

# WEB APPLICATION USING NODE JS

## COURSE SYLLABUS

SL NO	CONTENT
1	Introduction to Node JS
2	Setup Dev Environment
3	Node JS Modules
4	Node Package Manager
5	Creating Web server
6	File System
7	Debugging Node JS Application
8	Events
9	Express.JS
10	Serving Static Resources
11	Database connectivity
12	Template Engines

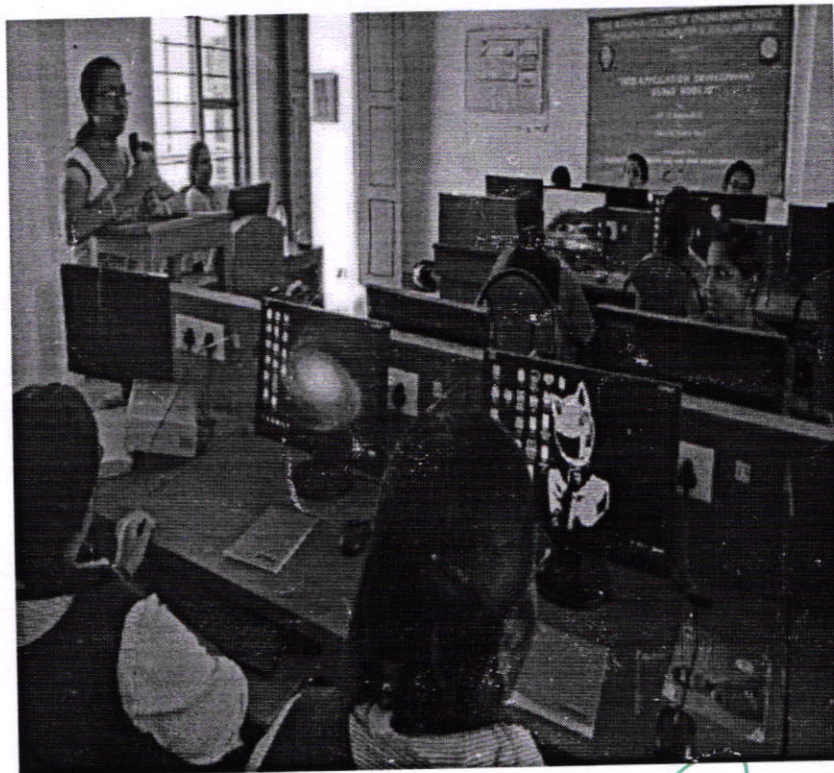
  
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PATTOOR P.O., NOORANAD  
ALAPPUZHA (Dist), PIN - 690 529



## REPORT ON WEB APPLICATION DEVELOPMENT USING NODE JS

A course 'WORKSHOP ON WEB APPLICATION DEVELOPMENT USING NODE JS' was organized by the Dept of computer science and Engineering of SBCE on 20.03.2019. This course was conducted in association with ICFOSS off the job training scheme at Project Lab, Computer Science Block. The event was officially inaugurated by Dr S V AnnlinJeba, Head of Dept. CSE. The resource person for the session was MrAnish S Nair, M/s. Logix Space Technologies. Pvt. Ltd. Pandalam, Alappuzha. We received wonderful participation both internal as well as external candidates of other institutions. The strength was Thirty (30) of which eight (8) were external participants. The sessions have started followed by Registration. Trainer gave immense information from introducing the FOSS technology to the participants. He discussed various platforms available for web development and gave a brief introduction about that. Since he has given clear idea about the basics of Node JS and Express and also provides hands on training of the technology, all the participants got collective and useful information about the title. Major achievement of the workshop was everyone has explored the opportunity to develop their own app using Node JS. We received good feedback about the event and appreciated the way of organizing the event by our department. The workshop was satisfactorily completed at 3 .30 pm with a validity function and certificate distribution.



