

VIVEKANAND COLLEGE, KOLHAPUR (Autonomous)

**Department of Electronics
Certificate Course in
"Electrical Wiring"**

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VIVEKANAND COLLEGE, KOLHAPUR (Autonomous)

**Department of Electronics
Certificate Course in
"Electrical Wiring"**

Notice

Date: 02/09/2019


All the students of college (UG students and PG students) are hereby informed that Department of Electronics starts the Add-On certificate course in "Electrical wiring" which gives the knowledge about electrical house wiring, how to take a precaution while handling electrical appliance, etc. Interested students should give their names on or before **15/09/2019** to the course in the department of Electronics. There are only 30 seats for this course, so admissions will be done on first come first basis.

Course Details:

Name of the Course: "Electrical wiring"
Duration: 3 months, 30 Periods (Weekly 3 lectures)
Course Fee: Rs. 600/-

Course Co-ordinator:

Mr. D. M. Panhalkar (9226046250)
Mr. P. R. Bagade (9890063936)
Mr. N. P. Mote (9921990399)
Mr. P. P. Bhat (9890346604)


Head
Department of Electronics
Vivekanand College, Kolhapur




Principal
Vivekanand College,
Kolhapur.

VIVEKANAND COLLEGE, KOLHAPUR (Autonomous)

**Department of Electronics
Certificate Course in
"Electrical Wiring"**

Notice

Date: 17/09/2019

All the students admitted for Electrical Wiring course are informed that their Theory and Practical session of Add-On certificate course in "**Electrical wiring**" will be held from 21/09/2019. The lectures and practical will be conducted in Department of Electronics at 10.30 am to 11.30 am and concerned should note the same.



Head
Department of Electronics
Vivekanand College, Kolhapur.

VIVEKANAND COLLEGE (Autonomous), KOLHAPUR
DEPARTMENT OF ELECTRONICS
CERTIFICATE COURSE IN ELECTRICAL WIRING

Sr. No.	Heading	Particulars
1.	Title of the Course	CERTIFICATE COURSE IN "Electrical Wiring"
2.	Eligibility for Admission	Candidate who passed 10th + 2 examination with at least 45% marks in aggregate
3.	Passing Marks for the course	The candidate must obtain 35 % of the total marks in theory and practical separately to pass the course.
4.	Duration	Three Months
5.	Level	CERTIFICATE COURSE
6.	Teaching medium	English
7.	Intake Capacity	30
8.	Job opportunities	Self employment, Government and Private sectors.
9.	To be implemented from the Academic Year	From Academic Year -June 2019-2020

The present CERTIFICATE course 'Electrical Wiring' is introduced for 10th + 2 pass students to enhance technical knowledge and skill to those who are literate. This curriculum is developed by considering the requirement of the local market to reduce the shortage of semi skilled workers in the area and to meet the need of job market.

Objectives of the course:

The objective of the course is to impart necessary competencies focusing on technical competencies like skill and knowledge so that they become employable in private sectors as well as public sector.

At the end of course, students will be able to:

- 1) Acquire knowledge and skills about safety precautions while working.
- 2) Identify and to use different tools used in wiring.
- 3) Understand the general concept of Generation of electrical power.
- 4) Understand the general concept of different wires.
- 5) Know about electrical symbols used in electrical parts.
- 6) Know about electrical house wiring.

JOB OPPORTUNITIES

- Technician in local government bodies Corporation, Star Hotels, Electricity Board, cogeneration plants, factories, Industries, Townships.
- Wire Man
- Electrician
- Instructor in technical institution
- Lift Operator
- Electrical Supervisor

Self-employment



- Owner Assembly shop of Electrical Appliances
- Proprietor Service centre for electrical appliances

Syllabus of the course

Title of the course: Home Electrical Wiring.

Total Lectures: 30

Total Marks: 100

Sr. No.	Unit	Sub-Unit	No. of Periods
1.	Safety Precautions and Electrical tools	Electrical shocks and procedure for separating person from contact with live wire First Aid different methods of artificial Respiration, Electric fire. Electrical tools: Pliers, Combination, side cutting, round nose, long nose, Screw drivers, connectors, electrical knife, Neon tester, test lamp, series test lamp, pincer, line dori, plumb bob, steel rule, Tenor saw, Hacksaw, Hammer. Symbols uses in Electrical technology, Reading of electrical drawing	06
2.	Current Electricity	Introduction, Generation of electricity, Types of electricity, Different energy sources, Current, Voltage, Resistance, conductance, power, energy, energy billing for a month, direct current and alternating current.	05
3.	DC and AC Circuits	DC circuits: Ohm's law, Series CKT, Parallel ckt, series and parallel combination, types of electrical ckt. AC circuits: Star delta Connection, capacitor, Fundamentals of AC circuits, Introduction of different ckt, power factor, classification of materials, cables, wires, and insulation low, medium, high voltage	10
4.	Fuse and soldering	Introduction, common fusing material, miniature circuit breaker, (MCB), molded case circuit breakers (MCCB), earth leakage ckt breaker (ELCB), Soldering equipments, precautions	03
5.	Electrical wiring accessories and House wiring	Wiring accessories, lamp holders, other accessories, distribution boards, types of wirings, types of wires House wiring: Introduction and necessity of wiring, selection of wiring, types of wiring, I.E. rule of domestic wiring, testing and installation of domestic wiring. Earthling formats for electrical connections	06

