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**N E W S R E L E A S E**

**State of the art test facilities help students get on their bikes**

A new Cycling Test Lab designed to help students develop their engineering skills has been launched at the [Silverstone Sports Engineering Hub](https://silverstonesportshub.co.uk/) (SSEH). This is an extension of their aerodynamic test facility and R&D tools and services offered to sports engineering.

The project has received £800,000 of [Local Growth Funding](https://www.buckslep.co.uk/our-projects/local-growth-fund-projects/) from the [Bucks Local Enterprise Partnership](http://www.buckslep.co.uk) (LEP).  An allocation of £350,000 has been put towards the Cycling Test Lab at [Silverstone University Technical College](https://www.utc-silverstone.co.uk/) (UTC), this facility will give students at the college access to three specialist rigs which will allow them to apply their learning to real world applications. £450,000 has been put towards a pedaling rig which will be homed at SSEH and an initial version is due to be completed by the end of 2022.

The facility will give students at the college access to three specialist rigs which will allow them to apply their learning to real world applications.

As well as offering practical experience, the rigs will allow SSEH to advance research and development skills for sports engineering. Customers will book the rigs and their testing will be carried out by the students with the results fed into a specialist cloud software program.

SSEH Managing Director Rob Lewis said: “It’s great to bring together business and education in a way that will inspire the students and allow them to participate in real world engineering. We expect the next phase of this project, the development of a pedalling test rig at SSEH, to be completed by the end of 2022.”

The three rigs include:

* A rolling resistance rig which uses a motor driven roller, allowing the amount of power required to rotate a wheel and tyre over a surface to be measured considering variables such as wheel speed, contact patch load and tyre pressures.

* A stiffness rig which uses force and displacement measurements to determine the stiffness of components, considering the mechanical efficiency to transmit rider power to the road. This bedplate-mounted rig allows a bike frame to be tested in various configurations as well as testing many components in isolation.

* A chain efficiency rig which uses the decay of a simple swinging pendulum to test and evaluate the frictional losses in a cycle chain which can reduce overall efficiency and performance. This rig will allow for testing of different chains, lubricants as well as chainrings and sprockets to help optimise bicycle drivetrains.

Neil Patterson, Principal, Silverstone UTC said: “We’re delighted to be working in partnership with SSEH on this project.  While it’s not unusual for businesses to work with universities on this kind of project, partnering with a school such as the UTC is quite unique and gives our students an unprecedented opportunity not only to learn some mechanical principles and their applications, but also to develop their skills in lab work and research which will help set them apart when it comes to university and apprenticeship applications.”

The Cycling Test Lab was launched on June 17 at a special open morning attended by 80 guests made up of Bucks LEP representatives, existing SSEH customers and industry delegates.

The SSEH is based at Silverstone Park which sits within the [Buckinghamshire Enterprise Zone](http://www.bucksez.co.uk), a partnership between the public and private sectors delivering significant commercial development for the wider benefit of the local and regional economies.

It brings together representatives of the local authorities in Buckinghamshire, businesses, and other public sector agencies. The SSEH received £2m of investment from the Government’s Local Growth Fund and was launched in 2019.

The pioneering sports engineering facility, provides the tools and environment for innovation in sport, enabling engineers and sports performance professionals to undertake cutting-edge research and development.

Richard Harrington, Chief Executive of the Buckinghamshire Local Enterprise Partnership, said: “This is a fantastic capability that will create a valuable new connection between students and industry.

“It is exactly the kind of facility that Bucks LEP imagined in the Industrial Strategy to enhance innovation and learning opportunities and I am sure the business, economic and social benefits provided by this investment represent excellent value for money for both Buckinghamshire and the UK as a whole.”

For further information visit [www.silverstonesportshub.co.uk](http://www.silverstonesportshub.co.uk) and [www.bucksez.co.uk](http://www.bucksez.co.uk)

**ENDS**

**Note to editors**

The [**Buckinghamshire Local Enterprise Partnership**](http://buckstvlep.co.uk/) (Bucks LEP) is a business-led ‘partnership of equals’ between local government and the private sector, building the conditions for sustainable economic growth in the County.

Buckinghamshire [**Enterprise Zone**](http://www.bucksez.co.uk/) status is a major economic growth opportunity for Buckinghamshire which promises to transform and enhance three key strategic employment locations in the north of the county and attract new investment.

The [**Silverstone Sports Engineering Hub**](https://silverstonesportshub.co.uk/) is based at Silverstone Park and provides facilities, space and a community for the sports engineering sector. It offers a range of wind tunnels, test rigs, offices and workshops aimed at the sports engineering industry and brings together some of the industry’s leading companies into one community, offering unique opportunities for collaboration and state of the art R&D.

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