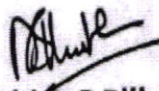


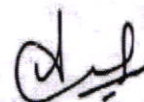



**Department Of Computer Science and Engineering  
Sree Buddha College Of Engineering, Pattoor**

**Certificate of Participation**

This is to certify that Mr./Ms. Mridhula S. Unnikrishnan of SBLE  
has participated in the national level workshop on **"WEB APPLICATION  
DEVELOPMENT USING NODE JS"** organized by Department of  
Computer Science and Engineering, Sree Buddha College of Engineering,  
Pattoor on 20-03-2019 in association with International Centre for Free and  
Open Source Software(ICFOSS)

  
**Ms. Keerthi A S Pillai**  
(Staff Co-Ordinator)

  
**Dr.S.V. Annlin Jeba**  
(Convener)

  
**Dr. S Suresh Babu**  
(Principal)



  
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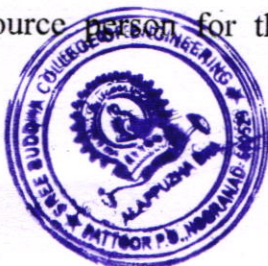
## WEB APPLICATION USING PYTHON FLASK

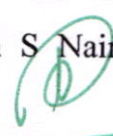
### COURSE SYLLABUS

SL NO	CONTENT
1	Introduction
2	An Overview of Flask
3	Diving Right In
4	Simple Views
5	Organizing the Application
6	Integrating a SQLite Database
7	Jinja Templates
8	HTTP Responses
9	HTML Forms
10	Advanced Views
11	Error Handling
12	Testing and Debugging
13	Advanced Topics
14	Conclusion

### REPORT ON WEB APPLICATION DEVELOPMENT USING PYTHON FLASK

A course on 'WEB APPLICATION DEVELOPMENT USING PYTHON FLASK' was organized by the Dept of computer science and Engineering of SBCE on 23.02.2019. This workshop was conducted in association with ICFOSS off the job training scheme at our Net Lab. The event was officially inaugurated by Dr S V AnnlinJeba, Head of Dept. CSE. The resource person for the session was MrAnish S Nair, M/s. Logix Space

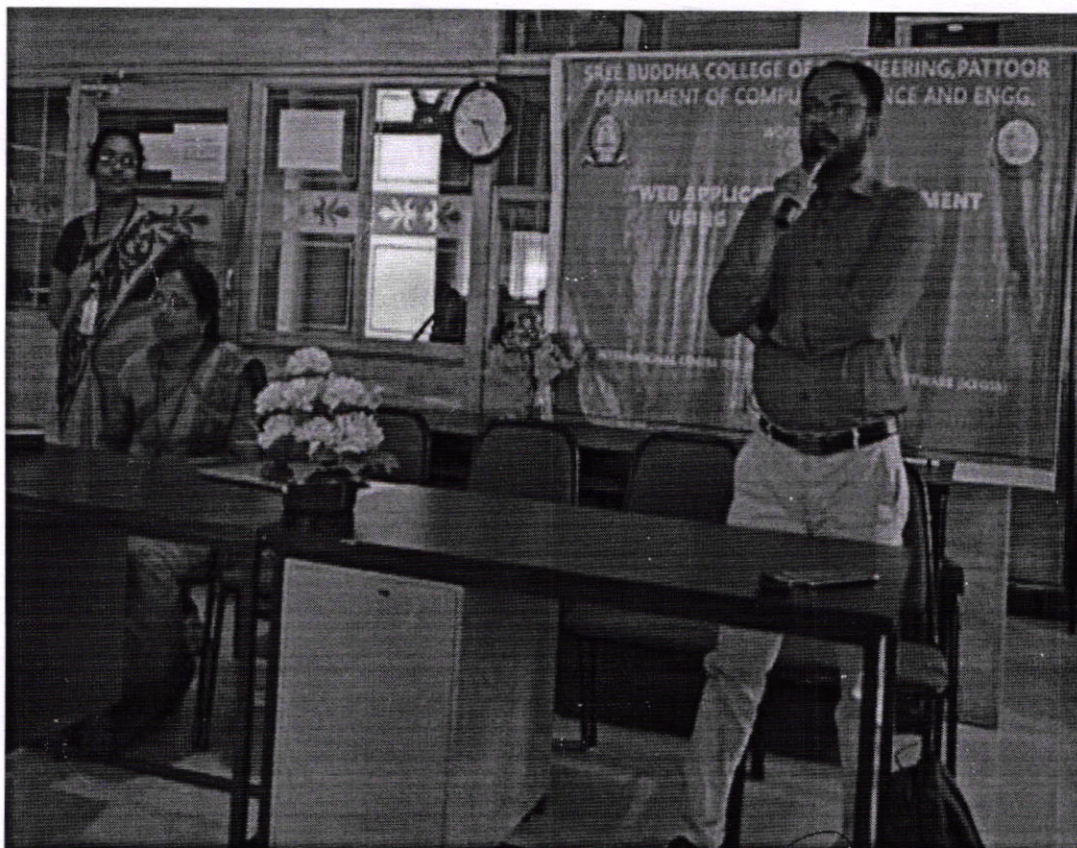


  
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Technologies. Pvt. Ltd. Pandalam, Alappuzha. We received wonderful participation both internal as well as external candidates of other institutions. The strength was Forty Two (39) of which ten (10) were external participants.

