

EL-BRANCHEN

VI TÆNKER BAG FACADEN

DANSK EL-FORBUND 

TEKNIQ ARBEJDSGIVERNE

The electrician training programme

Information for companies 2023



DANSK
EL-FORBUND

TEKNIQ
ARBEJDSGIVERNE

The electrician training programme – structure

One training programme – multiple options

All students of the electrician training programme are presented with challenges according to their interests and abilities.

For this reason, the electrician course programme comprises several tracks:

1. A 4-year electrician training programme
2. A 4½-year electrician training programme
3. A 5-year EUX electrician training programme
4. An electrician training programme for young people with an upper secondary school diploma

The electrician course programme is a 4-year or 4½-year vocational education programme combining college periods and periods working as an apprentice. The training programme consists of a basic course lasting 20 weeks, three main courses, apprenticeship with a company and an apprentice exam. The college periods last a total of 55 to 60 weeks and the apprentice weeks total 148 to 168 weeks.

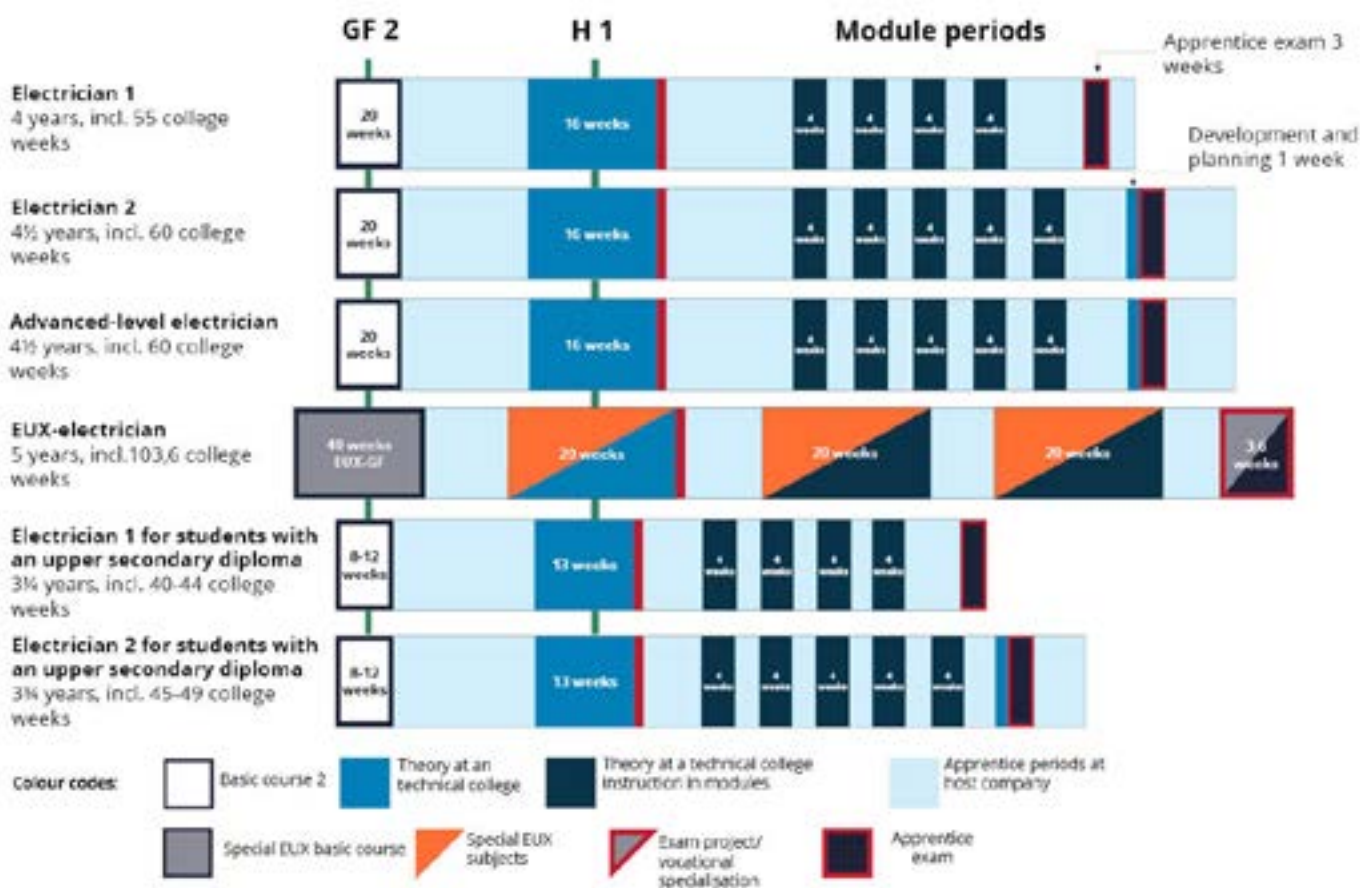
Basic course 1 (GF1)

