

KNOWLEDGE TRANSFER PROJECTS WITH LOUGHBOROUGH UNIVERSITY

MECHANICAL & MANUFACTURING ENGINEERING	
Guttridge Services Limited	Develop an integrated business support management system to support the processing of orders from sales and quotations, to work order generation and shop-floor scheduling.
JCB Service (I)	To evaluate, design develop and implement low noise-emission vehicle systems, with particular focus on engine cooling, exhaust, and air induction applications.
JCB Service (II)	To evaluate, design develop and implement CANBus technological systems into off-highway vehicles to expand and optimise the electronics and control capabilities of JCB products at reduced costs.
JCB Service (III)	To evaluate, design, develop and implement surface hardening of cylinder bores by laser processing technologies for improved performance and service life of off-highway vehicle engines.
Campbell Scientific Limited	To develop new leading edge instrumentation utilising optical technology for more precise and comprehensive sensing of present (local) weather.
Campbell Scientific Limited	The research, design and development of a cloud base recorder (or ceilometer) which will measure the height of cloud layers above the ground and give an estimate of cloud cover.
Supply Point Systems Limited (I)	The specification and development of a new tool management software product to support engineering sectors, in particular the volume producers of metal components.
Supply Point Systems Limited (II)	To develop bespoke management strategies and support systems for the supply chain, production and quality control activities of a small OEM enterprise with a diversifying product range and rapid company growth.
Romax Technology Limited	Development of a model for vehicle manual transmissions design based on combined dynamics, tribology, bulk fluid flow and heat transfer analyses to mitigate frictional/mechanical losses.
Rolls-Royce Fuel Cell Systems Limited	Development and implementation of a 'decision support system and strategy' to optimise sustainable design, manufacture and end-of-life management of fuel cell power generators.
PC Interworks Limited	The programme aims to specify, design and develop the software capable of supporting flexible business to business systems integration between the company and multiple disparate and varying supplier systems.
Capricorn Automotive Limited	To develop the scientific/technological developments for in-cylinder friction reduction. The generic and sustainable knowledge base for rapid market response. The development of new advanced cylinder liners.
MATERIALS ENGINEERING	
Teer Coatings Limited	The development, application and testing of advanced coatings for the improvement of performance of tools used in the processing of plastics and rubbers.
Dartex Coatings Limited	To optimise the capacity of polyurethane coating and lamination lines by utilising alternative polymer technologies.
Elite Thermal Systems Limited	To develop an improved range of furnaces, using evaluation and advanced testing of state of the art materials, to achieve reduction in costs together with improvements in functionality and energy efficiency.
ELECTRICAL & ELECTRONIC ENGINEERING	
Autochair Limited	Research, design and develop a family of electronic 'aids' to assist disabled people with access and assistance.
IT / BUSINESS SERVICES	
Cursor Controls	To research, design and develop high performance systems programming for a new range of optical tracker ball devices for the industrial and commercial markets.

JC Kellett (Developers) Limited	To re-engineer business processes & implement appropriate MIS to improve overall business efficiency and provision of management information to cater for industry legislation and market demands.
RWA Rail Limited	To design and develop a fast, usable Artificial Intelligence tool for the construction and validation of train timetables, including the codification of highly complex rules and restraints.
ESiT Limited	To enhance the capabilities of ESiT's Active Data Management Toolkit by exploiting recent research ideas in task and knowledge modelling, adaptive workflow and web technologies.
University Hospitals of Leicester NHS trust (UHL)	To design, develop, implement and evaluate a user-focused Clinical Trials Support System (CTSS) and the necessary associated business processes.
CIVIL & BUILDING ENGINEERING	
Mouchel Limited	Development and implementation of a knowledge strategy which through suitable processes, infrastructure, cultural awareness and demonstrable value promotes the collection, dissemination and sharing of knowledge.
Alderburgh Limited	To determine and further develop the application and performance of a buried drainage attenuation system.
EMCBE	Developing a transparent mechanism for demonstrating best value in Local Authority project delivery through the effective use of Offsite Modern Methods of Construction (offsite-MMC).
Aquabio Limited	Develop new techniques for the optimisation of wastewater treatment to improve opportunities for re-use by reducing the effects of fluid viscosity and microbial blockages.
DESIGN & TECHNOLOGY	
Hy-PRO International Limited	The establishment of a modern Design and Development Department, supported by IT facilities including CAD/CAM, for innovative product development from concept to manufacture.
O E Component Limited	To develop and integrate an in-house industrial design capability that will significantly enhance the pro-active design capabilities of the company and to produce new product designs.
Rototek Limited	To develop and integrate an in-house industrial design capability that will significantly enhance the pro-active design capabilities of the company and produce new product design.
SOCIAL SCIENCES	
Cheshire County Council	To extend the Cost Calculator to cover health provision for looked after children, following customisation and implementation, use the calculations to introduce effective joint commissioning strategies.
Coventry City Council	To implement a full service Cost Calculator in a local authority, incorporating the total range of social services, education and other processes provided in support of "looked after" children, to improve the overall effectiveness and efficiency of service commissioning strategies.
PHYSICAL SCIENCES	
Scientific Vacuum Systems (I)	Development of processes and systems to coat polymer substrates with complex materials at low temperatures using PVD and reactive sputtering.
Scientific Vacuum Systems (II)	Commercialise and develop a novel low-temperature deposition process by designing and constructing a large-scale coating facility suitable for processing a wider range of materials.