

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 5th 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
1.	23017128002	Akhil Krishnan	III B.Sc. Physics
2.	23017128003	Akshay	III B.Sc. Physics
3.	23017128004	Ganga Krishnan M	III B.Sc. Physics
4.	23017128005	Subin Mathew	III B.Sc. Physics
5.	23017128006	Vishnuprasad S	III B.Sc. Physics
6.	23017128010	Anju A	III B.Sc. Physics
7.	23017128011	Arun K V	III B.Sc. Physics
8.	23017128012	Gopika Gopalan	III B.Sc. Physics
9.	23017128013	Gulmesh Chand	III B.Sc. Physics
10.	23017128014	Hima Krishna P	III B.Sc. Physics
11.	23017128015	Krishna S	III B.Sc. Physics
12.	23017128017	Rakhi R Kurup	III B.Sc. Physics
13.	23017128018	Shalu T S	III B.Sc. Physics
14.	23017128019	Sreelekha B	III B.Sc. Physics
15.	23017128021	Vidya L	III B.Sc. Physics
16.	23017128022	Yadun Y	III B.Sc. Physics
17.	63019128001	Akhila Anil	I M.Sc. Physics
18.	63019128002	Ameena Majeed	I M.Sc. Physics
19.	63019128003	Angiras N Namboothiri	I M.Sc. Physics

20.	63019128004	Anu Prakash Achari	I M.Sc. Physics
21.	63019128005	Archana Aravind	I M.Sc. Physics
22.	63019128006	Harkishal S	I M.Sc. Physics
23.	63019128007	Lekshmi U	I M.Sc. Physics
24.	63019128008	Manju S	I M.Sc. Physics
25.	63019128009	Mridu R Murali	I M.Sc. Physics
26.	63019128010	Nandu Mohan	I M.Sc. Physics
27.	63019128011	Neethu S	I M.Sc. Physics
28.	63019128012	Priyanka P.	I M.Sc. Physics
29.	63019128013	Sarangi Krishna K	I M.Sc. Physics
30.	63019128014	Shekha . G	I M.Sc. Physics
31.	63019128015	Sivakumar S	I M.Sc. Physics
32.	63019128016	Sreelekshmi A	I M.Sc. Physics
33.	63019128017	Subin Balachandran	I M.Sc. Physics
34.	63019128018	Suraj S Nair	I M.Sc. Physics
35.	63019128019	Vijesh Vijayan	I M.Sc. Physics
36.	63018128001	Akshay A	II M.Sc. Physics
37.	63018128002	Amar Raj	II M.Sc. Physics
38.	63018128003	Anand Mohan A	II M.Sc. Physics
39.	63018128004	Anju Krishna	II M.Sc. Physics
40.	63018128005	Aswathy Mani Babu	II M.Sc. Physics
41.	63018128006	Athira P Nair	II M.Sc. Physics
42.	63018128007	Athira T Pillai	II M.Sc. Physics
43.	63018128008	Chinchu R Babu	II M.Sc. Physics

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



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CERTIFICATE COURSE IN BASIC ELECTRONICS 2019-2020

Attendance Statement TIME: 3 PM-4 PM

														<u> 4 PN</u>																					
Sl. No.	Candidate Code	Name of Student	Class	12/16/2019	12/17/2019	12/20/2019	12/31/2019	1/1/2020	1/3/2020	1/7/2020	1/9/2020	1/12/2020	1/16/2020	1/17/2020	1/20/2020	1/21/2020	1/24/2020	1/28/2020	1/30/2020	2/3/2020	2/4/2020	2/7/2020	2/10/2020	2/13/2020	2/14/2020	2/17/2020	2/20/2020	2/24/2020	2/27/2020	2/28/2020	3/4/2020	3/6/2020	3/11/2020	3/13/2020	VTTENDANCE %)
1	23017128002	Akhil Krishnan	III B.Sc. Physics	×	×	×	×	A	×	×	×	×	×	×	×	×	А	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	93.33
2	23017128003	Akshay	III B.Sc. Physics	×	×	×	А	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	96.66
3	23017128004	Ganga Krishnan M	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
4	23017128005	Subin Mathew	III B.Sc. Physics	×	×	Α	Α	×	×	×	×	×	×	×	×	×	Α	×	×	×	×	×	×	×	×	×	×	Α	×	×	×	×	×	×	93.33
5	23017128006	Vishnuprasad S	III B.Sc. Physics	×	×	Α	×	×	×	Α	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	93.33
6	23017128010	Anju A	III B.Sc. Physics	×	Α	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	96.66
7	23017128011	Arun K V	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	Α	×	×	×	×	×	×	Α	×	×	×	×	×	×	×	×	×	×	93.33
8	23017128012	Gopika Gopalan	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
9	23017128013	Gulmesh Chand	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
10	23017128014	Hima Krishna P	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	Α	×	×	×	96.66
11	23017128015	Krishna S	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
12	23017128017	Rakhi R Kurup	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
13	23017128018	Shalu T S	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
14	23017128019	Sreelekha B	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
15	23017128021	Vidya L	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	Α	×	×	×	×	×	×	×	×	96.66
16	23017128022	Yadun Y	III B.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
17	63019128001	Akhila Anil	I M.Sc. Physics	×	×	×	×	×	×	Α	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	96.66
18	63019128002	Ameena Majeed	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
19	63019128003	Angiras N Namboothiri	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	Α	×	×	×	×	×	×	×	×	×	×	×	×	96.66
20	63019128004	Anu Prakash Achari	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
21	63019128005	Archana Aravind	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
22	63019128006	Harkishal S	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
23	63019128007	Lekshmi U	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
24	63019128008	Manju S	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
25	63019128009	Mridu R Murali	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
26	63019128010	Nandu Mohan	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
27	63019128011	Neethu S	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
28	63019128012	Priyanka P.	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100

