

[ABOUT LOUGHBOROUGH UNIVERSITY](#)

[SCHOOL OF CIVIL AND BUILDING ENGINEERING](#)

**SYNTHETIC SPORTS PITCH DEVELOPMENT ENGINEER
(KTP ASSOCIATE)**

JOB REF: REQ15301

MAY 2015

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

A KTP (Knowledge Transfer Partnership) is a collaboration between a university and company, jointly funded by the Company and Innovate UK.

This KTP is between Loughborough University and [Technical Surfaces Ltd](#). KTP aims to help businesses to improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK Knowledge Base.

The KTP Associate will be based at the Company premises in Leicester.

1. Introduction to the Company

Technical Surfaces is the largest specialist artificial turf sports surface maintenance company in the UK. Established in 1998 the company was at the forefront of promoting the need for artificial turf sports surface maintenance. This was introduced by educating clients on the principles behind pitch maintenance and demonstrating the benefits by extending the useful life of these surfaces.

From its humble beginning of serving just one facility in Birmingham it now employs over 30 staff and carries out 300 maintenance visits every month. Its client base is national servicing facilities in England, Wales, Scotland and Ireland. The maintenance visits involve anything from routine brushing through to specialist refurbishment, as well as ancillary items such as repairs, linemarking etc.

As the UK's leading synthetic sports surface maintenance provider, Technical Surfaces works closely with the industry's principal manufacturers and construction companies to offer our customers the very best service. With over 35 years of industry experience, our unique skill set has led to many of the country's top pitch installers using Technical Surfaces as their preferred maintenance provider. These 'Partners in Excellence' understand the importance of having their pitches looked after from day one, to ensure maximum life expectancy and uphold their pitch-building reputation.

2. Overview of the Department

The School of Civil and Building Engineering is one of the largest of its type in the UK. We aim to develop and nurture the skill required to face the challenges of our increasingly complex built environment. Our world-class teaching and research are integrated to support the technical and commercial needs of both industry and society.

A key part of our ethos is our extensive links with industry, with many of our students being sponsored by major construction organisations. Loughborough graduates are extremely sought after by industry and commerce world-wide, and our undergraduate and postgraduate programmes are consistently ranked as excellent in both student surveys and independent assessments. Similarly our research is sponsored and applied by the many organisations in the civil engineering, construction and transport sectors.

Our website provides you with extensive information about both our research, teaching programmes and resources.

3. Project Outline

The project will develop a total pitch surface maintenance system incorporating tests to measure the effectiveness of the company's current maintenance techniques and procedures on synthetic surfaces. The project consists of several development stages for both the associate and the process itself. In brief this consists of evaluating current processes/tests and the market for the maintenance of artificial turf surfaces, the development of simplified testing procedures and the production of a management system to forecast the life expectancy of an artificial turf surface.

The project will also look at the potential improvements to the machinery used for surface maintenance.

The project deliverable will be an enhanced service offering to both new and existing clients and manufacturers on the maintenance of artificial turf surfaces. It is also hoped that Knowledge Transfer in the third year will result in improvements to the company's machinery plant and enable TS to offer recycling services for pitches.

The knowledge will help TS remain firmly as market leaders within the industry, increasing our turnover and overall growth as a result. We would hope to increase our contract base by 10% per annum given the enhancement to our service. However this will also assist the industry as a whole, with investments made in artificial turf surfaces giving a far better return due to both improved performance and extended life of the facilities.

More specifically the KTP will:

- Give the company an innovative USP and provide them with a competitive edge in the market
- Enable TS to expand their service offering to existing clients, including actual end users and industrial clients. This will result in an expansion of strategic partnerships for the company including strengthening relationships with suppliers, manufacturers and governing bodies.

The service offering for manufacturers will be improved with an increased knowledge of measurements and maintenance processes. It is expected that consultancy contracts with manufacturers of artificial surfaces will be greatly increased by the project.

The successful candidate will be employed as a KTP Associate by Loughborough University and will be based within the company at Leicester. At time some manual handling and operational use of large items of testing equipment will be required and so a good standard of physical ability will be required. The work will also involve travel between the company and Loughborough University and to sites throughout the UK. The successful applicant will also need to travel to management training/courses and to interact with Company clientele. The work will therefore include some lone working, working during unsociable hours, long distance travel to clients' sites and occasionally staying away overnight as part of a small (two-person) team.

