

CERTIFICATE COURSE IN ELECTRICIAN



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About Glister Eduversity

Today is the era of working parents and due to workload, they do not get enough time to support their children's education. Therefore, they are heavily blamed by all, in the current dialogue and debate about improving the education system, the disadvantages of improper parenting is known to all.

It is time to start parenting in the education system. With the Glister Eduversity, We present you the solution to all such problems switching towards telephonic parenting, proper guidance and development graph.

This is the first Indian institution to provide education care with parenting. Glister Education offers telephonic parenting with a right strategic plans for the student, online test series, seminar, scholarship programs, in really attractive packages.

We also guide their appointments as well as their strategies. So, let's don't wait, and achieve nothing less than success with Glister Eduversity Parenting cum Education Care.



Director: Amit Pandey

Mission

The mission of Glister Eduversity is to educate the citizens and citizen-leaders for our society.

We do this through our commitment to the transformative power of a liberal arts and sciences education.

Beginning in the classroom with exposure to new ideas, new ways of understanding and new ways of knowing, students embark on a journey of intellectual transformation.

Through a diverse living environment, where students live with people who are studying different topics, who come from different walks of life and have evolving identities, intellectual transformation is deepened and conditions for social transformation are created.

From this we hope that students will begin to fashion their lives by gaining a sense of what they want to do with their gifts and talents, assessing their values and interests, and learning how they can best serve the world.

Vision

Glister Eduversity will set the standard for residential liberal arts and sciences education in the twenty-first century. We are committed to creating and sustaining the conditions that enable all Glister Eduversity students to experience an unparalleled educational journey that is intellectually, socially, and personally transformative.

Welcome to the Glister Eduversity, Varanasi. For more than three Years, Glister Eduversity has served as our nation's flagship comprehensive institution of higher education.

Our primary goal is to become one of the most prominent and excellent educational Institute in the world. We are fortunate to have a talented, highly committed teaching and support staff here to ensure the learning environment of our students is the best it can be. Our faculties are renowned scholars and accomplished practitioners who are actively engaged in the academic excellence and innovative research ideas of the modern world. Our students are innovators, engineers, managers, great scientists, entrepreneurs, and aspiring leaders - from every age group and are located at every corner of the country. Our unique teaching and learning process with a proper blend of theory and practice crosses the boundaries of nations towards industry-readiness and global excellence.

Program overview

An electrician is a tradesman specializing in electrical wiring of buildings, transmission lines, stationary machines, and related equipment. Electricians may be employed in the installation of new electrical components or the maintenance and repair of existing electrical infrastructure.

Electricians may also specialize in wiring ships, airplanes, and other mobile platforms, as well as data and cable lines. The electrical industry is vast and there is an ever increasing demand for experts in various different areas. Anyone can see the impact that electricity has on our lives; it's everywhere. One of the many reasons people are drawn to work in the electrical industry is because it offers such a diverse field to work in, and there is always something that is of interest to someone.

With this Certificate Course in Electrician from Glister Eduversity, you will learn everything you need to know to work on residential and industrial projects as an electrician. We are incredibly dependent on electrical power, as for our everyday lives to function efficiently we need an uninterrupted supply of electricity. This makes electricians highly valued professionals.

Salient Features



Employment of electricians is projected to grow 10 percent from 2018 to 2028, faster than The average for all occupations. Increases in construction spending and demand for alternative Energy sources will drive demand for electricians.



Alternative power generation, such as solar and wind, is an emerging field that should require more electricians for installation. Increasingly, electricians will be needed to link these alternative powers Sources to homes and power grids over the coming decade. Employment growth stemming from These sources, however, will largely depend on government policy.



Most electricians learn on the job through an apprenticeship. This program has an extensive Hands-on practical approach, placing emphasis on safe working practice and on the development of useful, practical skills.



No Prior Knowledge or Skill is assumed. Successful completion of the course leads to the award of the Certificate.



