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Universities: How to become a TeachHy partner

TeachHy offers its network partners access to its educational material and the use of the MSc course modules available on the TeachHy web site. Any university being able to offer 20 to 30% of the course content locally (face-to-face), can draw on the other 70 to 80% to be supplied by the project. This will allow any institution to participate in this European initiative with a minimised local investment. TeachHy will offer help in local accreditation of the course and quality control of the course delivery, and student support. Schemes of Continuous Professional Development (CPD) can also be integrated into the teaching offer. The project will in the future cover the prevalent languages in the EU and educational systems in Europe. The associated network currently has over 70 partners, including two IPHE countries, and a strong link to international activities in education via the T.I.M.E. network.

Partnering universities will be required to pay a moderate annual license fee which will be used to maintain and update the educational materials.

Please contact Jean-Luc Delplancke for further information: delplje@gmail.com

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For regular updates and information, please go to our web site:

<http://www.teachy.eu>

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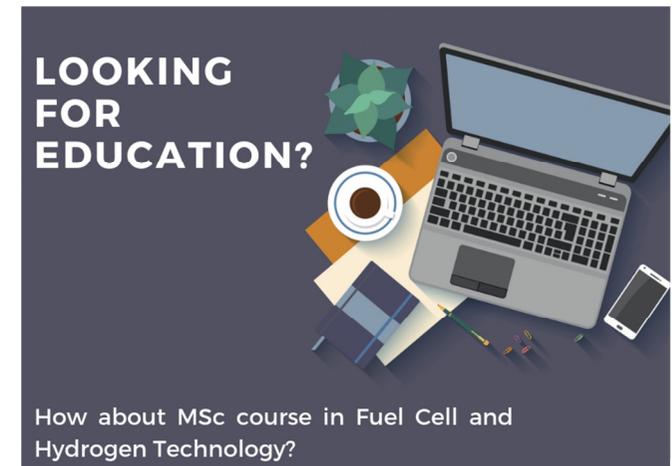
The TeachHy consortium:



A European MSc Course in Fuel Cell and Hydrogen Technologies



2020 academic year uptake



FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING

TeachHy is taking a lead in building a repository of university grade educational material, and is designing and running an MSc course in FCHT, accessible to students from all parts of Europe (and actually worldwide). A core group of highly experienced institutions working with a network of associate partners (universities, vocational training bodies, industry, and networks) to establish the course content and provide it on a Learning Management System (LMS) via internet access. TeachHy offers associate partners access to its educational material and the use of the MSc course (see over).

How can students take the course:

Partnering universities have access to the course material and register the course at their university. Students have to enroll at a partnering university and can then study for the MSc degree.

The course is structured as a 'blended' course, that is, part of it (typically 30%) is delivered in conventional lectures, the remaining 70% online. Exams, the final research project (thesis), and all or part of the laboratory work are also taken at the university the student is enrolled at. All rules of enrollment, studying, exam regulations and degrees of the partnering university apply. Depending on university, tuition fees might be charged and the course may take 12, 18 or 24 months.

The course is divided into a 'compulsory' part with 7 modules (see list) and further 11 'optional modules' out of which 5 have to be chosen. Further modules will be added as they become available. For universities offering longer courses (18 or 24 months) 'additional' modules are available in order to offer detailed training in specific topics.

Lecture language: currently English.

Other languages to be added.

Enquiries on partnering universities and course details;

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List of modules

Compulsory

Thermodynamics, electrochemistry, chemistry

Fuel cell technology

Hydrogen (production, storage, handling),
fuels (P2G, P2X), electrolysers

Fuel cell modelling tools and control

Characterisation methods

Lab experience

Hydrogen safety

Optional

Environmental analysis, life cycle analysis

Low temperature fuel cells (materials, stacks,
thermodynamics, electrochemistry, chemistry)

High temperature fuel cells (materials, stacks,
thermodynamics, electrochemistry, chemistry)

Low temperature systems

High temperature systems

Advanced characterisation

High temperature chemistry for SOFCs/SOEs

Fuel cell electric vehicles

Politics, markets, regulation, codes and standards

Energy systems and storage

Advanced modelling

Additional

Electrocatalysis

As the FCHT industry gradually emerges into the markets, the need for trained staff becomes more pressing. The TeachHy project addresses this issue by supplying graduate education (MEng/MSc, PhD etc.) in fuel cell and hydrogen technologies (FCHT) in form of a Masters' Course (MSc) offered across Europe.

TeachHy will also support student and industry staff mobility and training by giving access to placements, and schemes of Continuous Professional Development (CPD). Other project activities include educational material for the general public, politicians, stakeholders, decision makers, and certification officers (e.g. MOOC's and 'short courses').

TeachHy will build a business model so that operations can be continued post-project, and can act as a single-stop shop and representative for all matters of European university and vocational training in FCHT. The project partnership covers the prevalent languages and educational systems in Europe. The associated network has over 70 partners, including two IPHE countries, and the members of the T.I.M.E. university network

The project strives to deliver a substantially improved teaching of Fuel Cell and Hydrogen content across Europe from the year 2020. TeachHy will provide high-quality, harmonised educational content and infrastructure for FCH education to be shared across a network of currently more than 80 educational and training institutions in Europe.

The innovative contribution is that TeachHy will enable institutions to offer educational courses that would otherwise not be available locally, and allow students access to a mix of both face-to-face and e-learning content across borders. Any educational institution across Europe that fulfils minimum requirements and adheres to the project quality standards of delivery can participate in these activities. The network will be grown while the project is active with a final goal of around 200 institutions participating. This would probably represent the maximum number of institutions across Europe that could be willing and suitable to participate in the project programme.