The session has started followed by Registration. Trainer gave immense information from introducing the FOSS technology to the participants. He discussed various platforms available for web development and gave a brief introduction about that. Since he has given clear idea about the basics of Flask, Jinja and also provide hands on training of the technology, all the participants got collective and useful information about the title. He also gave a brief introduction about how to deploy a web site using a live server and demonstrates the steps to deploy an application to the server. Major achievement of the workshop was everyone explore the opportunity to develop their own app using Python with Flask. We received good feedback about the event and the way of organizing by our department.









## Department Of Computer Science and Engineering Sree Buddha College Of Engineering, Pattoor

### Certificate of Participation

This is to certify that Mr./Ms. Messhula S. Unnikrishnan of SBCE has participated in the national level workshop on "WEB APPLICATION DEVELOPMENT USING PYTHON FLASK" organized by Department of Computer Science and Engineering, Sree Buddha College of Engineering, Pattoor on 23-02-2019 in association with International Centre for Free and Open Source Software(ICFOSS)

  
Ms. Keerthi A S Pillai  
(Staff Co-Ordinator)

  
Dr.S.V. Annlin Jeba  
(Convener)

  
Dr. S Suresh Babu  
(Principal)

## Electrical Circuit Designing Using Auto CAD

### SYLLABUS

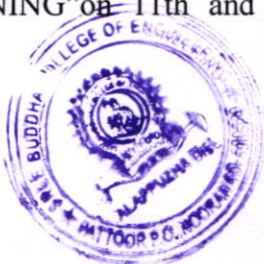
#### Electrical CADD

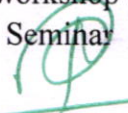
Electrical engineers design electrical equipment and electronic products - from microchips & computers to electric power networks - and any other products that process information and transmit energy. The primary task of Electrical Engineers is circuit designing or Schematic diagram.

Circuit designers have the responsibility of designing electronic circuits that make up electrical systems. The minimum educational requirement is a bachelor of science in engineering, some employers require a master's in electrical engineering. Since circuit designs change frequently, this career requires a greater amount of continuing education to keep up with technology updates.

#### Report

As part of the Electrical Department Association activity, Department of Electrical and Electronics, Sree Buddha College of Engineering, Pattoor in association with AutoCAD Engineering Solutions Pvt. Ltd., Chengannur organized a two-day workshop on "ELECTRICAL CIRCUIT DESIGNING" on 11th and 12th February, 2019 at Seminar Hall, EEE Block.



  
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Department association faculty in charge Asst.Prof. Chama R Chandranwelcomed the gathering. Mr. Mithun M.S., Central Manager conducted the sessions.

The workshop was conducted for final year UG and PG students. It gave an insight to Autodesk EAGLE software. In this competing environment, apart from an Engineering degree every company is looking for an additional certificate course for their candidates. In this regard, our department has organized such an event to add an additional course for the students. Around 26 students participated in the workshop.



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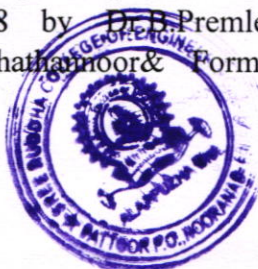
## RECENT ADVANCES IN INDUSTRIAL DRIVES AND CONTROL

### SYLLABUS

The design procedure of direct-driven interior permanent-magnet synchronous motors (IPMSMs) for a full electric four-wheel-drive sports car. Double-rotor synchronous machine, Electromagnetic sizing procedure. Aerospace actuator permanent-magnet synchronous motor (PMSM) Ultrahigh-speed electrical machine drive. Hybrid reluctance motor drive. Linear PMSM

### REPORT

A course on Recent Advances in Industrial Drives and Control was hosted from 9<sup>th</sup> to 13<sup>th</sup> July 2018 in the college campus for the Post Graduate students. The course was formally inaugurated on 09/07/2018 by Dr. B. Premlet, Prof in Physics, MES Institute of technology and Management, Chathamoor & Former Head of Department of Physics, TKM College of



