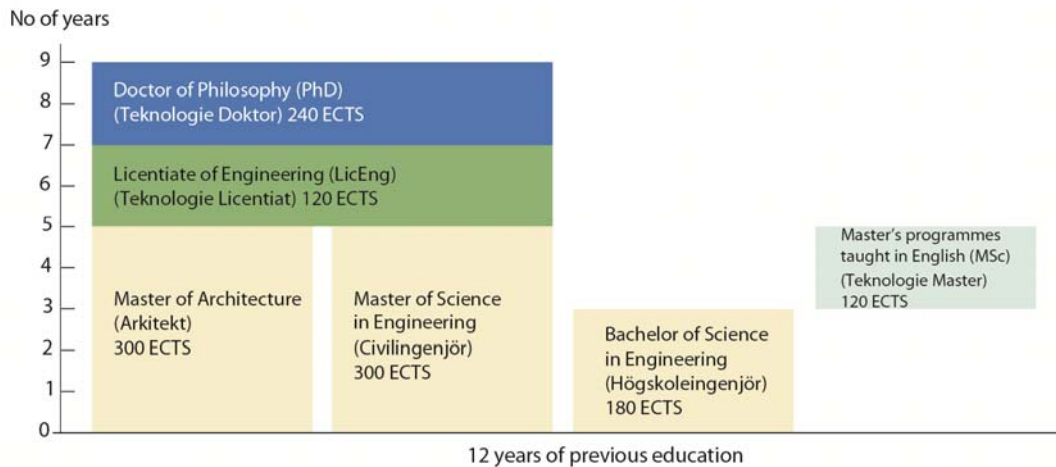


# The Licentiate of Engineering Degree

Note: The information in this document applies to Swedish postgraduate studies.

## Introduction

The *Licentiate of Engineering (LicEng)* is an intermediate postgraduate degree used only in a few countries, among them Sweden and Finland, and can be seen as an academic step halfway between a Master's and a PhD.



In Swedish, it is called *Teknologie Licentiat*, usually shortened in daily speech to just "*lic*" [liss]. The abbreviated form (as seen on business cards and in CVs and résumés) is *Tekn. Lic.*

Due to Bologna process, the LicEng *could be* likened to a Master of Philosophy (MPhil) degree in the British system.

## Formal Requirements

Since July 2007, the formal requirement for admission to postgraduate studies in Sweden is a Master's degree or equivalent.

In this regard, there is no distinction made between those pursuing the degree of LicEng and those heading for the PhD. Both tracks require the student to start their studies in the same way, and the choice of graduating after the Licentiate or continuing towards the PhD is usually made when the Licentiate is near completion.

However, the formal requirements and procedures for attaining the LicEng degree differ widely between universities and faculties, as well as between departments and divisions within the same academic institution. In neither case are they as strict as those of the PhD.

It is also worth noting that the Licentiate degree is no formal requirement for getting a PhD. Instead, it is up to each head of division or department to decide whether a student

should complete this degree, or skip straight to the PhD. As a result, many Swedish PhD students never complete a Licentiate as part of their doctoral studies.

On the other hand, some PhD students choose to end their postgraduate studies after completing the Licentiate degree, which is considered normal practice.

## **Length of Studies**

The Licentiate of Engineering corresponds to 120 ECTS, or nominally two years of full-time work, whereas a Swedish PhD amounts to 240 ECTS, or a nominal period of four years of full-time work (1.5 ECTS equals one week of full-time studies).

However, as a result of the differences in requirements and individual performance, the time to complete a Licentiate of Engineering degree varies. Normally, it should take around 2 ½ years, i.e. half of that of a PhD, if teaching and other departmental responsibilities are included.

## **Discussion**

So is the Licentiate good or bad? It depends. If you want a fallback option after half a PhD, it is excellent because it is your only choice. If you plan to work in a country where academia and industry know what the degree means, it is even better. This is indeed the case in Sweden, where the Licentiate seems to be well known in industry. However, if you only care about the PhD and want to complete it in as little time as possible, or if you are likely to apply for your first job in other countries, it is less useful.

I would say that the benefits of doing the Licentiate include several lessons learned as a result of having to write the Licentiate thesis, as well as being given the option to finish with a degree after half the PhD time. The experience resulting from the former, should, at least in theory, increase the quality of the PhD dissertation, while the safety of the latter might serve to attract a higher number of applicants. Those who do end their postgraduate studies after the Licentiate will also be happy to find that their degree is well known in Swedish industry.

A major drawback, however, is that a PhD following a Licentiate takes longer to complete; about six months according to my own estimate (other people's mileage may of course vary). It is also debatable whether so much effort should be spent on something with so limited international credibility, especially given the objective of the Swedish postgraduate programme to be internationally competitive.

To further complicate matters, there are different understandings of what a Licentiate degree means in other countries. In [Mexico](#) and [Brazil](#), the Licentiate (*Licenciatura* in Spanish and Portuguese) is an undergraduate degree. In both countries, the *Licenciatura* is equivalent to a Bachelor's degree, but usually given in engineering, art, education or pedagogical studies.

Against this it may be argued that the focus should be on the Licentiate as a *learning process*, rather than as a *recognised degree*, and that this learning helps meet the objective of producing internationally competitive PhDs.

Regardless of which, few PhD students are ever given a choice: the Licentiate is either compulsory or not.

Ideally, however, the same rules should apply within the same school, and most definitely within the same department or division. Knowing what rules apply before applying allows for better planning and comparison, and applying the same rules to everyone in an organisation is a simple matter of fair treatment. Today, this is not always the case.

My suggestion would therefore be to either make it compulsory for everyone in the same type of comparative group (whether that should be a division, department or faculty is a question I will leave out for now), or allow everyone to choose for themselves. After all, this is a matter of people who are expected to make difficult decisions later on in life.

## **Conclusions**

The Licentiate of Engineering degree has both advantages and disadvantages. From an international perspective, it is a degree that lives in academic and industrial obscurity. In Sweden, one of the few countries where it is used, it suffers from a set of formal requirements that lack standardisation across the entire academic field. The result is an unfair and disrespectful treatment of postgraduate students.

If you are considering one or several postgraduate positions, make sure you discuss these policies with your supervisor or the head of department before applying or accepting anything.

## **Further Reading**

- Liten ordlista om titlar (<http://www.wordforword.se/titlar.htm>)  
American and British English translations of Swedish academic titles (in Swedish).
- Postgraduate studies for PhD and Licentiate of Engineering ([https://www.kth.se/eng/education/application\\_admission/postgraduate.html](https://www.kth.se/eng/education/application_admission/postgraduate.html))  
Information from the Royal Institute of Technology (KTH), Sweden (in English).
- World Education Database (<http://www.wes.org/ca/wedb/ecountrylist.htm>)  
Example of differences: in Mexico, Colombia and Brazil the Licentiate (*Licenciatura*) is an undergraduate (Bachelor) degree.

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