All students who have completed primary school less than two years earlier will start by taking a 20-week basic course (GF1). At the latest by the end of the basic course, the student will have to select which vocational programme they wish to embark on after GF1.

GF1 teaches the students commercial subjects embracing general subjects such as: workplace culture, social science, health and how to apply for an apprenticeship. The students are also taught other subjects such as technical communication, work planning, collaboration and methodology.

Students joining the programme immediately after primary school and who already have a training agreement can skip GF1 and start immediately with GF2, which is the basic course for the electrician training programme.

All others who have completed primary school more than two years earlier will go directly to the 20-week basic course (GF2) which is targeted the electrician training programme.



Basic course 2 (GF2)

All apprentice electricians will have to complete a basic course involving 20 weeks of dedicated classroom instructions.

The basic course finishes with a practical and theoretic test focusing on electrical skills and the student will receive a basic course certificate. During the basic course, the student acquires the competencies in mathematics (level D), Danish (level E) and physics (level E) required to continue at the main course stage of the programme.

In addition to this, the apprentice also acquires competencies in first aid, fire fighting, working near/below energized components and near/below roll & fold scaffolds. The technical committee issues a special electrical safety certificate which is issued along with the basic course certificate.

Main section course

The first part of the electrician training programme is common for all students and typically lasts two years. This part comprises Basic Course 2 (GF2) lasting 20 weeks, a main section course 1 (H1) lasting 16 weeks and two apprenticeship periods in a company. The course only teaches electrical subjects and comprises among others:

- Electrical theory and installation techniques
- Basic automation technology
- Communication networks
- Measuring technique, documentation, quality assurance and electrical safety
- Customer service and ready-to-use technical solutions

The objective of the common main section is to provide all electrical apprentices with a range of competencies which will enable them to carry out basic installation work in private homes, commercial buildings and industry on their own.

Competencies which will constitute a scope of work in their own right for an electrician while at the same providing the student with competencies which are universal for all electricians, irrespective of any subsequent lines of specialisation.

The H1 course finishes with a combined practical and theoretic exam and the grade is part of the apprentice exam.

The next section of the electrician training programme comprises:

- Apprenticeship periods
- Minimum two college periods interspersed by apprenticeship period(s). For the college periods the apprentice will select elective modules in consultation with the host company.
- An apprentice exam

Main section courses 2 (H2) and 3 (H3) offer 32 elective modules each of 4 weeks' duration. The apprentice and the company jointly identify between 4 and 5 modules. If an apprentice and the host company select 4 modules, the training programme will last 4 years – if 5 modules are selected, the training programme will last 4½ years.

A module offers competencies at three levels:

- Advanced level
- Expert level
- High level

The intention with the levels is to ensure that the individual modules relate to each other in terms of the technical contents and skills, with each module building on the competencies acquired by the apprentice so far during the training programme.



