Objectives of ECVET

In the overall context of European educational collaboration ECVET is designed to improve transparancy and approval of vocational qualification in Europe.

Furthermore ECVET supports mobility during vocational (initial) education training) in Europe and the idea of life-long learning.

With this, apprentices will receive not only extended professional competence but also cross-cultural insights and obtain expatriate experience.

ECVET Modules in Chemlab

In the second year of the „European chemical laboratory technician" ECVET modules with different analytical topics will be conducted. Each student will complete two modules: that of his home country and one abroad.
The following focus topics are offered:

- Food analysis (Germany)
- Cosmetic analysis (Poland)
- Environmental analysis (Greece)
- Water analysis (Turkey)

Later on these modules are to be used by other apprentices of the chemical industry as well, which will then possibly be acknowledged as part of an international education.

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ECVET

European Credit System for

Vocational Educational Training

within the scope of

Chemlab

Leonardo da Vinci
Transfer of Innovation
Part of the European Commission's
Lifelong Learning Programme

Lifelong
Learning
Programme

2011-2013

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ECVET

European Credit System for Vocational Educational Training (ECVET)

ECVET is a form of common European currency for vocational education. Since 2005 this system is to be developed to enable a common European appreciation of learning outcomes.

The fundamental concept of ECVET is based on splitting qualification in units and the description of expected learning outcomes of these units. For this concept it is not important how long someone has studied something, but what knowledge, skills and competence he or she has gained.

The learning outcomes are pooled to learning units and evaluated with credit points. By this ECVET enables the collection of credit points for standardised modules.

ECVET modules in Chemlab comprise a continuative theoretical education regarding specialized analytical topics. Additionally to that special chemical techniques are learnt during the hands-on training part.

Then the student has to demonstrate the self-reliant use of the acquired knowledge in a self-contained project.

During the monthly module the international group of students deals with various analytical techniques and an overall project theme (for example: Carotenoids in food stuffs).

For example the module food analysis comprises the following learning units and learning outcomes:

⇒ Sampling and sample preparation
e.g. Freeze drying, homogenisation

⇒ Methods of extraction
e.g. SPE, Liquid-liquid-extraction

⇒ Methods of separation
e.g. RP-HPLC, HILIC, isocratic and gradient elution

⇒ Identification and quantification
e.g. UV-Vis, mass spectrometry, IR, NMR, calibration, recovery

⇒ Data evaluation and interpretation
e.g. Software for data evaluation, presentation of results

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