

Industrial Advisory Board

Tuesday 20th May 2025 | 16.00 – 18:00

Welcome at level 9 I-Hub | Meeting at Level 5, I-Hub / I-X (White City Campus)

Dinner will be served in The Works

Online: [Join Teams meeting here](#) 349 089 106 049 1 | Passcode: gY9EX2hV

[Previous minutes](#)

Attending

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| Internal | Alessandra Russo (Head of Department); Will Knottenbelt (Director of Industrial Liaison); Anne O’Neill (Department Operations Manager); Chiraag Lala (Teaching Fellow); Alastair Donaldson (Director of Research); Rob Craven (Postgraduate Director of Studies); Matt Collison (Undergraduate Director of Studies), Stefanos Zafeiriou (Deputy Head of Department); Tom Curtin (Industrial Liaison Officer); Joanna Clark (Cross Faculty Director - Partnerships) |
| External | Alexandros Papsyridis (Nefos Consulting); Mike Prettlejohn (Belmont Lansdown); Philip Miller (Compator); Pinar Emirdag (7RIDGE); Patrick Hebant, (Amadeus); Amit Gawali, (Aon); Emma Perry, (BAFTA); Dan Beimborn (QRT); Jean-Marie Ferdeguq, (former-Trainline); Iago Martinez, (FundApps); Raymond Mulligan, (Coutts); Robert Howes, (Dojo); Georgios Papaioannou (QRT); David Collis (Elliott Advisors), Sana Wajid (Fetch.ai), Simon McNamara (former-NatWest), Andy Cheadle (CloudNC) |
| Apologies | Robert Chatley (Director of Software Engineering Practice); Jackie Bell (Senior Teaching Fellow); David Sharp (Kaikaku); Karen Rossi (Lloyds Banking Group); Chris Blatchford (Kingfisher); Nabil Alsabah (msg global) |

Agenda

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| 1. | Welcome at Level 9 the I-Hub by Prof Alessandra Russo (Head of Department) |
| 2. | Presentation: Dr Joanna Clark (Cross Faculty Director - Partnerships) |
| | <i>Attendees to move to level 5 I-Hub to continue meeting</i> |
| 3. | Introduction of attendees and reminder of Terms of Reference: Prof Will Knottenbelt |
| 4. | Departmental update by Prof Alessandra Russo |
| 5. | Industry Presentation: Vision for Computing 2035 – Threats and Opportunities for DoC |
| 6. | Open discussion on above |
| | Refreshments break |
| 7. | Department Presentation – DoC Spinouts - Prof Stefanos Zafeiriou |
| 8. | Action plan / action points from meeting - Prof Alessandra Russo |
| 9. | AOB |
| 10. | Closing |

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| 1. | <p>Welcome at Level 9 the I-Hub by Prof Alessandra Russo (Head of Department)</p> |
| 2. | <p>Presentation: Dr Joanna Clark (Cross Faculty Director - Partnerships)</p> <p>Dr Jonna Clark gave a presentation on the Imperial's strategy and working with Industry.</p> <p>Science for Humanity has three pillars: Enabling talent, Powering research and Amplifying impact.</p> <p>These 3 pillars are enacted through 9 strategic initiatives: Imperial inspires, transforms, class of 2030, talent, futures, enterprise, West Tech Corridor, Global and Imperial sustainable.</p> <p>Imperial Futures launches 4 schools of convergence science to accelerate impact at scale. West Tech Corridor – White City campus has grown with partnerships at the core of it's thinking. Imperial Enterprise – our founding principle is 'committed to being useful'</p> |
| 3. | <p>Introduction of attendees and reminder of Terms of Reference: Prof Will Knottenbelt</p> <p>To advise the Department on the industrial relevance and suitability of its taught undergraduate and postgraduate curricula, including suggestions for new or modified courses and degree programs</p> <ul style="list-style-type: none"> • To identify any recent or longer-term developments or concerns of industry which are likely to have a significant impact on the Department's activities • To advise on and review the People Strategy of the Department • To review the Department's research strategy with respect to its industrial relevance and suitability, and to support current or planned research projects with practical help such as letters of support or internships • To identify opportunities for commercialisation of research • To explore other ways in which the Department can catalyse, encourage and foster a higher level of industry involvement in its degree and research programmes • To identify and advise on major strategic initiatives, such as the establishment of research centres, fund-raising initiatives etc. |
| 4. | <p>Departmental update by Prof Alessandra Russo</p> <p>Prof Russo gave an update on DoC for 2024-25. The department is targeting growth including students and academic staff, which reviewing research.</p> <p>Computing is at the core of Imperial's mission and growth strategic.</p> <ul style="list-style-type: none"> • 2029/30 Computing, Math, I-X, DSI, part of the Business School will move into a new flagship building at the White City campus. • This is part of Imperial's new strategy: "Science for Humanity" and "School of Convergence Science". • This will shape Computing in the next decades <p>Successful Plan in action</p> <p>Developed a new Joint degree with Mathematics, to start in 2027/28</p> <ul style="list-style-type: none"> • Hired a second UG Senior Tutor, Nick Powell, and new MSc AI coordinator Teaching Fellow • Hired new CSG staff member to manage expansion of Computing's GPU resources • Hired 6 new academics, of which 4 from industry • Anticipate growth of 30-50% in the next 3-5 years • Leading College's expansion of GPUs infrastructure • Leading the creation of a robots living lab at White City Campus • Through Stefanos Zafeiriou: influence design of upcoming Science Capital Fund |