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63019128013	Sarangi Krishna K	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63019128014	Shekha . G	I M.Sc. Physics	×	×	×	×	Α	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	96.66
63019128015	Sivakumar S	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63019128016	Sreelekshmi A	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63019128017	Subin Balachandran	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63019128018	Suraj S Nair	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63019128019	Vijesh Vijayan	I M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128001	Akshay A	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128002	Amar Raj	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128003	Anand Mohan A	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128004	Anju Krishna	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128005	Aswathy Mani Babu	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	Α	×	×	×	×	×	×	×	×	×	А	×	×	×	×	×	×	×	×	×	×	×	93.33
63018128006	Athira P Nair	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128007	Athira T Pillai	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128008	Chinchu R Babu	II M.Sc. Physics	×	×	×	А	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	96.66
63018128009	Divya R	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128010	Jesny Thankachan	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128011	Kavya Sasidharan K	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128012	Lekshmi Prasad	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128013	Nithina S	II M.Sc. Physics	×	×	Α	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	96.66
63018128014	Parvathy S	II M.Sc. Physics	×	×	×	×	×	×	×				×		×									×	×	×	×	×	×	×	×			100
63018128015	Rakhi Reghu	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128016	Remya Krishnan A	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128017	Sreya P K	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
63018128018	Vineeth Shaji	II M.Sc. Physics	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	100
	63019128014 63019128015 63019128016 63019128017 63019128018 63019128019 63018128001 63018128002 63018128004 63018128005 63018128006 63018128007 63018128008 63018128010 63018128010 63018128011 63018128011 63018128012 63018128014 63018128014 63018128014 63018128015 63018128016 63018128016	Shekha G Sivakumar S S	63019128014 Shekha . G I M.Sc. Physics 63019128015 Sivakumar S I M.Sc. Physics 63019128016 Sreelekshmi A I M.Sc. Physics 63019128017 Subin Balachandran I M.Sc. Physics 63019128018 Suraj S Nair I M.Sc. Physics 63019128019 Vijesh Vijayan I M.Sc. Physics 63018128001 Akshay A II M.Sc. Physics 63018128002 Amar Raj II M.Sc. Physics 63018128003 Anand Mohan A II M.Sc. Physics 63018128004 Anju Krishna II M.Sc. Physics 63018128005 Aswathy Mani Babu II M.Sc. Physics 63018128006 Athira P Nair II M.Sc. Physics 63018128007 Athira T Pillai II M.Sc. Physics 63018128008 Chinchu R Babu II M.Sc. Physics 63018128010 Jesny Thankachan II M.Sc. Physics 63018128011 Kavya Sasidharan K II M.Sc. Physics 63018128012 Lekshmi Prasad II M.Sc. Physics 63018128013 Nithina S II M.Sc. Physics	Shekha	Shekha G	Shekha	Shekha G	Shekha G	Shekha G	Shekha	Shekha G	Shekha G	Shekha G	Shekha G	Sala Sala	Signature Sign	Salata S	1 1 2 3 3 3 3 3 3 3 3 3	1 1 1 1 1 1 1 1 1 1	1 M.Sc. Physics x x x x x x x x x	Margin M	3019128014 Shekha G	3019128014 Shekha . G	3019128014 Shekha . G	3019128014 Shekha . G	3019128014 Shekha G	3019128014 Shekha G	3019128014 Shekha G	3019128014 Shekha . G	3019128014 Shekha. G	3019128014 Shekha . G	3019128014 Shekha . G	3019128014 Shekha, G I M.Sc. Physics x x x x x x x x x x x x x x x x x x x	3019128014 Shekhal G IM.Sc. Physics x x x x x x x x x



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.

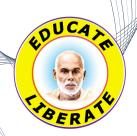
The sessions of course were handled by four faculty members of the department namely Dr. K. Sreelatha, Dr. Sasikala, Mr. Praveen K.H. and Mrs. Renju Ravi.

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