

## Sree Narayana College Chengannur

Post Graduate Department of Physics & IQAC

(Affiliated to University of Kerala)
NAAC accredited with Grade B
Neduvaramcode (PO), Cheriyanad
Chengannur-689508

# CERTIFICATE COURSE

## BASIC ELECTRONICS

Co-ordinator: Dr.K Sreelatha

**Members:** Mr.Praveen

Dr. Sasikala K

Ms.Shehina Shaji Ms.Renju Ravi

Ms.Arya Raveendran

Ms.Saranya K



JOIN NOW 9447897925



15 DEC 2019 TO 31 JAN 2020



TIME 3.00 TO 4.00PM

Head of the Department

Dr.Latha M S
Principal-in-Charge

Dr. K Sreelatha Head of the Department SN College Chengannur

Chengannur 21/10/2019

The Principal SN College Chengannur

Subject :- Conduct a certificate course for 2019-2020- request permission reg:

Madam,

The Department of Physics plans to conduct a certificate course on "Basic Electronics" for the UG and PG students of the department. The duration of the course is 30 hours. We plan to conduct the course from 15/12/2019 to 31/01/2020.

Kindly grant permission to organize the same.

Thanking you,

Yours faithfully,

Seulerthalk

Dr. K Sreelatha

#### **CERTIFICATE COURSE 2019-2020**

Department Conducts a Certificate course on "BASIC ELECTRONICS". The Duration of the Course is 30 hours. This course will provide the students an idea of the basic idea of electronic components and their uses and applications.

#### CERTIFICATE COURSE IN BASIC ELECTRONICS

#### PY19BE

#### **SYLLABUS**

#### **Module 1: Electronics & Electrical Components Identification**

Vaccum tubes – Resistors- Capacitors- Batteries- switches-Diodes – Transistors – Integrated chips – Bread board – voltage supplies- millimeters

#### Module 2: Uses of Electronics components for basics Electronic devices

Use of resistors and capacitors in a circuit- charging and discharging of capacitors- Uses of transistors transistor connections- Uses of diodes- filter circuits- zener diodes-voltage regulators

#### **Module 3: Cathode Ray Oscilloscope operations**

Identification of CRO knobs- Testing of CRO and PROBES- Measurements using CRO-Familiarization of Function Generators- Operation of Function Generator

#### **Module 4: Skill Development**

Soldering of electronic components –PN junction Diode (Ge & Si) characteristics - full wave & bridge rectifiers – Zener diode characteristics.

#### **Books for Reference**

- 1. Basic Electrical Engineering V.K Mehta & Rohit Mehta (2006) S.Chand publishers
- 2. Electrical Technology Volume I B.L.Tereja S.Chand publishers
- 3. Malvino Electronic Principles (1998) sixth edition Albert Paul Malvino Tata Mcgraw Hills publishers



### SREE NARAYANA COLLEGE, CHENGANNUR DEPARTMENT OF PHYSICS

#### **Minutes of the Meeting**

The minutes of the meeting of the Board of Studies of Certificate courses was held on 5<sup>th</sup> December, 2019 in the Department of Physics, Sree Narayana College, Chengannur at a.m. The following members were present for the meeting.

- 1. Dr.K Sreelatha
- 2. Mr.Praveen
- 3. Dr. Sasikala K
- 4. Ms.Shehina Shaji
- 5. Ms.Renju Ravi
- 6. Ms.Arya Raveendran
- 7. Ms.Saranya K

The following points were discussed in the meeting.

 The BoS has decided to initiate the following certificate course in the academic year 2019-20.

#### **BASIC ELECTRONICS**

- The syllabus for the above courses was designed by the committee considering the global needs and demand of the market.
- This course will provide the students an idea of the basic idea of electronic components and their uses and applications.
  - It was decided to conduct the above course having 30 hours duration.
  - The committee has framed the time- table apart from the academic hours.
  - Classes will start on 15/12/2019 and end on 31/01/2020.
  - The minimum attendance for the successful completion of the course is decided to be 75%.

- The submission of the assignment is compulsory for the successful completion of the course.
- The board has decided to initiate the certificate courses as per the approval of IQAC.
   Dr. K. Sreelatha proposed the vote of thanks and the meeting ended.

