards and Raspberry Pi were familiarized with the students. Various peripheral components like LCD display, IR sensors, Geared motors were introduced to students and also

explained the application of the same in robotics. There was robot making competition was conducted among the students. All students were given the necessary components that are required for making line follower robot. Mr. Irshad Mohammed E A and team from S6 ECE, RCET, won the competition.