Course Objective

The 6 Months Electrician course is for the Learners who want to be an Electrician, with the aim to learn, develop and practice required by the market. In this course, the emphasis is put on the learner to acquire the ability to perform as a confident and Competent Electrician. Electrician Industrial will be able to identify wires, cables, perform cable jointing & do cable connections. Able to operate motors, transformers & their controls. Able to operate & maintain Diesel generator set. Maintains storage batteries. Able to perform industrial wiring & control panel wiring & trouble shoot the circuits. Able to plan & install pipe earthing, plate earthing & test them.

The objectives of this course are to:

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Learning Outcome :

GENERIC OUTCOME

- Recognize & comply safe working practices, environment regulation and housekeeping.
- Work in a team, understand and practice soft skills, technical English to communicate with required clarity.
- Understand and explain the concept in quality tools and labor welfare legislation and apply such in day to day work to improve productivity & quality.
- Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.
- Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.
- Understand and apply basic computer working, basic operating system and uses internet services to get accustomed & take benefit of IT developments in the industry.

SPECIFIC OUTCOME

The Trainees will be able to

- Identify, select and use appropriate hand tools & power tools.
- Able to use suitable personnel protective devices and follow safety rules while executing electrical works.
- Identify, select & use appropriate materials, consumables and equipments.
- Perform good house keeping
- Carry out end termination of power and control cables.
- Handle various analog and digital measuring instruments.
- Carry out laying and dressing of power and control cables in cable tray.
- Carry out PVC & MS conduit wiring in construction job sites. Carry out power and control wiring of various motor starters.
- Compute simple calculations in AC single phase and three phase circuits.
- Carry out installation of earth electrode and measure earth resistance.
- Understand simple construction electrical drawings used in construction job sites.

Details of Programme: Certificate Course In Electrician

1. Title of the Course

The Course shall be called as "Certificate Course in Electrician", a Regular course of 6 months (240 hrs.) duration.

2. Duration of the Course

This is a Regular course of 240 hrs. Extended over a period of 6 months duration.

3. What You Will Get :

You Will Get a Mark sheet and a Certificate That Will be Universally Acceptable.

4. Aims and Objectives of the Course

This course is designed to provide basic electrical skills to those who need to perform first-line electrical maintenance tasks including the safe isolation, replacement and testing of a range of common electrical devices (motors, sensors, heating elements, solenoids, etc.) in a safe and effective manner. Importantly, the format of the course is specifically designed so that, when combined with suitable on-site consolidation of training, it will assist the maintenance manager in meeting the legal requirements for employee competence in electrical work.

5. SCOPE:

Wire Mechanic, Security and Fire Alarm system Installer, Network Cabling, CATV Specialist, Construction and maintenance Electrician, Line Worker, Industrial Electrician.

6. Syllabus

The syllabus is design to fulfill aforesaid objectives containing theory subjects as well as practical in Electrician.

OSH & Safety Practices	Theory : 50 Marks, Practical/Assignment : 50 Marks
Personnel & Material Safety	Theory : 50 Marks, Practical/Assignment : 50 Marks
Introduction to Electricity & Electronics	Theory : 50 Marks, Practical/Assignment : 50 Marks
Symbols, diagrams & Rules in Electric circuits	Theory : 50 Marks, Practical/Assignment : 50 Marks
Earthing	Theory : 50 Marks, Practical/Assignment : 50 Marks
House wiring & its concepts	Theory : 50 Marks, Practical/Assignment : 50 Marks
Home appliances & its repair	Theory : 50 Marks, Practical/Assignment : 50 Marks
Battery maintenance	Theory : 50 Marks, Practical/Assignment : 50 Marks

7. Eligibility Conditions

A candidate who has passed at least 12th examination from a recognized Board or its equivalent shall be eligible to take admission to the course.

8. Course Fee: INR 15,000+GST/-

Content of Syllabus :

Unit 1 :- OSH & Safety Practices

Safety and First Aid , Elementary first aid and artificial respiration, Safe working practices, Environment regulation and housekeeping. Fires in electrical Circuits & Precautions, Fire Extinguishers & its Types

Unit 2 :- Personnel & Material Safety

General Safety of Tools & equipment, Rescue of person who is in contact with live wire, Treat a person for electric shock/ injury.

