

## **Erasmus+ / Capacity building – Joint Project**

**Title: Innovative STEM Joint Programmes at Indian universities for enhanced internationalization and employability – JP4India**

### **Description of the Project**

What is the rationale of this project, in terms of objectives pursued and needs to be addressed?
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The scope of the project is to develop a framework supporting the establishment of efficient and innovative joint programmes in the field of STEM between European and Indian Higher Education Institutions. These type of programmes seem to be extremely rare in the field of Engineering and Science but the extensive experience of the European part of the consortium with the external support of the CLUSTER network in designing Joint Programmes will provide an ideal platform to develop a number of pilot programmes with the ambition of establishing a standard that could be adopted by any other institution in the future. The newly created joint programmes should aim at a high level of employability of the graduates by taking into consideration the needs of the employers and make active use of their expertise throughout the process.

This will be carried out by:

- 1) Analyzing the state of the art and identifying best practices in existing Joint Programmes in the field across the two Regions
- 2) Carrying out an extensive analysis on the perceptions and expectations of the stakeholders through:
  - a. A survey aimed at identifying what works and what doesn't and what actions are required to create programmes of higher quality and enhanced impact on the employability of the graduates.
  - b. Interviews with key individuals to deepen the understanding of the situation resulting from the quantitative analysis
- 3) Development of guidelines and directives to develop the new Joint Programmes (transferable to all institutions in Europe and India)
- 4) Training events both in Europe and India to test the usability of the results by programme directors/developers
- 5) Development of pilot JPs at each partner university
- 6) Dissemination events in both Europe and India to extend the impact of the project on non-partner institutions

Joint Programmes have represented one of the main tools for the internationalization of HEIs in Europe since the early 90s and are now a reality of the EHEA and a crucial component of the internationalization strategies of the European universities. A great amount of experience on the development and management of intra EU joint programmes has been generated but Joint Programmes between EU and Indian partners is a more recent phenomenon that needs a general framework and more efforts in order to actually impact the internationalization strategies of the HEIs from both regions. For this reason, the EU partners of the consortium consider that this project and its objectives are crucial to boost this kind of cooperation by making use of the above mentioned experience to support the Indian partners in developing contents, teaching methods, support activities and processes needed specifically for this kind of programmes.

A very limited number of Joint Programmes between EU and Indian institutions have been developed in the past decade but they seem to be the result of ad-hoc individual initiatives, with limited size, limited impact and very different level of quality and performance throughout Europe. Moreover, there doesn't seem to be a sufficient impact analysis and very limited links with the needs of the labor market in terms of learning outcomes and very limited involvement of companies active in both regions. It is the ambition of this project to tackle this gap.

Another outcome of the project will be to provide evidence and tool for recruiting the most suitable students to these joint programmes and therefore increase their relevance and impact in both regions. Who are the students who decide to enroll in these programmes? What are their ambitions and expectations? What happens to them after graduation? What kind of jobs are they offered? Are they comparatively better off than the peers who decided to stick to the home traditional degree programmes? What are their opinions and their satisfaction level about these programmes? What are the elements that convince a certain group of students to go for these programmes and what are the ones that prevent other from doing so? The project aims at answering these and many more questions taking into consideration both quantitative and qualitative data from a multi-stakeholder perspective.

At the end of the activities it will be possible to reach the following general objectives:

- Provide the students from both regions with a clear picture on what kind of scenario they can expect to face when registering to a Joint Programme. This should help the universities to recruit a higher number of motivated and fully aware students;
- Issue a set of recommendations/guidelines on how to improve existing Joint Programmes in the light of the feedback received by the stakeholders and how Programme Directors can create new effective and attractive ones both from the point of view of students and employers.

## Partners:

### EU:

1. KTH (Sweden - coordinator)
2. IST (Portugal)
3. Aalto (Finland)
4. UPC (Spain)

### India

5. IIT Madras
6. IISc Bangalore
7. Vellore Institute of Technology
8. IIT Bombay
9. IIT Kanpur
10. IIT Guwahathi

## Work Packages:

- 1) State of the Art and repository of best practices (Month 1-4) - Aalto
- 2) Quantitative analysis: survey among students and alumni from the EU and Indian partners and beyond (Month 5-12) - IST
- 3) Qualitative analysis: interviews to alumni, current students, programme directors, university management and employers (Month 13-18) - KTH
- 4) Guidelines for the development of innovative and efficient (in terms of employability) JPs between EU and India (Month 19-26) - UPC
- 5) Training: internal and external training courses for university professionals and field visits of EU programme directors to India and vice-versa (Month 22-36) – Indian partner 1
- 6) Development of JP: a number of pilot JP are created and launched (Month 27-34) - IST
- 7) Quality assurance (Month 1-36) – KTH
- 8) Dissemination and exploitation of the results: Mid-term open event in EU and India, Final event in EU and India, presentation of the results at EAIE, APAIE, and other HE conferences in the second phase of the project (Month 18-36) – Indian partner 2

### Project meetings:

- Month 1: Kick off and definition of the State of the Art Report structure and contents – Indian partner 1
- Month 4: Final approval of the SOTA report contents and elaboration of the questionnaire - IST
- Month 10: Analysis of the survey results and discussion on the report - IST
- Month 13: Elaboration of the contents and structure of the interviews, timeline and methodology – Indian partner 2
- Month 17: Analysis of the interviews and discussion on the report and guidelines structure - KTH
- Month 21: Coordination meeting, study visit of the Indian developers to Europe and preparation of the training events – UB
- Month 26: follow up of the internal training events, identification of the pilot JPs to be developed and approval of the guidelines – Indian partner 3
- Month 30: follow up meeting on the development of the pilots with the participation of the developers from both sides and planning of the external training events (non-partner universities). Planning of the dissemination – Indian partner 4
- Month 34: evaluation of the pilots and event to launch and promote the programmes in Europe - KTH
- Month 36: Final event in India – Indian partner 5

### EACH PARTNER COMPLETES THE TABLES BELOW

- Please provide a general presentation of your university followed by a specific description on the experience of your institution in Joint Programmes and in cooperating in general with European partners in the case of Indian universities or Indian partners in the case of European universities)
- Enter at least 2 persons (possibly more) that will be involved in the project activities. These persons can be either academics or administrators (possibly at least one per category) and should have experience in international affairs, project management, or development of joint programmes.

<b>Partner number</b>		<b>P1</b>
<b>Organisation name &amp; acronym</b>		

**D.1.1 - Aims and activities of the organisation**

*Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).*

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*Please describe also the role of your organisation in the project (limit 1000 characters).*

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**D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project**

*Please add lines as necessary.*

<b>Name of staff member</b>	<i>Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.</i>