

Job Description

Post title: Senior Research Fellow in Digital Design

Date last updated/evaluated: January 2025

Author: András Sóbester

Standard Occupation Code:	2119 – Natural and social science professionals
School / Department:	School of Engineering/Aeronautics & Astronautics
Faculty / Directorate:	Engineering and Physical Sciences
Job Family:	Education, Research and Enterprise (ERE)
Grade:	Level 5
ERE Pathway (if applicable):	Research
Post reporting to:	András Sóbester
Post line report(s):	n/a
Post base location:	Boldrewood

Job purpose: **Research:** Achieving research independence. Establishing and growing a reputation for research quality. Increasingly taking leading or supervisory roles within research teams, often as Principal Investigator or Co-Investigator.

Leadership, Management and Engagement: Assuming defined management roles and increasingly taking leading or supervisory roles within teams or projects, including line management and resource management where appropriate.

All contributions build on ERE Level 4.

Key accountabilities and indicative time allocation:

1. **80%**

Research Contribution:

- Sustain a personal programme of research which contributes to or complements wider research programmes or strategies.
- Develop and deliver independent, rigorous and original research that leads to the discovery of new knowledge, insight and/or understanding.
- Lead an individual or team research project or projects.
- Regularly produce a range of high-quality research outputs that: underpin an established and growing reputation within the research community for the originality, significance and rigour of research; and demonstrably contribute to debate, knowledge, understanding and impact within and/or beyond academia.
- Plan and develop innovative new research proposals, either as self-contained items or as part of wider programmes, identifying potential funding sources and lead, co-lead or contribute to income proposals.

- Collaborate and utilise networks to develop and deliver research with colleagues in own and other disciplines and/or organisations. Co-create with a range of public groups, partners or organisations, as appropriate.
- Project manage research activity, manage the application of a range of research methodologies and manage or supervise other members of a research team, as appropriate.
- Ensure effective co-creation, sharing of, and engagement with, research and research findings by a range of audiences (e.g., academic peers, practitioners, policymakers, publics), using a range of methods (e.g., peer-reviewed publications, conferences, public engagement, outreach, media releases).
- Proactively identify and pursue opportunities to ensure research activities benefit educational practice.
- Co-supervise or contribute to the supervision of postgraduate students and/or research assistants.

2.

5%

Leadership, Management and Engagement Contribution:

Building on the Leadership, Management and Engagement contributions inherent in other Level 5 activities:

- Successfully undertake defined management, engagement, administration or project roles within the department or School (e.g., admissions, examinations, excellence framework contributions).
- Manage processes and co-ordinate the work of others as required. Help determine priorities and allocate resources to meet planned objectives and requirements.
- Contribute to short and medium-term planning processes in the department or School, including budget planning for own area. Demonstrate an appreciation of longer-term requirements.
- Make a significant contribution to the wider work of the Faculty and University through effective participation and collaboration in working groups and committees (e.g., Equality, Diversity and Inclusion committees and self-assessment teams, Health and Safety committees, Research Ethics committees etc.).
- Actively contribute to, and support, Equality, Diversity and Inclusion initiatives within your role, ensuring that EDI principles are integrated into daily tasks and interactions.
- Provide expert advice to colleagues and students. Use persuasion and influence to foster and maintain relationships.
- Line manage or supervise staff, as appropriate.
- Effectively conduct and engage in appraisal, career development and continuing professional development activities; formulate development plans to meet current and future skill needs.
- Effectively act as hiring manager, or member of a recruitment panel, throughout the recruitment process. Ensure recruitment aligns with strategic plans, promote diversity and inclusion, and ensure compliance with employment law. Implement best practice to enhance the candidate experience and support successful candidates through onboarding and induction
- Ensure the effective management and use of assigned resources (e.g., budgets, equipment).
- Organise and/or participate in visit days, open days and public engagement activities.
- Manage external activities such as placements and field trips.

3.

5%

Knowledge Exchange and Enterprise Contribution:

- Achieving a record of effectively and independently managing knowledge exchange and/or enterprise activities and outputs through public engagement, outreach and/or other impact-generating activities.

4.	5%
To allocate 10 days a year (pro rata if part-time) to undertake training and continuing professional development (CPD), develop research identity and leadership skills in line with the Researcher Development Concordat.	
5.	5%
Any other duties as allocated by the line manager following consultation with the post holder.	

Internal and external relationships:

External: work with the representatives of the industrial partner

Person Specification – Skills and Competencies

All essential and desirable criteria outlined in this Person Specification will be assessed through a combination of recruitment application and CV, and where applicable numerical or written assessment.