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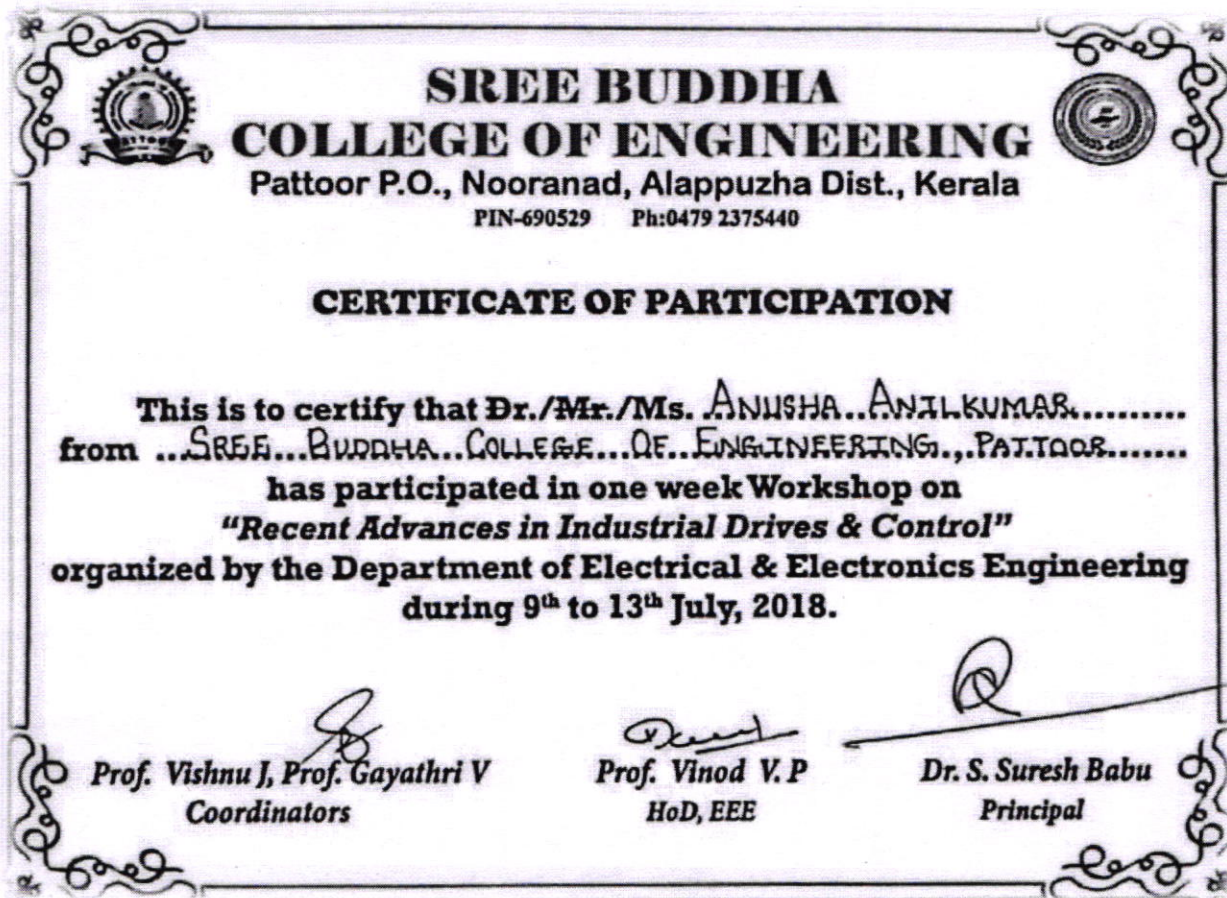


Engineering,Kollam,in the presence of Dr.S.SureshBabu,Principal SBCE,Pattoor,Sri K.K Sivadasan,Tresurer,SBCE,Pattoor,Prof.VinodV.P, Head of Department EEE,SBCE Mr.Vishnu J and Ms.Gayathri V, coordinators by lighting the lamp.The course was intended to develop awareness among Post Graduate students regarding the significance of Modern Trends in Modelling, Simulation and Control of Complex systems for various new generation applications



