

Knowledge Transfer Partnerships at London South Bank University

What is KTP?

Knowledge Transfer Partnerships (KTPs) are government funded programmes designed to help businesses improve their competitiveness and productivity through the better use of the knowledge, technology and skills available within UK Universities. Our academic team working at the interface between academia and business maintain strong links with employers, professional bodies and public and private sector enterprises making them ideal for these partnerships.

Benefits of KTP

The company or organisation gets:

- Associate 2-3 years full time with qualifications and experience required by your company
- Works in your company on your projects
- Specialist expertise and technical advice from LSBU
- LSBU academics work closely with the Associate to implement company goals
- **Budgets include** employment costs, training, travel and equipment

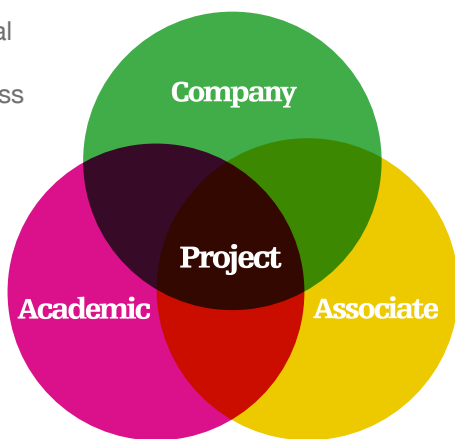
Your Project

At the heart of every Knowledge Transfer Partnership scheme is a project with specific strategic objectives. A high-quality graduate (a KTP Associate), supported by the academic expertise at LSBU, will work exclusively on the project at the company to deliver tangible results.

In order to apply for a KTP a company must have a project in mind that needs external knowledge to develop and is of strategic importance to the business. It must also have a commercial edge and see a healthy return on funding.

Company
needs additional expertise to improve business

Academic
provides expertise and assists with implementing the goals of the company



Project
created by company to improve business

Associate
experienced graduate works for company to carry out project



Centre for Knowledge Transfer

90 London Road, London SE1 6LN
T 020 7815 6922
F 020 7815 6915
ktpinfo@lsbu.ac.uk
www.ktp-lsbu.co.uk

Knowledge Transfer Partnerships

All Partnerships received financial support from the Knowledge Transfer Partnerships programmes (KTP). KTP aims to improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK knowledge base. KTP is funded by Technology Strategy Board along with other Government funding organisations.


Centre for Knowledge Transfer

Building Services Engineering & Construction

- Construction Management and Economics
- Urban Design and Development Strategies
- Commercial and Industrial Architecture
- Environmental and Sustainable Futures

- Post Occupancy Evaluation
- Indoor Air Quality
- Energy Use In Buildings
- Building and Property Services
- Thermal Systems, Refrigeration and Cooling

- Architectural Technologies
- Cost Planning and Whole Life Costing
- Building and Fire Legislation



When Universities and Business work together good things can happen...

Building Services Engineering and Construction

London South Bank University has always been at the forefront of the Building Services Engineering and Construction industry and has maintained a highly regarded reputation in this field. The faculty can provide the academic expertise,

resources and future specialists for the multifaceted needs of the property and construction sectors. The academics have a unique relationship with the industry and are well aware of the problems facing the property, building services and

construction sectors at present. Areas such as climate change, energy supply and conservation, environmental sustainability and quality need the attention of properly trained professionals and will thus drive growth within the business sector.



Be Lean, Be Clean and Be Green

“The building industry has become a key part of the planning process in considering what the energy consumption of a building is going to be in order to get permission to build,” explains David Long, Chairman of **Long and Partners**.

New Building Regulations under the London Spatial Development Plan have made it mandatory to consider renewable energy and low cost carbon technologies in all new developments and major refurbishments.

In London, planning permission will not be granted unless such provision is clearly identified and quantified. In order to achieve this, L&P, with the help of a KTP programme at LSBU, have developed a financial and engineering software tool, Green Wizard, which automatically calculates possible costs of achieving the required carbon performance of buildings.