Knowledge, Experience and Qualifications

Essential

- Substantial and authoritative practical knowledge and experience in digital design (including programming and CAD), supported by detailed understanding
- The required level of knowledge and understanding will normally have been gained through some or all of the following:
 - Considerable work experience
 - Vocational training
 - Formal qualification(s) equivalent to Level 7 or 8 of the [Regulated Qualifications Framework](#) e.g. master's degree, postgraduate certificate, diploma, PhD in relevant subject area in or Level 7 or 8 award, certificate, diploma.

Desirable

- PhD in Engineering, Software Engineering, Computer Science, Physics, Mathematics
- Experience in aircraft design
- Experience with the Rhino/Grasshopper CAD system
- Demonstrated commitment to maintaining professional knowledge and awareness through continuing personal and professional development.

Teamwork and Communication

Essential

- Collaborates effectively, understanding the strengths and weaknesses of colleagues.
- Works proactively with colleagues and other stakeholders, within and beyond the University, to achieve outcomes.
- Communicates effectively to develop understanding and achieve cooperation.
- Provides clear advice, guidance and recommendations on novel or complex concepts and issues.

Planning, Organisation and Resource Management

Essential

- Plans and progresses research and/or knowledge exchange and enterprise activities within broad guidelines and established University policies and procedures.
- Formulates development plans to meet current skill requirements.

Problem Solving and Initiative

Essential

- Develops detailed understanding of long-standing and/or complex problems and applies accumulated knowledge and experience to understand and/or resolve them.
- Demonstrates an awareness of principles and trends within a specialist field and awareness of how this affects education, research and/or knowledge exchange and enterprise activities in the University.

Job Hazard Assessment

For any hazards identified below a health clearance will be undertaken by our occupational health provider and form part of recruitment checks. Further ongoing clearance may be required for some roles, including for existing members of staff.

Does the risk assessment identify the need for ongoing health surveillance for this role? No

[Author to check selections below prior to confirmation of job description/submission to Recruitment.]

Physical Environment

Working outside	Not applicable
Exposure to noise levels >80dbA	Not applicable
Working with dust or fumes	Not applicable
Working with skin irritants/sensitisers	Not applicable
Working with chemicals (industrial or cleaning)	Not applicable
Working in a confined space	Not applicable
Working at height	Not applicable
Working with sewage	Not applicable
Contact with cytotoxins	Not applicable
Exposure Prone Procedure (EPP) work	Not applicable
Direct patient care or patient contact / Contact with clinical specimens or pathology work	Not applicable
Ionising radiation	Not applicable

Psychological and Social Environment

Working shifts	Not applicable
Working nights	Not applicable
Lone working	Not applicable
Working with children	Not applicable
Exposure to persons with challenging behaviour	Not applicable

Equipment, Tools and Machines

Working with vibrating machinery or tools	Not applicable
Driving duties	Not applicable
Driving LGV, PCVs	Not applicable
Driving forklift trucks	Not applicable
Food handling	Not applicable
Contact with latex	Not applicable

Physical Abilities

Prolonged repetitive movements or actions	Not applicable
Moving or handling heavy loads	Not applicable

Behaviours

Our [Inclusion and Respectful Behaviour Policy](#) describes the expectations of everyone who is a part of our community.

Our **Southampton Behaviours** (below) outline the responsibilities we each have in working collaboratively to achieve our University strategy.

Personal Leadership

- I take personal responsibility for my own actions and an active approach towards my development.
- I reflect on my own behaviour, actively seek feedback and adapt my behaviour accordingly.
- I demonstrate pride, passion and enthusiasm for our University community.
- I demonstrate respect and build trust with an open and honest approach.

Working Together

- I work collaboratively and build productive relationships across our University and beyond.
- I actively listen to others and communicate clearly and appropriately with everyone.
- I take an inclusive approach, value the differences that people bring and encourage others to contribute and flourish.
- I proactively work through challenge and conflict, considering others' views to achieve positive and productive outcomes.

Developing Others

- I help to create an environment that engages and motivates others.
- I take time to support and enable people to be the best they can be.
- I recognise and value others' achievements, give praise and celebrate their success.
- I deliver balanced feedback to enable others to improve their contribution.

Delivering Quality

- I identify opportunities and take action to make improvements.
- I plan and prioritise efficiently and effectively, taking account of people, processes and resources.
- I am accountable for tackling issues, making difficult decisions and seeing them through to their conclusion.
- I encourage creativity and innovation in others, to deliver workable solutions.

Driving Sustainability

- I consider the impact on people before taking decisions or actions that may affect them.
- I embrace, enable and embed change effectively.
- I regularly take account of external and internal factors, assessing the need for change, and gaining support to move forward.
- I take time to understand our University strategy and communicate this to others.