TECHNICAL
EDUCATION
ACADEMY

School of Engineering

COURSE PROGRAMME

000364

Maintenance and repair of electric motors

The Electrical Motors: Technology, Operation & Maintenance training programme, covers AC and DC motors troubleshooting, technology and maintenance.



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Course overview

Intermediate level

Why take this course

The Electrical Motors: Technology, Operation & Maintenance training programme, covers AC and DC motors troubleshooting, technology and maintenance. The skills and knowledge covered by this system will prove invaluable for industrial maintenance technicians or anyone working in a field that uses AC and/or DC motors. This system covers major topics like AC and DC motor failures, common methods of diagnosing these failures by using a multimeter and megger meter, and troubleshooting these failures.

Motor troubleshooting includes a motor connection box to practice hands-on skills such as troubleshooting faults in a DC motor and AC single-phase and three-phase motors, evaluating DC electric motor commutator and brush health, and using a multimeter to test an AC motor start/run capacitor.

The course covers a wide variety of areas where failures can occur within AC motors (bearing failure, start windings, centrifugal switch, thermal switch) and DC motors (couplings, brushes, armature, field winding, and power supply). This array of topics allows learners to gain confidence and competence when practicing applicable hands-on skills and to see how they translate to real-world situations.

The lectrical Motors: Technology, Operation & Maintenance training course covers common types of AC and DC motor failures and causes and builds by allowing learners to study how to test, diagnose, and troubleshoot these problems. Specific objectives include listing common failures of a three-phase AC motor’s stator windings, understanding common methods used to diagnose DC motor failures, and using a megger meter to test a DC electric motor armature.

Who it is for and how it helps

This course is valuable for anyone who works on motors, people who will benefit from attending this course include maintenance technicians, HVAC maintenance and repair technicians, energy management personnel, plant & facility maintenance technicians and anyone who needs cross-training on pumps and pump systems.

What you will learn

- Применить полученные знания по техническому обслуживанию и устранению неисправностей электродвигателей
- Описать требования к защите двигателей и техническому обслуживанию электродвигателей
- Определить требования к регулированию скорости для двигателей и объяснить основные принципы работы двигателей и приводов
- Перечислить основные проблемы, связанные с испытанием двигателей для предотвращения выхода из строя подшипников двигателя
- Производить поиск и устранение неисправностей двигателей и приводов
- Объяснить интерфейсные схемы управления двигателями с ПЛК/РСУ

Course overview — continued

- Сократить время простоя электродвигателей и повысить общую производственную безопасность на предприятии
- Увеличить производительность производства и сократить расход запасных частей

Joining the programme

Contact the Academy and quote course code 000364 to confirm dates, delivery format, prices and enrolment terms.

Training for your team

Tell us your business goals, the roles and number of participants, and your preferred dates and location. This will help us discuss the right training option.

Preparing for the programme

The published programme does not specify any prerequisites. Contact us before enrolling to confirm how to prepare.

Discuss your training needs

mail@tecedu.org
www.tecedu.academy

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