AP AYANA COLLEGE OF CHENGAMANE

#### **CERTIFICATE COURSE IN BASIC ELECTRONICS**

**Details of Students Enrolled for Certificate Course: 2019-2020** 

Sl. No.	Candidate Code	Name of Student	Class	Signature
1.	23017128002	Akhil Krishnan	III B.Sc. Physics	Afrila
2.	23017128003	Akshay	III B.Sc. Physics	Abely
3.	23017128004	Ganga Krishnan M	III B.Sc. Physics	Ganga:
4.	23017128005	Subin Mathew	III B.Sc. Physics	Subin Math
5.	23017128006	Vishnuprasad S	III B.Sc. Physics	Value.
6.	23017128010	Anju A	III B.Sc. Physics	- Anga
7.	23017128011	Arun K V	III B.Sc. Physics	Down.
8.	23017128012	Gopika Gopalan	III B.Sc. Physics	Gopla
9.	23017128013	Gulmesh Chand	III B.Sc. Physics	Glunesh
10.	23017128014	Hima Krishna P	III B.Sc. Physics	Lim
11.	23017128015	Krishna S	III B.Sc. Physics	Loush
12.	23017128017	Rakhi R Kurup	III B.Sc. Physics	In.
13.	23017128018	Shalu T S	III B.Sc. Physics	Shalm
14.	23017128019	Sreelekha B	III B.Sc. Physics	South
15.	23017128021	Vidya L	III B.Sc. Physics	Vidys
16.	23017128022	Yadun Y	III B.Sc. Physics	Allm
17.	63019128001	Akhila Anil	I M.Sc. Physics	All
18.	63019128002	Ameena Majeed	I M.Sc. Physics	Amena
19.	63019128003	Angiras N Namboothiri	I M.Sc. Physics	Angun
20.	63019128004	Anu Prakash Achari	I M.Sc. Physics	Jan.

PIN: 689 508 COLUMN A TORRESTANDE

		191	1	11
43.	63018128008	Chinchu R Babu	II M.Sc. Physics	Chisch -
42.	63018128007	Athira T Pillai	II M.Sc. Physics	Athun
41.	63018128006	Athira P Nair	II M.Sc. Physics	Athin
40.	63018128005	Aswathy Mani Babu	II M.Sc. Physics	Aguaty
39.	63018128004	Anju Krishna	II M.Sc. Physics	Agrikan.
38.	63018128003	Anand Mohan A	II M.Sc. Physics	Anarel
37.	63018128002	Amar Raj	II M.Sc. Physics	Amou Ray
36.	63018128001	Akshay A	II M.Sc. Physics	Abshar
35.	63019128019	Vijesh Vijayan	I M.Sc. Physics	Vijesh
34.	63019128018	Suraj S Nair	I M.Sc. Physics	Suray
33.	63019128017	Subin Balachandran	I M.Sc. Physics	Suhin
32.	63019128016	Sreelekshmi A	I M.Sc. Physics	Safeh
31.	63019128015	Sivakumar S	I M.Sc. Physics	Sinaku.
30.	63019128014	Shekha . G	I M.Sc. Physics	Shakhe
29.	63019128013	Sarangi Krishna K	I M.Sc. Physics	Sarangi
28.	63019128012	Priyanka P.	I M.Sc. Physics	Quent
27.	63019128011	Neethu S	I M.Sc. Physics	Nearley.
26.	63019128010	Nandu Mohan	I M.Sc. Physics	Varde
25.	63019128009	Mridu R Murali	I M.Sc. Physics	Madu
24.	63019128008	Manju S	I M.Sc. Physics	Manyn.
23.	63019128007	Lekshmi U	I M.Sc. Physics	Lefoha
22.	63019128006	Harkishal S	I M.Sc. Physics	Hanker
21.	63019128005	Archana Aravind	I M.Sc. Physics	Atan