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## INTERNET OF THINGS

### Syllabus

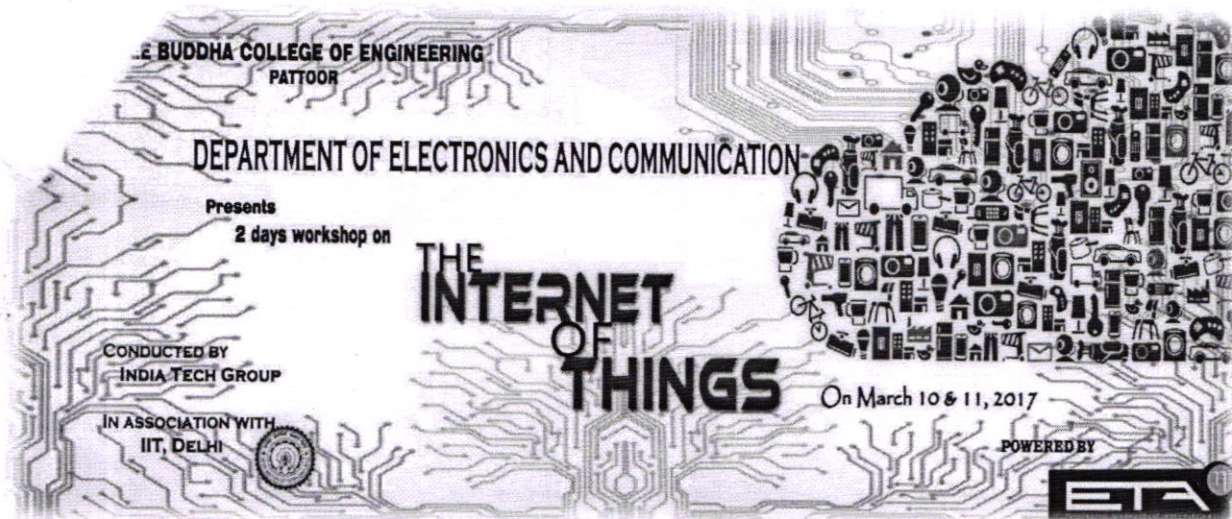
Introduction & Details about IoT and Arduino to the students. Installation of software, Testing of arduino, Testing of Bluetooth, Testing of waves in relay Major connection, Bluetooth Naming, Programming concept, Programming to control fan, light and other home appliances, Testing the circuit, Controlling light and fan with voice command

### Report

The department of ECE in association with ETA (Electronics Technocrats Association) had organized a 2 day workshop on 'Internet of things and Hacking Tricks' which was conducted by Indian Tech Group in association with IIT, Delhi on 10<sup>th</sup> and 11<sup>th</sup> of March 2017 at Ashoka Auditorium. The staff coordinator of the workshop was Mr. Jayaraj VS and the student's coordinators were Mr. Jaison John, of 6<sup>th</sup> semester and Mr. Ananthu Suresh, of 8<sup>th</sup> semester ECE Dept.





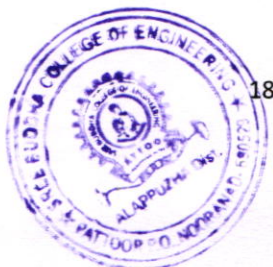


The workshop began with an inauguration ceremony at 9:30am on 10<sup>th</sup> March 2017. The meeting was attended by Ms. AmbikaSekhar, HoD, ECE who gave the Welcome Speech, Sri. K KSivadasan, Treasurer of SBCE who gave the inaugural address and inaugurated the workshop, Dr. S Suresh Babu, Principal of SBCE who gave the Felicitation address and an introduction to the workshop was given by Mr. SidharthSinghania, Sr Design Engineer, Indian Tech Group. The meeting concluded at 10:30pm with the vote of thanks from MrAnanthu Suresh. A total of 95 students attended the workshop which included students from S4, S6 and S8 semesters and they were divided into 18 groups.

After tea break the workshop resumed. The first session was about introduction and familiarizing the concept of IoT and different applications of IoT in the field of agriculture, home automation, smart city etc. An IoT kit was provided for each group of 5 students which included Arduino UNO R3 development board, 5V 2-channel relay module, HC-05 Bluetooth module, a bulb holder, an AC source power plug, a set of jumper wires and a mini screw driver. He gave a detailed about Arduino UNO that was to be used in the workshop.