Unit 3 :- Introduction to Electricity & Electronics

Concept of basic Electricity, Single phase & three phase circuits, Electrical terms : Voltage, Currents, Resistance, Impedance & power factor, Electronic components : Capacitor, Choke coil, Diode, Transistor, Thyristor .

Unit 4 :- Symbols, diagrams & Rules in Electric circuits

Diagram & Symbols used in basic Electrical Circuits, Wiring & installations. IE rules for General Electricity, Color Code of carbon Resistors , Series & Parallel Circuits, Direct current & Polarity testing, Alternating Current & identifying phase neutral and earth terminals, Interpret the components as per circuits and laying components on PCB, Testing of assembled PCB

Unit 5 :- Earthing

Concept of earthing, purpose & types, Earthing of domestic installation, Pipe earthing & Plate earthing .

Unit 6 :- House wiring & its concepts

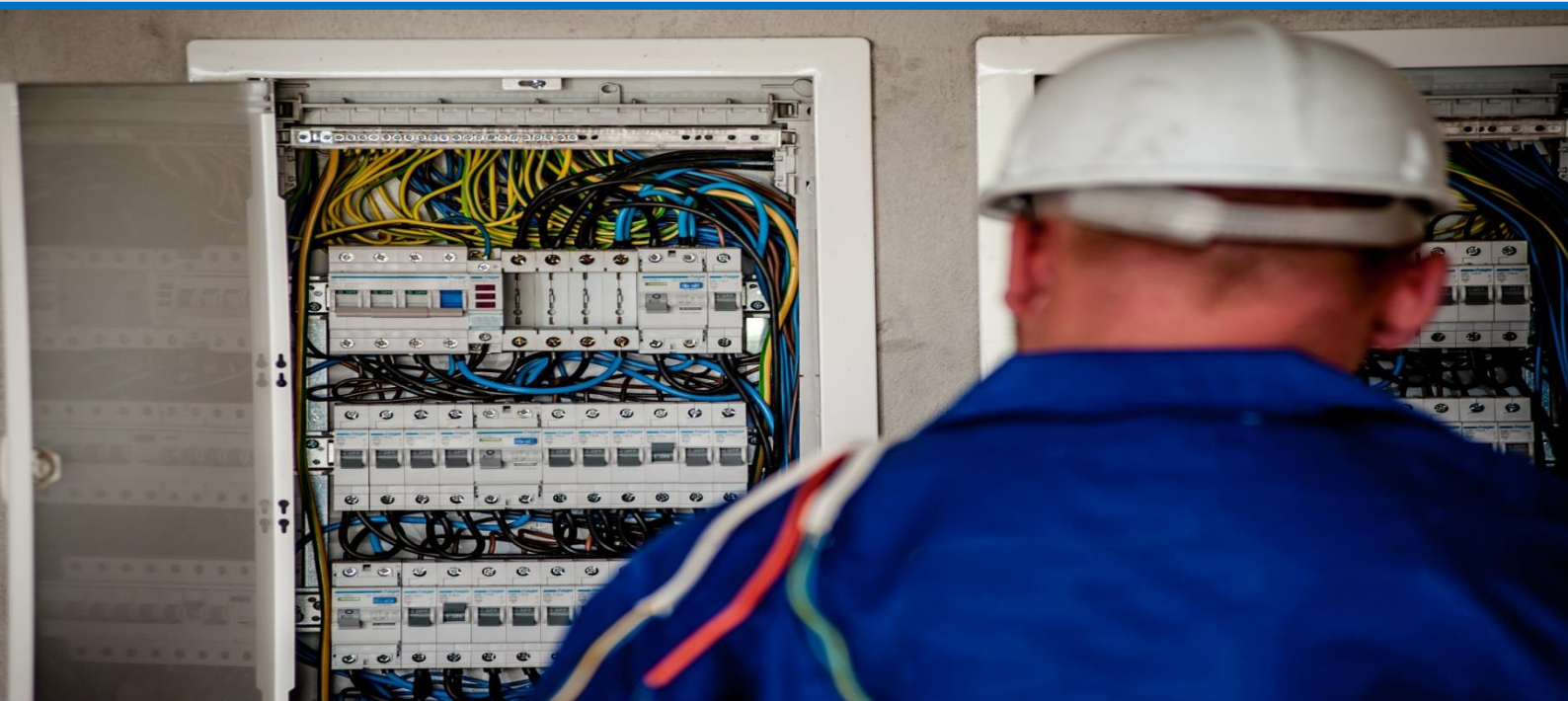
Conductors, Insulators & its types, Crimping & Crimping Tools, Soldering, Joints in Electrical Conductor, Concept of gauge of wire, conductor, Material & its current carrying capacity, Determination of Fuse size according to the load of circuit and its location, Study of different components used in house wiring. Use of Megger & Test lamps in fault location Concept of different types of switch gears used in general Electrical installations. , Energy meter installation.