Practicals :

*Minimum 80% practicals must be conducted from the following list.

4



Sr. No.	List of Practicals
1	Safety measures to be observed followed in the electrical workshop
2	Demonstration of elementary first aid
3	Personal protection basic injury prevention basic first aid safety signs for danger, warning & caution
4	Demonstration of trade hand tools and use of crimping tools
5	Measurement of current voltage of power of a appliances
6	Connecting of lamps in parallel circuits study of Resistance Inductance
7	Demonstration and identification of different types of wires & cables
8	Skinning the cable and joint practice on single and multistrand wire (straight married and pigtail joint)
9	Market survey of electrical accessories
10	Construction of switch board.
11	Practice of conduit stair case wiring
12	Installation and wiring connection of ceiling fan exhaust fan, geyser, water purifier
13	Measurement of insulation resistance of new house wiring by using Megger
14	Practice of earthing
15	Industrial visit

Assessment:

Term End Theory Assessment –50 marks

1. Duration - These examinations shall be of two hours duration.
2. Theory question paper pattern:-
 - a. There shall be 10 multiple choice questions each of 1 mark.
 - b. There shall be four major questions. All questions shall be compulsory with internal choice within the questions. Each question will be of 20 marks with options.
 - c. Questions may be sub divided into sub questions a, b, c & d only, each carrying 20 marks and allocation of marks depends on the weightage of the topic.

Practical Examination Pattern: (50 marks)

References:

1. Electrical Technology - Edward Hughes
2. Electrical Technology - H. Cotton
3. Electrical Wiring Estimating & Costing - J. D. Gupta
4. Home appliances servicing - Edwin P. Anderson
5. Basic Electrical Engineering - A Kastkin
6. Basic Electricity (Hindi) - K. B. Bhist
7. House Wiring Practice - T. D. Bhise
8. Indian Electricity Rules - Nausheer Bharocha
9. Fundamental's of Electricity - Kernard C. Graham
10. Electrical Engineering - B. L. Theraja
11. Basic electronics - By V. K. Mehta



Add-On-Course
Lecture Attendance



	24/05	31/08	02/10	28/10	29/10	29/10	29/10	06/10	06/10	12/10	14/12
16	Suyash Pawan Chougale	Suyash	Suyash	Suyash	Suyash	Suyash	Suyash	Suyash	Suyash	Suyash	Suyash
17	Patil Niranjan Anmasaheb	Mahadev	Mahadev	Mahadev	Mahadev	Mahadev	Mahadev	Mahadev	Mahadev	Mahadev	Mahadev
18	Pandurang Bhagappa Shingode	PB	PB	PB	PB	PB	PB	PB	PB	PB	PB
19	Pratiraj Prakash Kambale	PKS	PKS	PKS	PKS	PKS	PKS	PKS	PKS	PKS	PKS
20	Abhishek Ajit Patil	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
21	Sunil Uttam Ghorpade	Sunil	Sunil	Sunil	Sunil	Sunil	Sunil	Sunil	Sunil	Sunil	Sunil
22	Anurag Pundalik Mali	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP
23	Akash Balaso Khot	A.B.K.	A.B.K.	A.B.K.	A.B.K.	A.B.K.	A.B.K.	A.B.K.	A.B.K.	A.B.K.	A.B.K.
24	Akash Prakash Nigavekar	AK	AK	AK	AK	AK	AK	AK	AK	AK	AK
25	Amar Shivaji Patil	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP
26	Manish Amar Thorat	MTS	MTS	MTS	MTS	MTS	MTS	MTS	MTS	MTS	MTS
27	Bhagyashree Machindra Kambale	BKS	BKS	BKS	BKS	BKS	BKS	BKS	BKS	BKS	BKS
28	Vaibhav Sadashiv Padaval	VSP	VSP	VSP	VSP	VSP	VSP	VSP	VSP	VSP	VSP