There is a wide range of technology permutations that can meet the carbon reduction targets, but with highly variable costs.

To find the optimum solution for a particular building will be a one-off design that works exclusively for that site. However, such solutions require intensive and expensive design work. Simplifying this design process will generate considerable competitive advantage. “Green Wizard has raised our standing. No-one else has a tool that is as client friendly whilst also using secure and robust information. We have a clear differential from the competition,” says David.

KTP associate, Giovanni Privetera says “The Green Wizard has allowed us to show our clients at the very initial stage of a project how different low and zero carbon technologies impact on the carbon performance of a range

of buildings. Results are calculated with an accuracy within 10% of what the end calculations will be.”

LSBU Academics, Professor Tony Day and Dr Gurjeet Dhesei, provided expertise in energy reduction technologies and the ability to evaluate them comparatively on technical, economic and financial bases. “At LSBU we have years of experience designing building services and engineering systems and developing software tools for specialist analysis. This project has helped the industry estimate the value of renewable energy technologies,” explains Tony.

The existing building services engineering organisations provide a relatively labour intensive design service, with 2-3 days spent on working on a project, which is time lost if you fail to win the bid. Green Wizard can do this same work in just an hour! ♦

Continuous Commissioning (ConCom)

A logical strategic approach to carbon and energy management

Over the last 10 years, ABS Consulting, a consultancy service provider to owners, managers and occupiers of buildings, has enhanced and consolidated its service products to be delivered through the process of Continuous Commissioning (ConCom). To increase the commercialisation of this umbrella offering, KTP Associate Nadia Karagianni was appointed to lead the development of the Continuous Commissioning (ConCom) package which would present ABS' Carbon and Energy Management services in a more tangible and standardised way expanding the reach of its consultants and the company's market share.

The brains behind the Continuous Commissioning service is Director of ABS, Jim Ure, who explains, "it embraces the whole idea of carbon management and energy efficiency, from the initial concept of a building right through to demolition and building the next one. Involvement can take place at any stage." Jim also mentions that although there are many competitors in each component of the product, there are few, if any for the whole ConCom process. "We now have a product to offer that provides us with a marketing advantage and our clients with a service that enhances value while recuing or containing operating cost."

Continuous Commissioning, now the firm's main offering when delivering energy efficiency, carbon reduction, improved maintenance, optimum

operation and post occupancy evaluation, was developed into a packaged service offering by the KTP Associate in two stages. The first stage was about developing a promotional package that revolved around creating client facing corporate communication such as marketing brochures, case studies, sales presentations and a restructured website, all stressing a uniform corporate identity and a clear value proposition. The second stage was about developing analytical tools and support material to enable internal training, standardise analysis and reporting and to allow for the development of licensing agreements. This consultant facing analytical package included manuals of ABS' services and automated spreadsheets for Carbon footprinting, energy monitoring and scenario assessment. On applicable projects delivery time was reduced by 40%.

The new Continuous Commissioning package is currently being implemented for a client with

over 200 UK sites, a great achievement for ABS and the Associate. Nadia is extremely pleased with the work that has been accomplished on the KTP and is ready to begin new employment at ABS as a 'Carbon and Energy Management Consultant.' " Coming into the company as an outsider enabled me to see things with a fresh set of eyes and gave me the opportunity to lead positive change. The KTP had a tangible impact on the way ABS is both attracting and delivering projects."

London South Bank University (LSBU) academics Phil Jones and Mikko Arevuo were thrilled the progress the project made. Not only did the KTP provide them with valuable experience in their fields of industry but it also enabled them to validate theories and use live examples to feed into teaching. "This was such an excellent project because it transformed, so smoothly, a scientific project into a commercial proposition. Nadia was a key player in this transfer, the ideal Associate," said Mikko.