Other selected successes

- Case for growth and move has been approved by College
- Secure second Google DeepMind Academic Fellowship, making Computing the only Department globally to have two GDM Academic Fellows in residence
- Attracted funding for a Centre on “AI and Law”, in collaboration with Cambridge – 13 PhD studentships for 5 years.
- Future Leader Fellowship (Tolga Birdal), and Turing AI World-Leading Research Fellowship (Stefanos Zafeiriou)
- Four academics appointed as Co-directors of two of the Schools of Convergence Science (Human and AI, Space, Security and Telecoms)
- Professor Russo appointed a Chair of Imperial-X initiative, July 2025

Andy Cheadle asked where the new students will come from. AR answered both home and overseas, with a pool of approx. 20 apps per place across courses.

4 New Schools of Convergence Science building on existing interdisciplinary strengths across Imperial

- Sustainability, Human and Artificial Intelligence, Health and Technology & Space, Security Telecoms

Phil Miller asked how will the department will source academics for the new JMC department. AR confirmed that there is no new JMC department. The academics will be source by the departments approved growth. Both computing and maths are approved to grow.

Iago asked how is AI changing growth in the next 5 years. AR confirmed the department thinks about new AI lead course, pushed earlier in the degree, with specialise AI course in the final year. The department is also exploring teaching new languages in demand from Industry.

Matt Collinson said ML is now in year 2, Math for ML is now in year 3, pushed from year 4. Including new modules including Gen AI.

Will K said, we are thinking more about how to tackle students using AI.

Industry Presentation: Vision for Computing 2035 – Threats and Opportunities for DoC

- Rob Howes said that perhaps ‘rote code’ is no longer important, doc should be teaching fundamentals more than code.

Rob worries about how many engineers will think vibe coding will pass for reliable, safe code.

Dojo has taken 10 Imperial MEng students to create an AI programme.

Alexandros Papaspyridis spoke about AI’s impact on HE.

Phil Miller spoke about the Geo-political outlook

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- Conflict and splintering of international relations: Increasing strategic competition, especially in the tech domain (e.g. US/UK–China, UK–Russia tensions, US isolationism).
- Tech could be the next WW battlefield.
- Sovereignty & resilience: UK’s need to safeguard technological edge and digital sovereignty.
- Intellectual Property & Security
- Risks of IP leakage: Moves to protect sensitive research and commercial innovations.
- Partnership scrutiny

Student Recruitment & Composition

- Priority for aligned nations: Preference for students from countries with shared democratic values, tech norms, and open societies.

- Vetting high-risk regions: Enhanced due diligence for applicants from regions of concern (e.g. with documented cyber/IP violations).

UK Contribution & Worker Retention

- Skilled worker retention: Encourage graduates to remain and contribute to the UK digital economy post-study.
- Graduate route policy alignment: Target immigration and post-study visa policies to favour long-term contributors.
- Integration initiatives: Promote UK societal understanding, language, integration, and professional ethics among students.

Ethical & Legal Compliance

- Avoid discriminatory practices: Must align with equality law while ensuring proportionate risk-based policy.
- Transparency and consistency: Ensure processes are defensible and academically justified

Open discussion on above

George commented that fundamentals need to be preserved, not just gen use gen ai. Doc should be teaching students to innovate, whilst being grounded to fundamentals.

Raymond Mulligan commented that he worries this is point in time. This conversation would be different two years ago. The LLMs are moving so fast it's difficult 'circle to square'

Matt asked should be training students for their first job, or a leadership job 10 years down the line. PM commented that we cannot predict where AI will be in 10 years.

Andy Cheadle commented he became an engineer to solve problems. We have turned engineers into verifiers rather than creators. This is an entirely different still. Watch out for the loss of creativity and the need to understand verifying. David Collis commented that code review is very important. Juniors are native in AI, but they don't verify. Managers are doing the code review. Code review skills are still important. Andy commented that AI can also code review.

6. Ally Donaldson commented that if AI is good at adapting code, perhaps we don't need the old coding skills, perhaps we should be more **radical**.

Amit Gawali commented that scaling GenAI is lacking, building and scaling at a cost effective way is very difficult, especially in a regulated.

Prof Alessandra Russo asked how liability is managed with AI generated code. Who is responsible? Is this liability the same as before GenAI?

Phil Miller noted an AI programme he wrote in a bank had a 98% success record in spotting organised crime, as opposed to the 80% rate with humans. The UK Government would only approve the human results. Regulation cannot keep up with AI and organised crime. Therefore, the CEO is responsible for the AI. That's a discussion for the House of Lords.

Dan Beimborn commented that at QRT junior roles are being heavily affected and are disappearing. If you are entering a company you need to understand code review. QRT does 1 year of training.

Andy Cheadle spoke about the need for architects not engineers. More systems thinking needed.

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| 7. | Department Presentation – DoC Spinouts - Prof Stefanos Zafeiriou Prof Zafeiriou gave a presentation on DoC spinouts including Facesoft, Ariel AI, Context AI, Safe Intelligence, Lumirithmic, Cogitat, & GraphicsFuzz |
| 8. | Action plan / action points from meeting - Prof Alessandra Russo The foundations are still very important, despite new technology. |
| 9. | AOB None |
| 10. | Closing |