

Power cable technology training courses

KEMA Academy



How should you respond to challenges such as additional regulatory requirements, network ageing, the need for network expansion and the integration of decentralized (renewable) power generation? How can you avoid huge capital expenditure and cut operating costs, while maintaining security of supply in today's competitive environment?

Power cables come in a variety of sizes, materials and types, each adapted to a particular application. Moreover, a cable network isn't made up of cables alone: there are many different types of joint and termination (sealing end) and especially these accessories have a major influence on network reliability.

Drawing on its expertise in this field, KEMA has developed dedicated training courses to transfer knowledge and link theory to day-to-day operations.

For a current overview of our training program and to register, please visit www.kema.com/academy.



In-company & customized
training courses

At the client's request KEMA can also provide in-company and customized training courses. The course can then, for example, deal with actual cases from your business operations, or future scenarios sketched out by you. We are flexible in this.

Overview of power cable technology training courses

Course	Description	Subjects	Result	Target Group
<p>Power cables in general</p> <p>three-day training course</p> <p>English and Dutch language</p>	<p>This three-day general course covers all the important aspects of (extra) high and medium voltage cables and their accessories, both from a theoretical and practical point of view. A visit to the KEMA High Power and High Voltage Laboratories is also included.</p>	<ul style="list-style-type: none"> • Design parameters • Materials & types of cable • Cable manufacture • Cable joints and terminations • Cable installation • Ageing • Testing • Asset management 	<p>After the course you will have knowledge of all relevant matters which involve power cables, from start to finish.</p>	<p>Anyone involved (or to be involved) with power cables in the course of their daily work. A Bachelor of Engineering degree is recommended.</p>
<p>Ampacity and engineering aspects of power cables</p> <p>two-day training course</p> <p>English and Dutch language</p>	<p>The ampacity of a cable often appears to be surprisingly good over the short term, but surprisingly poor over the long term or at very specific spots (hotspots). This in-depth training course will help you calculate the ampacity of cable systems. It also covers various important subject areas relevant to the detailed engineering of cable systems.</p>	<ul style="list-style-type: none"> • Standards and guidelines • Stationary & dynamic approach • Thermal bottlenecks • The relationship between ampacity, remaining life and magnetic fields • Short-circuit behavior • Calculations • Other engineering aspects • Practical exercises 	<p>After completion of the course you will have:</p> <ul style="list-style-type: none"> > insight and methodologies to determine the ampacity as accurately as possible > knowledge to decide which methodologies can be best applied when 	<p>Anyone involved (or to be involved) with power cables in the course of their daily work. A Bachelor of Engineering degree and a certain foreknowledge of power cables is recommended.</p>
<p>Ageing, quality assurance, testing, diagnostics and failures of power cables</p> <p>two-day training course</p> <p>English language</p>	<p>In-depth training course that focuses on degradation and ageing mechanisms, tests during production, lifetime and post-installation, failures and failure investigation of power cables and their accessories - all within the context of, and linking to, quality assurance.</p>	<ul style="list-style-type: none"> • Causes of failures • Degradation mechanisms • Testing cables during the production and operation phases • Failure analyses 	<p>This course will provide you with independent advice towards issues such as:</p> <ul style="list-style-type: none"> > the effects of degradation mechanisms > different types of ageing mechanisms > various methods and their effectiveness 	<p>Anyone involved (or to be involved) with power cables in the course of their daily work. A Bachelor of Engineering degree and a certain foreknowledge of power cables is recommended.</p>
<p>Asset management, maintenance and remaining life of medium voltage cables</p> <p>two-day training course</p> <p>English and Dutch language</p>	<p>Most medium voltage cables are exposed to low current loads and can achieve a significant lifespan without causing major problems. Things are quite different when cables are subjected to high current loads and when accessories regularly fail. This in-depth training course will help you address these issues.</p>	<ul style="list-style-type: none"> • Asset management • Cable types and accessories • Types of faults • Ageing processes • Diagnostic methods • Remaining life • Practical exercises 	<p>After the course you will have:</p> <ul style="list-style-type: none"> > the proper knowledge to manage the acquisition of insight into the residual life of cables > valuable input for the replacement or maintenance policy 	<p>Anyone involved (or to be involved) with power cables in the course of their daily work. A Bachelor of Engineering degree and a certain foreknowledge of power cables is recommended.</p>
<p>Asset management, maintenance and remaining life of high and extra high voltage cables</p> <p>two-day training course</p> <p>English and Dutch language</p>	<p>Performing the right maintenance at the right time and, if necessary, replacing components, is essential for making optimal use of your operating resources. This in-depth training course deals with the asset management of (extra) high voltage power cables in general and the maintenance, condition and the remaining life of these cables and their accessories.</p>	<ul style="list-style-type: none"> • Asset management • Determining the remaining lifespan • Life extension • Recommendations • Discussion of practical case studies 	<p>This course will provide you with:</p> <ul style="list-style-type: none"> > points of reference for efficiently dealing with cables and accessories > insight into which form of maintenance to apply and when > insight into which maintenance strategy can be best applied > knowledge required to reduce maintenance costs and the number of faults, while increasing the total life 	<p>Anyone involved (or to be involved) with power cables in the course of their daily work. A Bachelor of Engineering degree and a certain foreknowledge of power cables is recommended.</p>

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