Unit 7 :- Home appliances & its repair

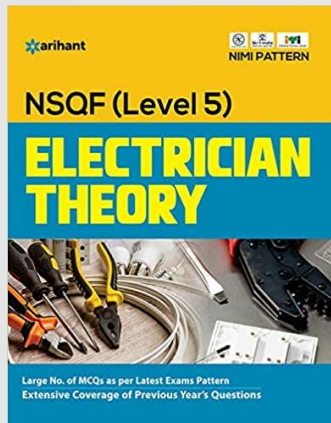
Voltage and Power requirement to all kinds of home appliances, Basic construction and assembly of electric iron, Heater and fan . Basic construction and assembly of mixer grinder, Blender and OTG, Basic construction and electrical parts of washing machine, microwave oven, refrigerator and dish washer . Repair and service technique of home appliances.

Unit 8 :- Battery maintenance

Types of batteries, Battery application in inverter and UPS, Specific gravity of battery, Process of discharging and recharging of battery, Construction and parts of lead acid/maintenance free battery. Battery chargers and Precaution while charging.

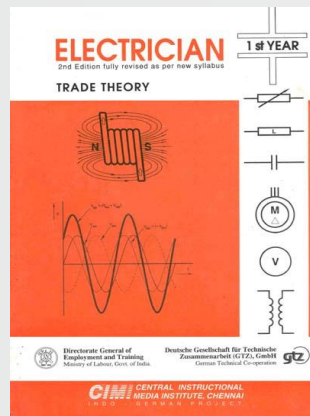


Books For Reference



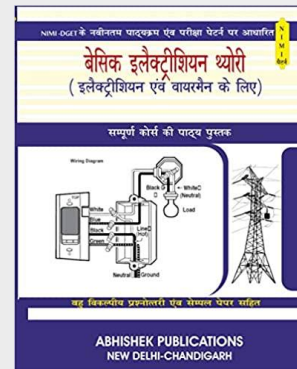
Arihant Publication

Electrician Theory



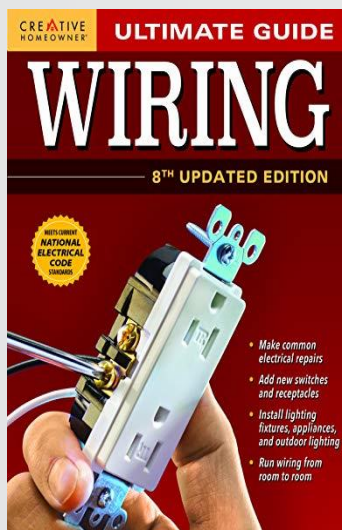
Neeru Kapoor

Electrician Trade Theory (1st Year)

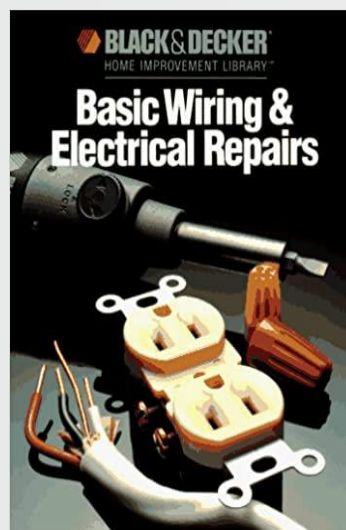


Anoop Bhardwaj, Abhishek Publication

Basic electrician Theory



Editor of Creative Homeowner
Wiring



Black & Decker
Basic Wiring & Electrical Repairs