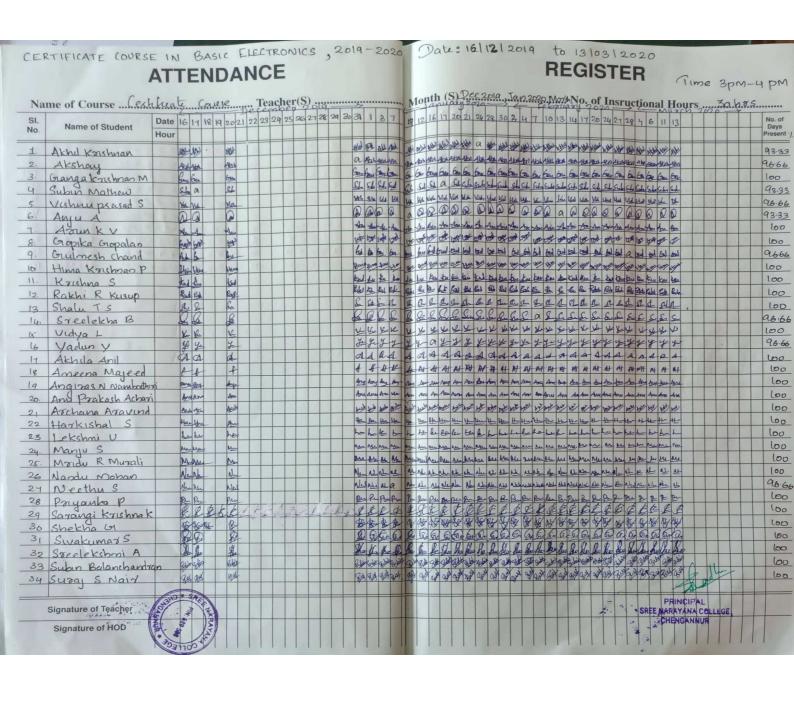


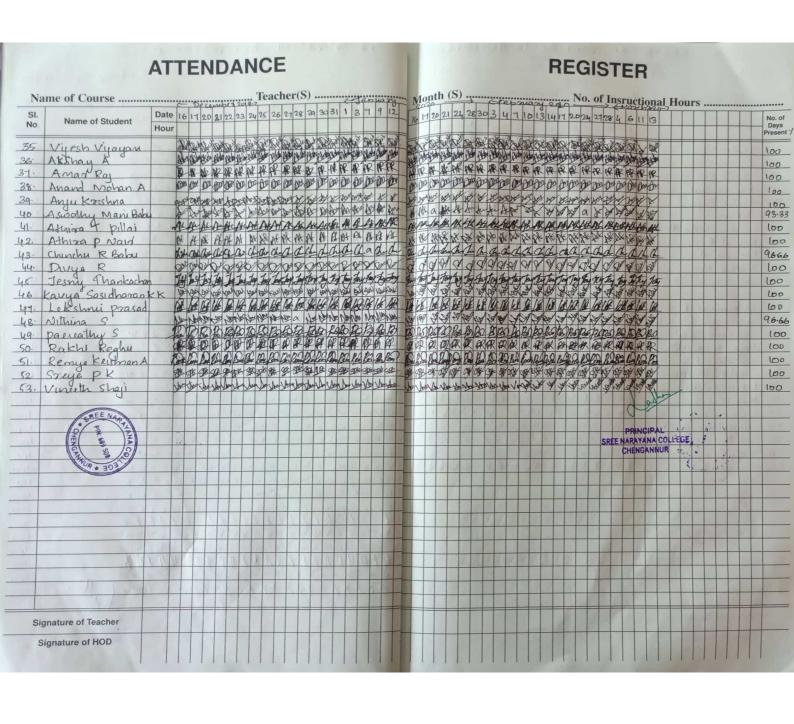
SREE NARAYANA COLLEGE CHENGANNUR

44.	63018128009	Divya R	II M.Sc. Physics	Divine.
45.	63018128010	Jesny Thankachan	II M.Sc. Physics	Lavya.
46.	63018128011	Kavya Sasidharan K K	II M.Sc. Physics	Janes -
47.	63018128012	Lekshmi Prasad	II M.Sc. Physics	- Lebeller
48.	63018128013	Nithina S	II M.Sc. Physics	Nithera.
49.	63018128014	Parvathy S	II M.Sc. Physics	Pawary
50.	63018128015	Rakhi Reghu	II M.Sc. Physics	Raffu
51.	63018128016	Remya Krishnan A	II M.Sc. Physics	Ramp
52.	63018128017	Sreya P K	II M.Sc. Physics	Sour
53.	63018128018	Vineeth Shaji	II M.Sc. Physics	Vincethy.

CHENCANNUR \*

PRINCIPAL SREE NARAYANA COLLEGE CHENGANNUR





### SREE NARAYANA COLLEGE, CHENGANNUR DEPARTMENT OF PHYSICS

#### CERTIFICATE COURSE IN BASIC ELECTRONICS

#### **CERTIFICATE COURSE REPORT 2019-2020**

Date: 15/12/2019 to 31/01/2020

Time: 3.00 pm to 4.00 pm

**Venue: Physics Lab** 

As per the decision of Dept. of Physics, Sree Narayana College, Chengannur, IQAC and the PG department of Physics jointly conducted the certificate course having 30 hours duration. The program was inaugurated by Dr. M.S. Latha, the Principal-in-charge, and chaired by Dr. K. Sreelatha, Head, Department of Physics, Sree Narayana College, Chengannur. Dr. Sasikala, Course coordinator delivered the welcome address.

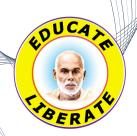
The sessions of course were handled by four faculty members of the department namely Dr. K. Sreelatha, Dr. Sasikala, Mr. Praveen K.H. and Mrs. Renju Ravi.

The session started with the basics introduction of electronics. Certificate course that benefits the students with something extra beyond their regular academics and serves as an added advantage. The main objective of the course was handling and maintenance of electrical and electronics instruments in Physics UG & PG laboratories and to develop general skill in Electronics & Electrical Components Identification, their uses and soldering them. Second year UG, third year UG, first year and second year PG students in our department successfully completed the course. The minimum attendance for the successful completion of the course is decided to be 75%. On the completion of the course, certificates were distributed to the students by Dr. M.S. Latha, the Principal-in-charge and Dr. K. Sreelatha, Head of the Department of Physics, Sree Narayana College, Chengannur.

Duration: 30 hrs theory

The students have completed 30 sessions including theory and practical during the period 15/12/2019 to 31/01/2020.





## Sree Narayana College Chengannur PG Department of Physics & IQAC

### **Certificate of Participation**

This certificate is proudly awarded to

Rakhi R Kurup

This is to certify that Rakhi R Kurup of III B.Sc. Physics has successfully completed the certificate course on 'Basic Electronics' conducted by PG Department of Physics, Sree Narayana College, Chengannur during the academic year 2019-20. The member achieved the fundamentals of electronics and general skills in using basic electronic components



Szuluthak

DR.K SREELATHA

Signature of HOD

Department of Physics



DR.M S LATHA

Signature of PRINCIPAL Principal SREE NARAYANA COLVEGE CHENGANNUR