

Curricula Enrichment for Sri Lankan Universities Delivered through the Application of Location-Based Services to Intelligent Transport Systems

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SUMMARY

Sri Lanka faces many transportation challenges. Constraints such as timely access to modern technology and the lack of appropriately trained personnel have contributed to increasing social, economic and environmental concerns around road safety, pollution and transport inefficiencies. The project LBS2ITS will address these issues through enrichment of the University curricula; specifically, the integration of LBS (Location-based Services) into ITS (Intelligent Transport Systems). LBS deliver information based on the location of objects. Smart transportation is therefore an ideal LBS application since it is based on locating people (e.g. using smartphones) and objects (e.g. cars, trains, etc.). As LBS evolve rapidly, there is an increasing need to train the next generation of skilled professionals who can leverage these new capabilities. This is important for Sri Lanka, where population growth and resource constraints demand the urgent use of emerging technologies to secure the safety and sustainability of their society. This level of education is in its infancy and cannot rapidly deliver the knowledge inputs required to change transport management decision-making. The Erasmus+ project LBS2ITS aims at a fully immersive and integrated teaching and learning experience. The outcome will be a digital learning environment supporting synthetic and real-world learning experiences encouraging self-paced learning modules for both teacher and students. It will contain digital resource kits for interaction with modern equipment, continuous assessment and two-way feedback. Webinars and virtual experiences will underpin real-world Problem-based Learning (PBL) scenarios. A key novelty will be inclusion of industry representatives and external experts in the advisory groups. These will support our dissemination and quality control initiatives, the relevance of the PBL and student learning outcomes. Mentorship and a focus on cultural awareness, gender equity and social parity will govern our principles for curricula enrichment.

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