Mr. R.S. Kulkarni

1994 1996 to 1998

Sl. No.	Name	08/12	09/12	10/12	11/12	12/12	13/12	14/12	15/12	16/12	17/12	18/12	19/12	20/12	21/12	22/12	23/12	24/12	25/12	
16	Suryashree Chougale	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
17	Patil: Niranjananna'sahab:	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
18	Pandurang Bhagappa Shingade	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
19	Pratiraj Prakesh Kambale	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
20	Abhishek Ajit Patil	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
21	Sunil Uttam Ghorpade	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
22	Anurag Pundarik-Mati	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
23	Akash Baiaso Khot	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
24	Akash Prakash Nigavekar	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
25	Amar Shivaji Patil	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
26	Manish Amar Thorat	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
27	Bhagyashree Machindra Kambale	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch
28	Vaibhav Sadashiv Padaval	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch	Approch



Mr. P. P. Bhat
(Subject Teacher)

Add- On- Course
Practical Attendance



Vivekanand College, Kolhapur (Autonomous)

B.Sc. Examination,

Title-Electrical Wiring

Day & Date- 29/12/2019

Time-

Total Marks-50

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Sub-questions in a main question carry equal marks.
- (5) Assume suitable data if necessary.
- (6) Preferably, write the answers in sequential order

Q.1 Attempt the following.

10Marks

1) Which material is used for wiring continuous bus bar?

- a. Aluminium b. Copper c. Both (A) and (B) d. None of these

2) All the appliances are connected in.....

- a. Series ~~b. parallel~~ c. Both (A) and (B) d. None of these

3) Which material used for checking supply is on or off

- a. Cutter ~~b. Continuity tester~~ c. Hammer d. All the above

4) Multimeter used for....

- a. AC voltage b. DC Voltage c. DC current d. ~~All the above~~

5) The S.I. unit of power is

- a. henry b. coulomb ~~c. watt~~ d. watt-hour

6) Out of the following which is an insulating material ?

- a. Copper b. Gold c. Silver d. ~~Paper~~

7) is used for measure voltage.

- a. Ammeter b. wattmeter c. galvanometer d. ~~voltmeter~~



Theory and practical results of Electrical Wiring

Sr.No	Name of Students	Marks	
		Theory (50)	Practical (50)
1	Rohan Raju Sonkambale	39	40
2	Santosh Vasudev Gavali	46	35
3	Pranav Sunil Sharbidre	34	38
4	Bharat Shivaji Shingare	38	34
5	Mandar Dnyanadev Patil	40	35
6	Ashish Sunil Kambale	39	32
7	Raj Ramesh Tahasildar	43	38
8	Sammed Rajendra Latthe	36	38
9	Shubham Laxman More	32	38
10	Akash Anandrao Pawar	30	41
11	Krushnat Sunil Karande	31	25
12	Siddhesh Ravindra Lohar	42	30
13	Sourabh Krushnat Nerlekar	38	32
14	Shreenivas Mallapa Gudami	44	38
15	Abheejit Keraba Lad	38	35
16	Suyash Pravin Chougale	32	32
17	Patil Niranjan Annasaheb	25	34
18	Pandurang Bhagappa Shingade	33	35
19	Pratiraj Prakash Kambale	39	40
20	Abhishek Ajit Patil	40	35
21	Sunil Uttam Ghorpade	47	38
22	Anurag Pundalik Mali	43	40
23	Akash Balaso Khot	26	25
24	Akash Prakash Nigavekar	30	42
25	Amar Shivaji Patil	31	42
26	Manish Amar Thorat	45	40
27	Bhagyashree Machindra Kambale	31	35
28	Vaibhav Sadashiv Padaval	25	36



Head
Department of Electronics
Kulshreshtha College, Kolhapur



" Education for Knowledge, Science and Culture."
- Shikshanmaharshi Dr. Babuji Salunkhe



Shri Swami Vivekanand Shikshan Sanstha's

VIVEKANAND COLLEGE , KOLHAPUR (AUTONOMOUS)

NAAC Accredited 'A' Grade With CGPA 3.24, College With Potential For Excellence by UGC
Star College By DBT, Govt. Of India, ISO 9001: 2015

CERTIFICATE

This is to certify that Mr./Mrs.....

of BA/B.Com/Bschas Passed the Value
Add on Course in Electrical Wiring in the Month of December year 2019-
2020. The said certificate has been issued to him/ her after qualifying the Add-
On Course Exam in Theory and Practical Department of Electronics
Vivekanand College, Kolhapur (Autonomous).

The Testimonials, whereof, are at the seal of the college and the signatures of
the co-ordinator and the Principal of the said college.

Co-ordinator



Principal