

Call for proposals: Erasmus+ Capacity Building in the Field of Higher Education 2018

WHAT IS A CAPACITY-BUILDING PROJECT?

Capacity-building Projects are transnational cooperation projects based on multilateral partnerships, primarily between higher education institutions (HEIs) from Programme and eligible Partner Countries financed through the above-mentioned instruments. They can also involve non-academic partners to strengthen the links with society and business and to reinforce the systemic impact of the projects. Through structured cooperation, exchange of experience and good practices and individual mobility, Capacity-building Projects aim to:

- support the modernisation, accessibility and internationalisation of higher education in the eligible Partner Countries;
- support eligible Partner Countries to address the challenges facing their higher education institutions and systems, including those of quality, relevance, equity of access, planning, delivery, management and governance;
- contribute to cooperation between the EU and the eligible Partner Countries (and amongst the eligible Partner Countries);
- promote voluntary convergence with EU developments in higher education;
- promote people-to-people contacts, intercultural awareness and understanding.

Joint Projects: aimed at producing outcomes that benefit principally and directly the organisations from eligible Partner Countries involved in the project. These projects typically focus on three different types of activities:

- curriculum development;
- modernisation of governance, management and functioning of HEIs;
- strengthening of relations between HEIs and the wider economic and social environment.

PROJECT Memo

Proposal Title	Master's programme in Bioinformatics (tentative)		
Region		REGION 6 Asia Afghanistan, Bangladesh, Bhutan, Cambodia, China, DPR Korea, India, Indonesia, Laos, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam	
Project category	Category A: Curriculum development Subject area: HEALTH Multi-country project within one single region, involving at least two countries from this region		
Proposal IDEA	<u>Aims& objectives:</u> The main objective of the proposed project is the development of a joint Master's programme in Bioinformatics (OR Data Mining in Bioinformatics OR Bioinformatics in Medicine OR Medical Diagnostic Technologies OR Biomedical Informatics OR or else/relevant) in Asian countries, aiming at predictive modeling for personalized treatment. The programme will focus in the study of biological mechanisms through the use of a wide range of computational tools in order to overcome the issues of significant measurement variation and the overwhelming complexity which is inherent in the biological systems.		
Aims& objectives Evidence of the issue Proposed activities Expected results			

	<p><u>Evidence of the issue:</u></p> <p>Bioinformatics is an exciting and challenging field that merges computer science and biosciences into a single discipline. It is the science of managing, analysing, and integrating biological data using advanced computing techniques, thus facilitating the transformation of massive data sets into biomedical knowledge and understanding. Bioinformatics and computational biology are at the core of modern biomedical research and they hold promise for fascinating future scenarios, such as personalized medicine.</p> <p>Prospects in the field of bioinformatics include its future contribution to functional understanding of the human genome, leading to enhanced discovery of drug targets and individualised therapy.</p> <p>The WHO has recognised the use of information and communication technologies (ICT) as a core competency of the 21st century healthcare workforce to support patient care. Thus, professionals well-trained in the use of ICT are highly needed. Training programmes in Biomedical Informatics have emerged over the last 40 years, especially in developed countries.</p>
Types of partners required	<ul style="list-style-type: none"> • Minimum three Higher education institutions (HEIs) from EU countries; • Research Institutes; • Minimum two HEIs from each Partner Country taking part in the project; • Private Information Technology Companies;
Duration	3 years
Estimated budget	Maximum EU grant 1.000.000 euro
EU funding programmes/Actions	Capacity Building in the Field of Higher Education 2018
Deadline	08 February 2018

Project Structure – Activities – WPs (Indicative-Tentative)

WP1: State of the Art in Bioinformatics Master Degrees & Needs Assessment on MSc Programme Profile

The specific objectives of this WP are:

- Map the state of the art in Bioinformatics Masters degrees in the EU and Asia, outlining their different approaches regarding the learning basis and methodologies
- Analyse comparatively the state of the art in Bioinformatics Masters degrees in the EU and Asia, and their different approaches regarding the learning basis and methodologies
- Identify the needs of the Industry, of the socio-economic and political stakeholders, of the students, as well as of the staff (both academic and administrative) of the Universities in the partner countries, with reference to the Masters degrees in Bioinformatics
- Identify the strengths, weaknesses, opportunities and threats (SWOT) of existing Master degrees in Bioinformatics offered by Asia partner HEIs, aiming at enhancing the strategic planning toolbox for the reform of those curricula and the development of new ones.

- Assess the transferability of the strengths of the EU curricula identified through SWOT, to Asia context

The successful implementation of this WP will equip Project partners with an in-depth understanding of the factors influencing the design of curriculum components, meaning a) Vision (goals and purposes of the curricula – WP2), b) Operationalization of the vision (development of curricula structures, contents, methodologies – WP4), c) Delivery of curricula (WP6) and, d) Evaluation (WP7), and will be the starting point of the paradigm shift among all involved: the higher education institution administration, the teachers, the students, as well as the stakeholders outside the higher education institutions.