

# Research Strategy – Department of Engineering

### Vision (max 200 words)

Our vision for 2028 is a unified engineering department of 80 academic staff undertaking a broad spectrum of world class, high impact research, supporting our research-led teaching activities. This will maintain our excellent collegial atmosphere, enable flexibility and creativity in our work but with sufficient groups of researchers (our 'nodes') to challenge on the world stage in terms of research quality and impact.

To deliver on the vision, the Department will:

- Increase our PGR numbers and submission rates to 0.6/FTE/year
- Increase research funding to £10M annually in 2028
- Continue world leading interdisciplinary research, within the department, the wider university and with key external collaborators
- Maintain the world leading impact of our research, in terms of the REF metrics
- Increase the GPA of the departmental REF return to 3.50 based on the 2021 metrics

In the ten-year timeframe, the Department is looking to consolidate its position as a leading interdisciplinary engineering department offering world leading research that supports industry and academia and has strength in depth. We will be ambitious in our applications for research funding and the strategic direction that reflects the evolving areas that support grand challenges, where we can make a significant, world leading contribution.

## Strategic Research Themes and Priorities

#### Research Themes - Challenges / Nodes :

- Consolidate the Research Node structure within the department to support world leading, interdisciplinary research by engaging with research institutes
- Ensure critical mass in the fundamental academic disciplines within engineering to support the production of world leading research by securing large research grants and strategic hires
- Continue to show how the research in the department, which is conducted in Nodes, supports the Grand Challenges and UN Sustainable Development Goals, which are the externally facing shop window of our activity

#### **Increase Research Spend:**

- Target an increase in research spend to exceed £10M annually by 2028
- All members of academic staff to be named as an investigator on a current externally funded research grant
- Professional development support, through the Research Nodes and RIS trainings, for academic and research staff to ensure grant applications are effective, increasing success rate of applications
- Diversification of research income to include a wide range of funders, including industry
- Increase the number of mid-career level staff winning substantial (£500k +) grants

#### Improving Outputs, Impact and Profile:

- Professional development support for academic staff through the Staff Information Sessions to increase the fraction of 4\* outputs to 40% at the next REF
- Targeting overseas collaborators to increase position in world ranking
- Maintain REF position within top quarter of discipline, with an ambition to improve position to top 15

#### Research Environment and Culture:

- Increase the number of available PhD studentships through diversified funding routes, including industrial funding of 10 studentships annually
- Create more PhD scholarship opportunities to attract high quality candidates
- Ensure the Department is an open, friendly and inclusive place to work; providing support for all members of its diverse research community.