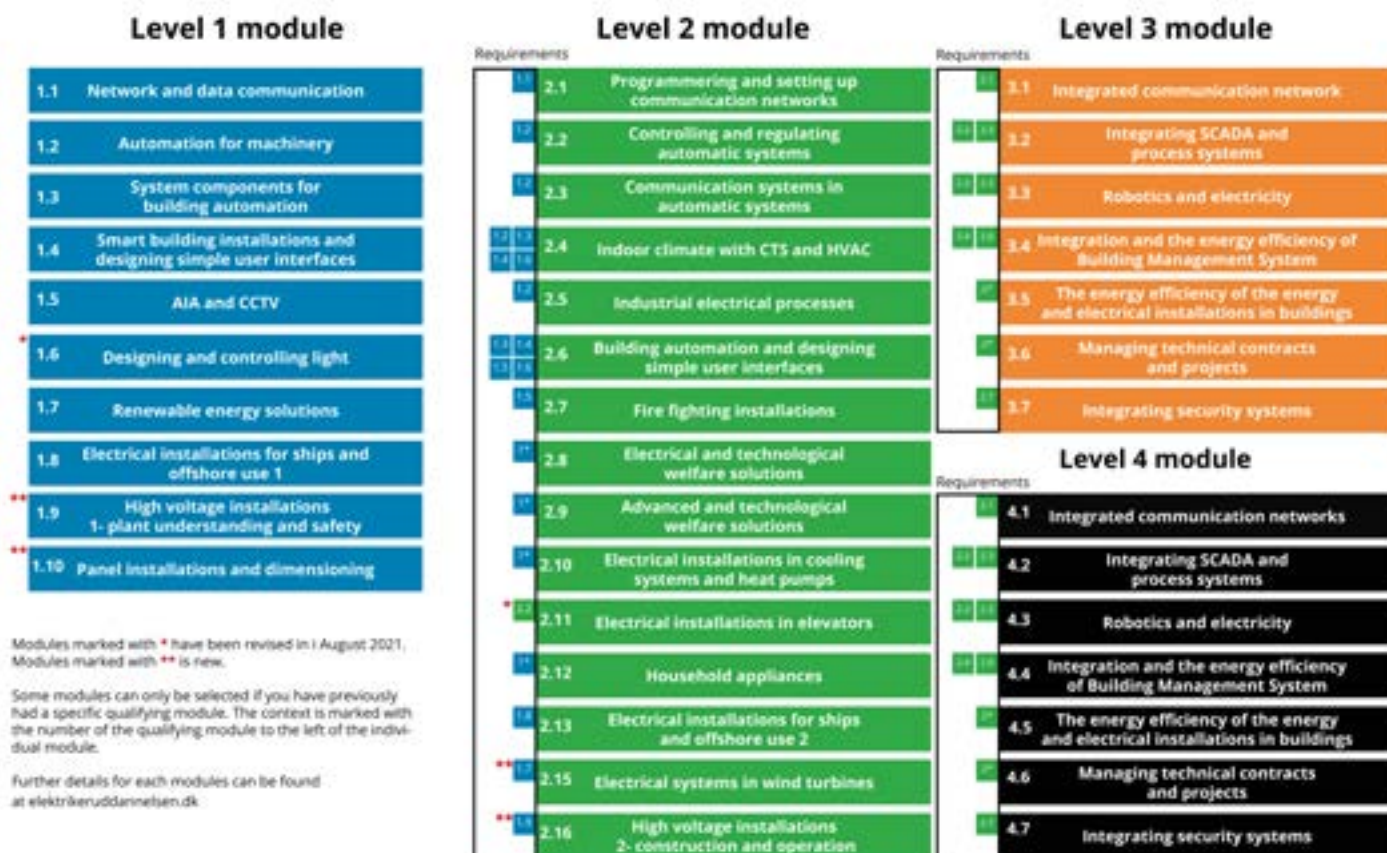
Taking on an apprentice is a good investment

When you take part in training an apprentice, you make your contribution to ensuring that the workforce also looking forward will be able to offer the required electrical skills and competencies.

Through guidance and attentive instruction, you will be able to make your mark on your apprentice so that the apprentice as a member of the team will fit into your company culture and approach. This will be a major advantage to you and the apprentice alike when it comes to considering a potential permanent employment contract with your organisation.

Being young, the apprentice will of course question your methods and habits but they will also offer new and alternative points of view on modern technology for your business.