JOB DESCRIPTION

Job Grade: Other £21,000 to £26,000 per annum

Job Purpose:

The KTP Associate will undertake:

- A review of latest best practice, industry knowledge base and previous research testing of artificial turf sports surfaces to acquire further performance/state data and experience in testing apparatus methodologies and their benefits and limitations.
- A review of test results and testing methods with view to providing appropriate protocols of key performance indicators
- Supporting the development of simplified test methods to indicate changes in performance
- Assessment and review of Maintenance Techniques and procedures, and highlight potential improvements in best practice
- Development of Management System(s) (Life cycle model) to support intervention decision making and forecast life expectancy of synthetic surfaces
- To investigate, evaluate and inform the (further) development of new and novel maintenance techniques
- Preparation of Final Reporting

Challenges:

- To be immersed fully in a commercial R&D environment and support the company in meeting their technical development challenges
- To gain an understanding of quality assurance and the importance of manufacturers and end user requirements
- To develop an understanding of the costing and pricing infrastructure of commercial services
- Project specific challenges include:
 - To develop field testing protocols that permit simple and rapid assessment regarding play performance and physical state of outdoor sport facilities
 - To report field test data effectively, combining it with external data inputs such as environmental conditions, client feedback, and often working with limited and/or contradictory information.
 - To effectively translate these outcomes into company evaluation and client feedback processes

Opportunities

- To work with and learn from an academic team with many years' experience in the field and contribute directly to commercial research and development and service offering
- To apply research and academic expertise in a real-time commercial contact
- To enhance their professional development and develop skills in project management.
- To become an expert in a very specialised field of engineering/science.
- To lead the development of evidence based facility management system(s) to make a step change in the industry best practice.

The associate will develop the following managerial and technical competencies during the project:

- Significant experience and expertise in project management and team working within a commercial environment
- Good communication and presentation skills to a wide variety of key stakeholders
- The ability to plan commercial/academic research and development projects and complete them efficiently and to deadlines
- Good negotiation skills for dealing with commercial contacts, suppliers, customers etc
- Knowledge of costing and commercial models associated with the services offered by Technical Surfaces
- Advanced materials knowledge and expertise in advanced machinery

The associate will have the opportunity to gain membership to relevant professional bodies such as the ISEA which include attendance at conferences and academic training.

Technical Surfaces technicians regularly attend SAPCA training courses and so the associate will be given the opportunity to attend these and gain an NVQ qualification.

The university also offer a wide variety of staff development training including leadership and management courses, IT skills courses and presentation and communication courses. The associate will have full access to these if appropriate.

Duties & Responsibilities:

1. Carry out the KTP project tasks and deliver the outcomes as outlined in the project plan.
2. Manage the project and disseminate the findings to the project team.
3. Undertake KTP management training, as well as other courses as deemed necessary.
4. Write R&D reports, and present these at the Local Management Committee (LMC) meetings, as well as at national conferences and symposia with other members of the project team.
5. Prepare research papers for publication in highly acclaimed learned journals, in line with the expected scholarly activities of the University Research Staff, but in accordance to the commercial sensitivity of collaborating companies.
6. Travel to management training/courses and Company clientele and to various other locations within the UK, and possibly overseas, as required.
7. Travel to clients' and prospective sites and undertake field testing using existing and prototype testing equipment; directly gathering field test data. This will involve manual handling, long distance travel and some out of hours and overnight stays as part of a small operative team.
8. Meeting and interacting with clients and prospective clients on behalf of the company. This will require a professional standard of, interpersonal skills and confidence.
9. To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

10. The associate should be a self-motivated individual with the ability to think analytically and communicate with a wide range of academic and commercial personnel. They should have good attention to detail, good communication skills and excellent time management skills.

