PROFESSIONAL EDUCATION IN THE FRAMEWORK OF THE EURATOM FP7 GENTLE PROJECT


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Abstract – The Euratom GENTLE project is a pan-European effort pulling together the leading institutions in the field of nuclear engineering and education to create a sustainable lifelong learning programme in the field of nuclear fission technology. Directly targeting the needs of industry, research, regulatory and TSO organizations, three different learning programmes have been developed: 1) support for student research experiences (where graduate and undergraduate students can apply for internships at GENTLE partners), 2) inter-semester courses for undergraduate and graduate students on topics outside regular curricula (organized at partner institutes) and 3) a professional education programme (targeting professionals with at least 5 years of working experience, not necessarily in the nuclear field) that are intending to work in the nuclear industry. These programmes will be available for the public in 2015-2016. More information can be found at www.gentleproject.eu/.

I. INTRODUCTION

Nuclear safety and security are of prime concern in our society. A highly skilled and well-educated workforce is essential to maintain the civil nuclear reactor fleet safely, to decommission obsolete plants, to be involved in new build projects, and to deal with legacy and future radioactive wastes. This workforce helps the nuclear industry, technical safety organizations (TSOs), and the regulatory bodies to provide employment and competitiveness in the long term and maintain their strong international position.

To support the training of students and the education of professionals, the GENTLE project (Graduate and Executive Nuclear Training and Lifelong Education, www.gentleproject.eu) was launched within the 7th Framework Programme of the European Commission.

GENTLE is a pan-European project in the field of education in Nuclear Energy. It brings together leading institutions with the aim of creating a sustainable lifelong learning programme in the field of nuclear fission technology that meets the needs of relevant stakeholders (industry, research, regulatory and TSOs).

In addition to providing financial support for training of students via Student research experiences (advertised on www.gentleproject.eu), the GENTLE project offers two types of professional education. First, Intersemester courses are offered for graduate and postgraduate students on special topics that are generally not part of the academic programme. Second, Executive professional education is provided as a five module programme targeted at professionals developing their knowledge of nuclear reactors and fuel cycles. All courses are taught in English.

The GENTLE network consists of 11 participant organizations (see Table I) and 12 stakeholders, and could be extended in follow-up programs. GENTLE is a practical manifestation of the European Credit system for Vocational Education and Training (ECVET) framework that facilitates the accumulation and transfer of credits for learning outcomes from one qualifications system to another. ECVET aims to promote transnational mobility and access to lifelong learning. It is not intended to replace national qualification systems, but to achieve better comparability among them. ECVET applies to all outcomes obtained by an individual from various education and training pathways that are then transferred, recognized and accumulated in view of achieving a qualification. This initiative makes it easier for European residents to gain recognition of their training, skills and knowledge in another Member State.