Modules under the electrician training programme



The modular structure of the electrician training programme allows the students to specialise within a specific field, for example targeting energy efficiency. They can also decide to follow a wider scope of modules which will provide them with a broader and more general profile as an electrician.

Generally, the host company must be certified for the modules selected. This means that the host company works with and has competencies that comply with the technical content of the module. A host company may select up to two modules, however, which are not covered by their normal operations. The purpose is to improve the opportunities of host companies to future-proof the company's offerings by allowing them to train an apprentice to cover one or more business areas which the company is expanding into.

The modules are selected when the host company and the student conclude the training agreement and must be listed in a separate annex to the agreement.

Another selection of modules can be made. This alternative selection must be made at the latest one week after H1. At a later stage, alternative modules can only be selected by agreement with EVU. An alternative module can be selected up to six months before the scheduled start of the module, not any later.

To continue to the next module, the student must pass the previous module.

The electrician training programme

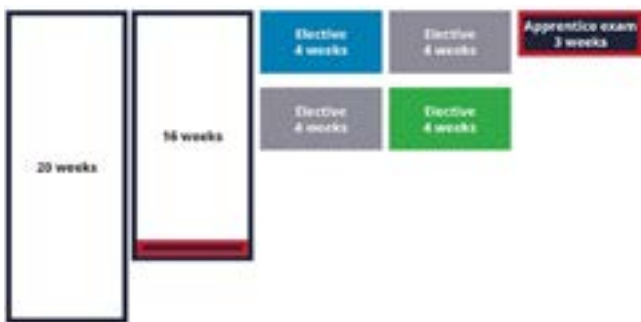
Colour codes:

Common course
 Level 1 module
 Level 2 module

Level 3 module
 Elective module
 Apprentice exam

Electrician, 4 years – 4 elective modules

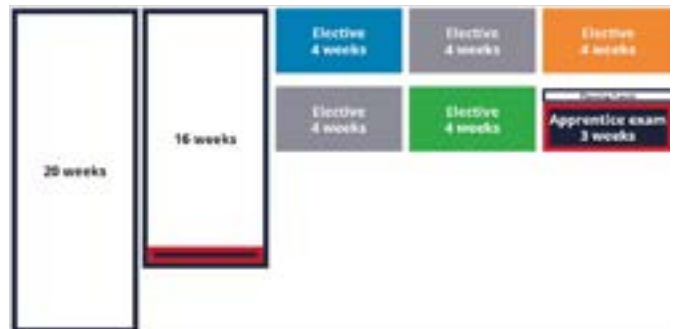
College periods: 55 weeks



For the 4-year programme the student must select minimum one level 2 module (green).