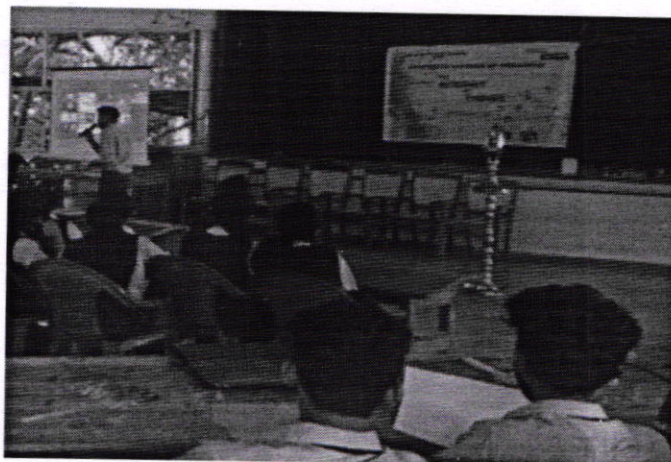
Arduino is the name of the company which manufactured the Arduino UNO. The Arduino board can be powered in three different ways. The microcontroller used in the board is Atmega328. The Atmega16u2 converts the program given by the user into microcontroller language. The other components of the board pins ICSP and AREF, 16Mhz oscillator, USB Jack, DC Jack, digital pins, analog pins, transmitter, receiver, led the students were made familiar with all the components on the board.

We had lunch break at 12:10pm and after the break the workshop resumed at 1:00pm. In the second session Mr. Sidharth explained about the ways in which the Arduino board can be tested. And for the testing a program was written and uploaded into the Arduino using the Arduino software. The Arduino software was provided for each group. He also explained about the other two components which were present in the kit. 5V 2-channel Relay Module and Bluetooth Module and the methods of testing these components. In between, at 2:45 pm there was a tea break, tea and snacks were served. At 4:15pm the first day's session concluded.



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The next day March 11<sup>th</sup>, the session started at 8:45 am. The students were given a task to perform. They had to control a light and fan using the components given in the kit. The circuit diagram was well explained and the code was given to the students. At 10:15pm tea and snacks were served in the respective places. After the tea break the zonal round competition was conducted. Winner of the competition was that group who completed the earlier given challenge with a short span of time. The students enthusiastically performed in the competition. Till the lunch break at 1:00pm the practical session continued. The doubts of the students were clarified and cleared by MrSidharth and his two colleagues.

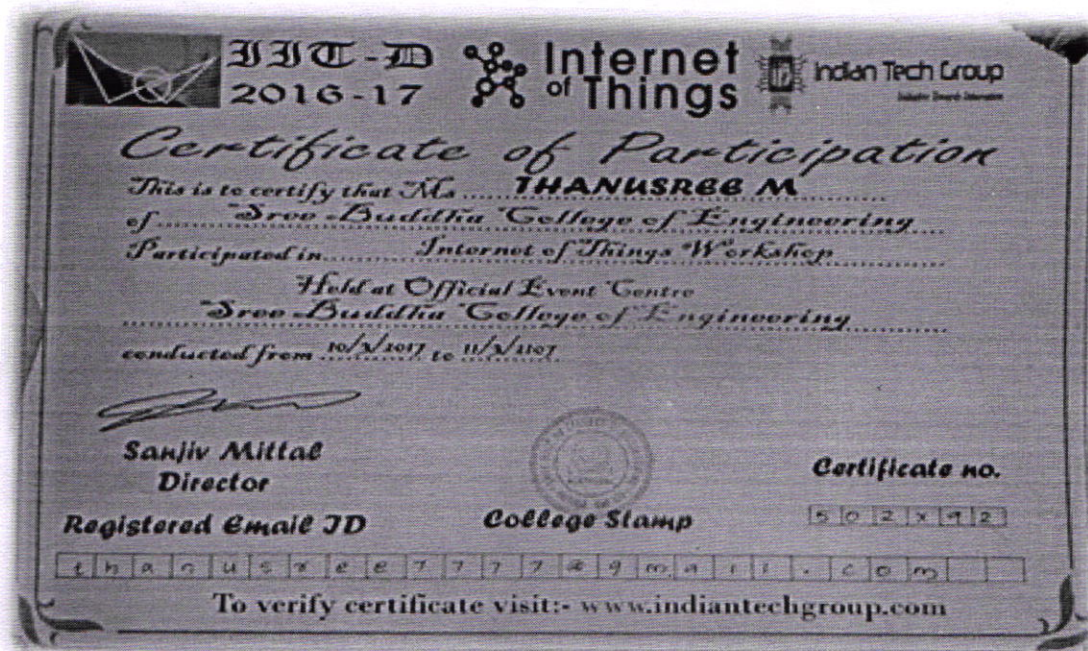
After lunch the next session started at 2:00pm and was about Hacking tricks. The ways that one's Whatsapp account can be hacked within a small amount of time was practically shown. The tricks which can be used to protect oneself from hacking, how one can know whether their account is hacked or not. Like all other session this was also an informative session. The tea break was at 3:00pm.

