£10m to train the engineers of the future in the region

GRAEME BROWN

The University of Warwick has been handed a £10 million boost to train the high-tech manufacturing experts of the future.

The university has been awarded one of five new Industrial Doctorate Centre statuses announced by The Engineering and Physical Sciences Research Council (EPSRC) to address fundamental engineering challenges in advanced manufacturing. Its Warwick Manufacturing Group (WMG) – founded by Birmingham Post columnist Lord Kumar Bhattacharyya – will focus on high-value, low-environmental impact manufacturing.

The move – which will eventually see 30 people a year train for engineering doctorates – has been welcomed by car giant Jaguar Land Rover as an investment in the future of manufacturing in the West Midlands.

Professor Lord Bhattacharyya said: “Our vision is to produce a new generation of manufacturing leaders with the high-level know-how and research experience essential to compete in a global manufacturing environment defined by high impact and low carbon.

“WMG-based centre will address industrially challenging issues that enable companies to develop and implement effective low-environmental impact technology and policies that also benefit the bottom line.

The four-year doctorates are intended to create world-class researchers in the UK to pursue a career in industry.

The EPSRC says it provides postgraduate engineers with an “intensive, broad-based research programme incorporating a taught component relevant to the needs of, and undertaken in partnership with, industry”.

The doctorates are seen as a radical alternative to the traditional PhD, and are aimed at being better suited to the needs of industry, with the student spending a significant proportion of their time working in a company.

Jaguar Land Rover (JLR) will be the major partner of WMG, but IBM, the Motorsport Industry Association, Nikon, Oleo, PTC, RDM, Siemens and Tata Steel will also be involved.

JLR head of research Dr Tony Harper said: “I look forward to the new centre developing high-quality graduates who, as future manufacturing leaders, are fully conversant with the global business environment and the importance of low carbon, from an economic as well as an environmental standpoint.”

WMG will initially train 10 students a year for four years, but that is expected to expand to 30 a year in the short term.

Participants will also benefit from time spent at one of WMG’s international partners.

The group has teaching and research centres located in Hong Kong, India, China, Malaysia, Singapore and Thailand.

As well as Warwick, there will be investment in research centres in Strathclyde, Swansea, Sheffield and Nottingham, and other companies involved include Rolls-Royce, Corus, Timed, Airbus, BAE Systems and Boeing.

The Minister for Universities and Science, David Willetts, said: “These new centres will generate a new wave of engineers with the knowledge and skills needed to become future business leaders and create new innovation and economic growth for the UK.

“They focus on key areas of advanced manufacturing, such as new techniques for producing metal, which are vital to the UK’s major industrial sectors including the aerospace and automotive industry. These talented young innovators will help fuel future economic growth for the UK.”

City firm ships 6,500 tyres for Dubai race – Manufacturing, page 42
FACTFILE: WARWICK MANUFACTURING GROUP

- WMC was established in 1980 by Professor Kumar Bhattacharyya
- More than 700 students a year are trained in centres in Hong Kong, India, China, Malaysia, Singapore and Thailand through WMG
- It collaborates with business partners including Jaguar Land Rover, Tata, IRS, Network Rail, BAE Systems, AstraZeneca and ARUP
- It trains about 1,100 undergraduate students a year
- WMG operates an international programme of research, education and knowledge transfer, amounting to £100 million a year
- The group has about 250 employees and 150 associates
- It trains about 400 masters students on a range of programmes such as digital manufacturing management and engineering business management

David Willetts