Electrician, 4½ years – 5 elective modules

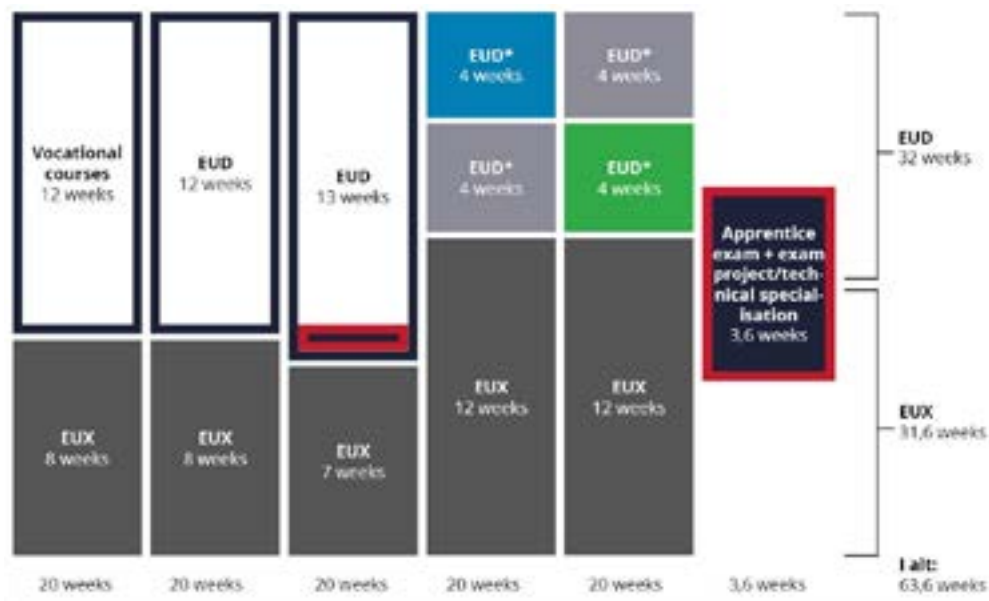
College periods: 60 weeks



For the 4½-year programme the student must select minimum one level 3 module (orange).

EUX – electrician, 5 years – 4 elective modules

College periods: 103.5 weeks



In order to ensure the proper relationship between the subjects studied for the upper secondary school EUX diploma and the profession as an electrician, each college selects the four modules offered at the EUX programme.

As a result of this, H2 and H3 can be determined by

Apprentice exam

The apprentice exam is a 3-week period normally immediately following H3.

The apprentice exam is in fact a project assignment which involves that the apprentice alone or jointly with one or two fellow apprentices must identify a problem to solve. The problem and its solution must be based on the contents of minimum three of the modules which the apprentice completed during H2 and H3.

For the assessment of the apprentice exam, the focus will be on the apprentice's ability to think in an innovative manner, to combine theory, practice, product and systems and to generate a user-friendly solution for the end-user.

EUX – two educations in one

Students can also train to become an electrician under the EUX programme. The EUX programme combines vocational education and upper secondary school – two educations in one. In other words, the apprentice both becomes an electrician and finishes upper secondary school.

Once passed the apprenticeship exam, an EUX electrician qualifies for enrolment with a higher education programme, such as engineer or marine engineer.

Completion of the EUX training programme takes five years of which classroom instructions total 103.6 weeks. EUX apprentices must complete four elective modules. The colleges each offer the EUX training programme with a fixed module structure.

Special programme for students with an upper secondary diploma

Apprentices who already have an upper secondary diploma in Mathematics B, Physics B and Danish A must take a special track which will shorten the basic course and the main courses by a total of 3/4 year.

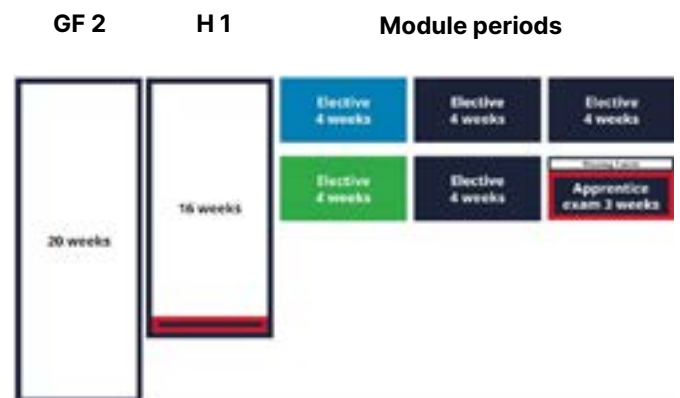
Advanced-level electrician for the skilled and ambitious students

For apprentices exhibiting particularly good professional skills and technical qualifications, the host company and the apprentices can jointly opt for the advanced electrician training programme where part of the theory is taught at a more advanced level equivalent to the instructions offered at the programme for the Academy Profession (AP) Degree in Service Engineering.

For apprentices training for the advanced-level electrician degree, 3 out of 5 modules must be level 4 (black modules).

EUX – electrician, 5 years – 4 elective modules

Classroom periods: 103.5 weeks



Colour codes:

- Common courses
- Level 1 module
- Level 2 module
- Level 3 module
- Level 4 module
- Apprentice exam

Apprentices aged 25 years or older

Apprentices who are 25 years or older when commencing the electrician training programme must complete the training programme under the adult education programme – EUV.