PERSON SPECIFICATION

Job Title: Artificial Turf Sports Surfaces Development Engineer (KTP Associate)

Job Grade: Other £21,000 to £26,000 per annum

	Essential	Desirable	Stage to be assessed
Qualifications	Relevant industrial experience and a 2.1 degree in Engineering or Materials Science providing the course included some electronic modules	A Masters in Engineering or Materials Science including electronic and electrical engineering	1 and 3
Experience	Knowledge of artificial turf sport surfaces, the sports service industry or similar areas. Experience of experimental design including data collection and analysis	Experience of team and project working in a multi-disciplinary environment Experience of a variety of measurement technologies (force, displacement, other).	All to be assessed at stages 1 and 3
Skills and Abilities	<p>Good written communication skills, ability to produce professional standard reports</p> <p>Professional level of interpersonal and presentational skills</p> <p>A good standard of oral English and the ability to be clear and concise in verbal communications</p> <p>Good research skills and ability to collate and manipulate data</p> <p>Excellent time management skills</p> <p>Good computer skills including Word processing, spreadsheets, databases and presentation software</p>	The associate should be a self-motivated individual with the ability to think analytically and communicate with a wide range of academic and commercial personnel.	All to be assessed at stages 1 and 3

Other	A person qualified at NVQ Level 4 in an appropriate subject (HNC/D or equivalent) up to PhD, who has the potential to be a business leader of tomorrow.		3
	To observe the University Equal Opportunities policies at all times.		3
	Flexibility in working conditions and hours.		1,3
	Must be licensed to drive in the UK		

Stages in Assessment: 1, Application Form, 2, Selection Test, 3, Interview.

Conditions of Service

This is a full-time, fixed-term appointment for a period of 36 Months. The salary for the post will be within the range £21,000 to £26,000 per annum. Commencing salary will be determined by previous experience. The successful candidate will be employed by Loughborough University, but will be based at Technical Surfaces Ltd, Leicester.

The appointment will be subject to the Conditions of Service for Academic and Related Staff, insofar as they do not conflict with the working practices of the Company with which you will be expected to comply, details can be found at:

<http://www.lboro.ac.uk/services/hr/a-z/conditions-of-service.html>

Informal Enquiries

Informal enquiries are welcomed and should be directed to:

Dr Paul Fleming
Sport Surfaces Research Group Leader
School of Civil and Building Engineering
Telephone: 01509 222616
Email: P.R.Fleming@lboro.ac.uk

Applications

The closing date for receipt of applications is **7th June 2015**.






Interviews will be held at the offices of Technical Surfaces Ltd in Leicester and are scheduled for 16th June 2015.



Knowledge Transfer Partnerships

Knowledge Transfer Partnerships enable recently qualified graduates (known as KTP Associates) to work in companies managing challenging projects central to the development needs of participating companies.

Knowledge Transfer Partnerships can provide you with:

-  Valuable work experience in a commercial environment with improved career prospects
-  Competitive salary
-  An opportunity to lead and manage a R&D project with defined goals
-  The possibility for future employment with the company partner at the end of the project
-  A generous personal professional development and training budget.

Synthetic Sports Pitch Development Engineer (KTP Associate) Fixed-Term for 36 months.

£21,000 to £26,000 per annum

Plus: Up to £6,000 for individual training & development

An enthusiastic, innovative and self-motivated person is required for a Knowledge Transfer Partnership between Loughborough University and [Technical Surfaces Ltd.](#) The project involves development of a total pitch surface maintenance system incorporating tests to measure the effectiveness of the company's current maintenance techniques and procedures on synthetic surfaces. A generous training budget is available to enhance the career profile of the successful candidate.

The successful candidate will be employed by the University, but **based at Technical Surfaces Ltd, Leicester.**

You should have either Masters in Engineering or Materials Science, minimum 2.1 degree in Engineering or Materials Science or a closely allied discipline. Some experience of artificial surfaces, the sports service industry or similar areas is desirable.

You will gain experience of a commercial research and development environment and may have the opportunity to register for a higher degree.

Informal enquiries:

Dr Paul Fleming
Senior Lecturer in Geotechnics / Programme Director:
Civil Engineering
Telephone: 01509 222616
Email: P.R.Fleming@lboro.ac.uk

Please quote ref no: **REQ15301**

Closing date: **7th June 2015**

Interviews will be held: **16th June 2015**

This Partnership has received financial support from the Knowledge Transfer Partnerships programme (KTP). KTP aims to help businesses 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 the Technology Strategy Board along with the other government funding organisations.