The workshop was concluded at 4:15pm by a Q & A and feedback hour. The feedbacks from students were good. They got to learn something new and thought of this workshop as informative and hoped to attend similar workshops in future.



  
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## 3D PRINTING AND COORDINATE MEASURING MACHINE

### Syllabus

#### Module 1

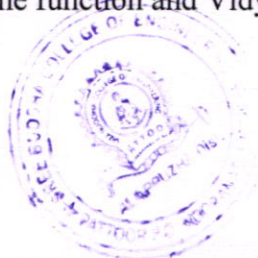
Coordinate Measuring machine, Constructional details, types of CMM. Measurements using CMM, Standards and procedure

#### Module 2

Rapid prototyping- areas of applications, benefits of manufacturing industry.

### Report

Department of Mechanical Engineering, Sree Buddha College of Engineering conducted a course "3D Printing and Coordinate Measuring Machine" in association with QUOIN Mechanics, a startup company from Trivandrum. The Inaugural function was conducted at Seminar hall, Mechanical block. Prof. Anilkumar A V, HoD, gave the welcome note, Principal Dr. S. Suresh Babu gave the Presidential address and Shri K KSivadasan, Treasurer, and Sree Buddha Educational Society inaugurated the function by giving the Inaugural address. Dr. Saji Varghese, Professor felicitated the function and Vidya V, Assistant Professor gave the vote of thanks.





The first day sections on “Coordinate Measuring Machine” handled by Vidya V and on “3 D Printing” by Vaisakh.Y, Assistant Professors, Department of Mechanical Engineering, Sree Buddha College of Engineering, Pattoor. The next day consisted of hands-on training on MitutoyoCrysta Plus CMM, SD 300 Pro RPT Machine, Plycast Fused Deposition type 3D Printer which was handled by Niju Thomas, CEO, Quoin Mechanics. There were 43 participants, out of which 5 were from other Engineering Colleges.





# Computer Aided Design and Analysis Using Solid Works

## Syllabus

- Introduction to CAD and Solid Work
- Introduction to Solid Works Sketch
- Hands- on Session-Solid Works Sketch
- Introduction to Solid Works 3D Modelling Part 1
- Hand on Session-Solid Works 3D Modelling Part 1
- Solid Works 3D modelling Part 2
- Hand on Session- Solid Works 3D Modelling
- Introduction to Solid Works Assembly of parts
- Hands on session-Solid Works Assembly
- Introduction to Solid Works Static Analysis
- Hands on Session-Static Analysis

## Report

Sree Buddha College of Engineering, Pattoor conducted five day workshop on Computer Aided Design and Analysis using Solid works 18<sup>th</sup> to 22<sup>nd</sup> July 2016. Department of Mechanical Engineering, Sree Buddha College of Engineering, Infographicx Technical Training and services jointly conducted the workshop.

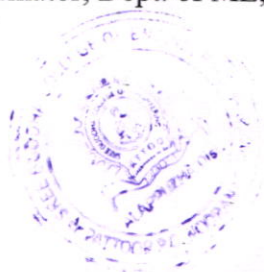
As part of the workshop Solid works sketching, 3D modeling, Assembly and static analysis training for third semester Mechanical Engineering students have been carried out at the CAD lab.

35 participants attended the workshop. Inaugural function of the workshop was held at Seminar hall of Mechanical Engineering Department. Prof Anilkumar A.V, HOD, Department of Mechanical Engineering gave the welcome address. He also gave a talk about the emerging trends in the field of designing and manufacturing.

The function was presided over by Dr. S Suresh Babu, Principal SBCE. In his presidential address pointed out the role of CAD tools and design engineers.

Sri. K.K. Sivadasan, Treasurer, SBCE inaugurated the function. He elaborated about the vast opportunities available to students when they gain expertise over the designing tools.

Prof Arun M, Staff Coordinator, Dept. of ME, SBCE gave the vote of thanks.