EUV apprentices must study the same curriculum as all other electrical apprentices. The vocational college makes an assessment as to whether the apprentice has the work experience or educational background required to shorten the training programme. Most 25+ years apprentices must follow the same training programme as apprentices not yet 25, however.

Apprentices with highly relevant work experience or who has previously completed another education must follow a dedicated shorter adult training programme. Since the college is responsible for ensuring that the training programme is correctly shortened, 25+ apprentices would benefit from contacting the college to determine their individual training programmes.

Approval of the company

All companies that wish to enter into an educational agreement, must be approved to educate electrician apprentices.

In order to be approved, the company must complete an application at evu.dk/criteria-for-certification-of-employers-for-electrician-apprenticeships/, in most cases, it will be approved within 10 working days.

A company is approved for a certain number of modules, depending on which tasks they can offer the apprentice.

However, it is possible to choose up to two modules, which the company is not approved for - in that way it is actually possible to educate a learner for the company's future work areas.

The apprenticeship agreement

The apprenticeship agreement is a legal and mandatory contract between the apprentice and the host company.

It covers the conditions of the apprenticeship, including the company's obligation to train the apprentice. The agreement must contain information about the apprentice and the company, start and end dates for the agreement, working hours, and which collective agreement applies to the apprentice etc.

The apprenticeship agreement is submitted digitally via laerepladsen.dk. Here you login with the company's NemID employee signature or another NemID associated with the company. It is possible to get the help of the local vocational school to enter into the training agreement via laerepladsen.dk.

The agreement must be signed by both apprentice and company before the apprenticeship starts. If the apprentice is under 18, parents or guardians must also sign the training agreement.

When the agreement is signed by both parties, it must be approved by the vocational school. In connection with entering into the agreement, an attachment is submitted to the school with information on which modules the apprentice must register for.

When the apprenticeship agreement is completed, you will receive a receipt from laerepladsen.dk with a link to elektrikeruddannelsen.dk/modulvalg. Here you will find a guide to how you choose modules.

If the apprentice is an EUX electrician, modules have already been planned for your apprentice, and you do not have to do anything more.

When you have found the 4-5 modules the apprentice must have, you have to complete [this form](#) and send it to the vocational school the apprentice attends. Since it contains personal information, the form must be sent to the school's secure e-mail. The school acknowledges the module selection, at the same time as they complete the registration of the apprenticeship agreement.

No cost for boarding school

The modular structure of the electrician education means that in some cases it may be necessary to send the apprentice to school elsewhere in the country. This is because, for practical reasons, some schools do not have the opportunity to offer all 32 different modules.

If you choose a school with an attached school home, however, the company can have all costs for board and lodging covered by AUB. The company also gets 80% of the costs of the cheapest public transport covered.

Your company therefore has almost no costs associated with sending an apprentice to school elsewhere in the country.



Business-oriented/study-oriented extension

Apprentices and companies can choose to supplement the training with further training for up to 4 weeks (professional extension). It is thus possible to choose an additional 4-week module. Apprentices and companies can also choose study-oriented extension, e.g. supplementary mathematics education.

If the company and the apprentice want professional development, this must be stated in the training agreement.

Addendum to the training agreement for extension

Both in the case of study-oriented and vocational extension, a decision must be made as to whether the training period/ the training agreement must be extended accordingly number of weeks for which there is a build-up.



Useful links

Information about the electrician training programme
Elektrikeruddannelsen.dk

Tekniq arbejdsgiverne
(the Danish mechanical and electrical contractors association)
www.tekniq.dk

Secretariat for the education committees for electricians and plumbers
www.evu.dk

The Danish Union of Electricians
www.def.dk

Online meeting place for apprentices and host
companies
www.laerepladsen.dk

**You can find more information about the electrician training programme at
elektrikeruddannelsen.dk**

**You are welcome to contact EVU for any queries concerning the electrician training
programme**



Published in March 2023 by:
EVU - El og Vvs-branchens Uddannelsessekretariat
Højnæsvej 71, DK-2610 Rødovre | Phone: +45 3672 6400 | E-mail: evu@evu.dk