



**Project name: Innovating Education of Talents
in Chemistry for Business Success
in SMEs' Innovations – InnoChem**

Project output: Action Plan – Greece 2017

Activity: O5-A2

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Summary of main outputs - Road Maps

The project seeks to identify the potential lack of fit between the skills training for engineers and scientists that European educational establishments currently provide and the skills that may be required by the chemical industry to support innovation in the future. The first critical step was therefore to identify with the industry the skills required for future engineers and scientists and the final objective was to validate and improve current courses at higher educational institutions and, if necessary, to stimulate the development of new courses that meet the future skills needs of the chemical industry. The purpose of the SQA was to get SMEs' view about the future of their sub-sectors of the chemical industry - rather than issues which may be specific to each company. SQA's main target was to obtain a picture of the demand for specific skill sets needed to ensure that the chemical sector is well placed to meet tomorrow's societal challenges.

Some of the main measures which have been defined from the Roadmap were:

2. Short-term actions

2.1. New curriculum

Leading organization: NTUA

Sources of funding: NTUA

Time schedule: October 2017 the adaptation

The new curriculum will be adopted from the next academic year 2017-2018 and will be evaluated after 2 years of marketing implementation.

2.2. Expanding communication with students, academia, industry partners & society in general

Leading organization: NTUA

Sources of funding: NTUA

Time schedule: October 2017, continuously

- ✓ Strengthening of the content of the course websites with educational and tutorial materials. Create active websites in all courses (undergraduate and graduate).
- ✓ Updated CVs of all faculty members and auxiliary staff in the School website. Increasing the percentage of faculty members participate in academic-research networks (Google Scholar etc.).
- ✓ Continue and expand outward actions (participation in meetings, conferences, presence in research "events", etc.) for the presentation of the overall project of the School.
- ✓ Continuing the dialogue with the industry sector and association of professional chemical engineers. Participation of the School Units in the General Assemblies of HACL.
- ✓ Monthly management discussions with students and employees.
- ✓ Annual meeting of former graduates and employers with students. Improving the connection of the Chemical Engineering School with alumni. Inclusion of soft skills lectures is conditional on finding an external source of funding e.g. from EU funds, donations etc.
- ✓ Constant communications with Industrial Partners and the Public through social media (such as Facebook page).

2.3. Increasing the attractiveness of the study

Leading organization: NTUA

Sources of funding: NTUA

Time schedule: October 2017, continuously

- ✓ Strengthening the initiative of excursions to industrial operations to review current status and updates. In order to apply this activity, it will also be necessary to cooperate with industrial partners and their interest in future graduates of technical schools and interest in cooperation on their education.
- ✓ Promoting Chemical Engineering among the young generation by participating to:

a) Researcher NIGHT:

NTUA as other universities and research centers organize annually the research night, an event founded by Horizon 2020 where the public visit NTUA facilities and can actual participate in simple experiments and lectures.

b) Science and Innovation Festival:

The Science and Innovation Festival, Athens Science Festival, started in 2014 and in the years it has established itself as one of the biggest celebrations of science and technology in Greece.

Every spring, for a week, residents and schools in Athens explore science through fun, innovative and interactive ways. At the same time researchers, teachers, renowned scientists and artists do their best to explain their science and make the viewer part of. t also entertainment. The Athens Science Festival is organized by the educational organization "Science Communication - SciCo», the British Council, the City of Athens Technopolis, the Scholars Association of the Onassis Foundation and the General Secretariat for Research and Technology in cooperation with many academics, research institutions and educational organizations. Chemical Engineering School and its basic labs fully support Athens Science Festival by participating all these years.

c) Visits of High-School students:

Several visits from High-School students will be organized annually in order to create a real picture of what chemical engineering means.

Also, professors and members of the Board of the Hellenic Association of Chemical Engineers in collaboration with the School will visit High-Schools in order to inform students about the science and its future perspectives.

3. Medium-term actions

Leading organization: NTUA

Cooperating organization: NTUA, HACI, HACE

Sources of funding: NTUA, External financing via EU funds

Time schedule: 2018/2019

- Overall elaboration of a Strategic Action Plan for educational, research and other operational issues.
- Improving research awareness of the School through growth of publications in high impact journals and stronger assertion of European programs and international partnerships.
- Responding to the continuous increase of the average patent acquisition time.
- Implementation of a "culture of evaluation" in all activities of the School (education, research, administration). Extension of foreign communication and cooperation between universities.