**SREE BUDDHA COLLEGE OF ENGINEERING**  
(in association with InfoGrafix Technical Training and Services)

# CERTIFICATE OF INTERNSHIP

*You have been awarded this Certificate following the completion of mentioned Training Course conducted by the Department of Mechanical Engineering, SBCE in association with InfoGrafix Technical Training and Services*

Name: NIKHIL R

Course Title: Computer Aided Design & Analysis using **3S** SolidWorks

Course Content: SW Sketching, 3D Modelling, Assembly, Static Analysis

Course duration: 18.07.2016 to 22.07.2016



GRADE:

**A+**



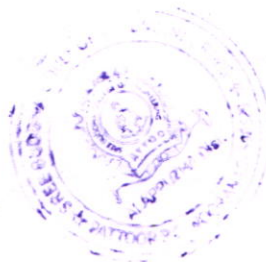
**DIRECTOR**  
(InfoGrafix)



**PRINCIPAL**  
(SBCE, Pattoor)

[www.infographicxgroup.com](http://www.infographicxgroup.com)

[www.sbce.ac.in](http://www.sbce.ac.in)



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# Google Sketch Up

## Syllabus

- About sketch up 2018
- Brief history Trimble Sketch Up
- Trimble Company
- Why sketch up become popular for 3d modeling with advantages
- Sketch Up Layout

## Report

Sree Buddha College of Engineering, Pattoor conducted four day workshop on Google SketchUp from 11<sup>th</sup> to 16<sup>th</sup> October 2018. The Institution of Engineers (India) students Chapter of Department of Mechanical Engineering, Sree Buddha College of Engineering, Nexus Technical Solutions and The Institution of Engineers (India) Kollam Local Centre jointly conducted the workshop.

As part of the workshop Google SketchUp license has been purchased and a four day training for third semester Mechanical Engineering students have been carried out at the CAD lab.

127 participants attended the workshop. Inaugural function of the workshop was held at Seminar hall of Mechanical Engineering Department. Dr. Saji Varghese, HOD, Department of Mechanical Engineering gave the welcome address. He also gave a talk about the emerging trends in the field of designing and manufacturing.

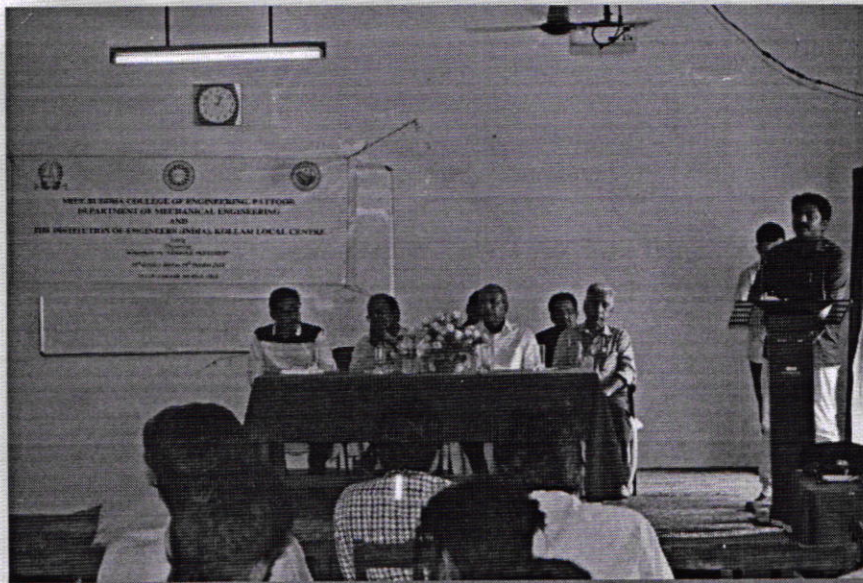
The function was presided over by Dr. S Suresh Babu, Principal SBCE. In his presidential address he explained about the importance of various CAD/AM tools and the expertise over these tools play a major role in career path of students. Sri. K.K. Sivadasan, Treasurer, SBCE inaugurated the function. He elaborated about the vast opportunities available to students when they gain expertise over the designing tools. Sri Suresh Kumar S, Business Manager, Autodesk ATC, gave an introduction talk about Google Sketch Up. Prof Madhav K, IEI Coordinator, SBCE in his facilitation pointed out the role of CAD tools and design engineers.




Prof Anwar Rajeev, Staff Coordinator, Dept. of ME, SBCE gave the vote of thanks.



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**SREE BUDDHA COLLEGE OF ENGINEERING**  
**IEI STUDENTS CHAPTER, DEPARTMENT OF MECHANICAL ENGINEERING**  
**CERTIFICATE OF PARTICIPATION**


This certificate is awarded to  
Aashwin S Pillai  
 of  
Sree Buddha College of Engineering  
 for successfully participating in four day workshop on "Google SketchUp"  
 Organized by Department of Mechanical Engineering  
 From 11<sup>th</sup> to 16<sup>th</sup> October 2018.


Anand Rajeev Mathan K  
 Workshop Coordinators

Dr. S. Suresh Babu  
 Head of Department

Dr. S. Suresh Babu  
 Principal

  
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