Research Assistant Centre for Offsite Construction + Innovative Structures



Role Description

Grade & Salary:		Grade 4	
		£26,715 - £31,865 per annum	
Campus Location:		Institute for Sustainable Construction, 7 Hills, Sighthill	
Line Management Responsibility for:		N/A	
Role Summary:		The RA will support the on-going research and commercial activities of COCIS undertaking working primarily in the offsite construction sector and timber supply chain. A large emphasis of the project will be the undertaking of structural timber engineering and test work. The role will also require Building Information Modelling including the digital integration of information acquired from the timber engineering research work. The curation of outreach and skills content may also be required.	
Main Duties and Responsibilities			
	Work across a range of projects activities providing technical support as required. The RA will be actively involved in test work, data processing and technical reporting as well as creating technical drawings for communication purposes.		
\checkmark	Structural timber engineering and test work as well as collating relevant information of digital integration.		
\checkmark			
~	Support capacity and market assessment reviews and productivity analyses of the sector undertaking both qualitative and quantitative assessment processes engaging with industry partners and stakeholders.		
	Develop skills content for the future delivery of the built environment working collaboratively with colleagues and external partners.		





Attributes	Essential Selection Criteria	Desirable Selection
Education/Qualifications	Criteria Master level degree in a Built Environment Subject area: Architectural Technology, Structural Engineering etc	Criteria Graduate member of an appropriate Professional Institution working towards chartered status: RIBA, ICE, CIOB IStructE etc
Experience	Track record in working with industry partners on timber related research projects. Experience of managing research activities and delivering research outputs to industry or external stakeholders. Experience of structural test work and experimental processes. Experience of working with students and stakeholders. Structural Timber Engineering knowledge Knowledge and experience of the offsite construction sector Working knowledge of construction software's including BIM. Experience of Microsoft office packages such as Excel, word and powerpoint	Experience of building external networks Database and client relationship management working with external clients and stakeholders Experience of editing media files including video content.
Skills/Personal Requirements	Excellent written and verbal communication skills Effective time management in delivering reports and advice to clients Enthusiastic and good self- motivation	Ability to work within a team environment Experience in presenting to academic and industrial audiences.

Essential Selection Criteria are mandatory requirements for a post-holder. If a potential candidate does not evidence all of these requirements in their application form they do not meet the essential criteria of the role and, therefore, will not be short-listed for interview.



Initiative and Problem Solving:			
Is the role holder required to: 17. solve standard day to day problems as they arise; choose between a limited number of options which have clear consequences, by following guidelines or referring to what has been done before; recognise when a problem should be referred to others?	Yes		
18. use initiative and creativity to resolve problems where the optimal solution may not be immediately apparent but has to be assessed by a process of reasoning, weighing up the pros and cons of different approaches; identify and assess practical options; break the problem down into component parts?	Yes		
19. resolve problems where there is a mass of information or diverse, partial and confliction date, with a range of potential options available; apply creativity to devise varied solution, approaching the problem from different perspectives?	Yes		
20. resolve problems where there is a lack of precedent which calls fro innovation and creative thought to develop appropriate options; anticipate problems and make projections; initiate solutions which take into account strategic implications for the institution and which do not limit future choices?	Yes		

Analysis and Research:		
Is the role holder required to:		
21.establish the basic facts in situations which require further investigation and inform others if necessary?	yes	
22. analyse routine data or information using predetermined procedures and gathering the information from standard sources; need to work accurately to complete the task precisely as specified?	yes	
23. identify an appropriate existing method of analysis or investigation according to the data and objectives; recognise and interpret trends or patterns in data; identify or source additional information which could potentially help the investigation as the analysis progresses?	yes	
24. analyse or research complex ideas, concepts or extensive data from different perspectives; work out how bet to apply existing methodologies according to the overall context, objectives and expectations; identify the relationship between complex, interdependent factors?	yes	
25.identify the research question within a specific context; generate original ideas to build on existing concepts; generate new concepts and methodologies; develop new avenues of research?	yes	

Sensory and Physical Demands:			
Is the role holder required to:			
A. Carry out highly specialist or very complex tasks requiring either mastery of a wide range of complex sensory or physical techniques or involving unusually intense physical effort?	No		
B. Carry out tasks which require either mastery of a range of sensory or physical techniques, concentration to co-ordinate different sensory or precision in applying these sensory skills, or involve considerable physical effort?	No		
C. Carry out tasks at a level which would require either learning certain methods or routines or involve moderate physical effort?	Yes		
D. Complete basic tasks which either would require either a minimum of instruction or light, if any, physical effort?	Yes		

Work Environment:		
Is the role holder required to:		
37.work in an environment which is relatively stable and has little impact on you or the way in which work is completed?	Yes	
38. understand how the work environment could impact on your own work or that of colleagues; take standard actions, within health and safety guidelines where applicable, to adapt to the environment	Yes	
39. understand variability in your working environment and its potential negative impact on the work process or the health and safety of yourself or colleagues; determine the level of risk and appropriate response?	Yes	

Pastoral Care and Welfare:	
Is the role holder required to:	
40. show sensitivity to those who may need help or, in extreme cases, are showing signs of obvious distress; initiate appropriate action by involving relevant people?	
41.give advice on commonly occurring welfare issues or queries; follow standard welfare procedures for the institution; recognise when and individual should be referred elsewhere for professional help; respect confidentiality?	
42. give support, guidance or pastoral care where standard procedures do not always exist; maintain confidentiality and build trust; judge when to listen, when to give advice or guidance and when to refer the individual for professional help; be fully aware of support networks for both yourself and the individual?	

Team Development:		
Is the role holder required to:		
43.advise or guide new starters working in the same role or unit on standard information or procedures?		
44.train or guide others on specific tasks, issues or activities; give advice, guidance and feedback on the basis of your own knowledge or experience; deliver training?		
45.carry out training or development activity according to the needs of the individual or group; identify current capabilities and future needs; define the performance standards required; identify appropriate developmental activity; assess the application of learning; give feedback and guidance on overall performance?		

Teaching and Learning Support:			
Is the role holder required to: 46.introduce students or others who are new to the area to standard information or procedures?	Yes		
47.teach or train students or others on specific tasks, issues or activities; assess performance and provide feedback during the event?	Yes		
48.teach, train or facilitate development activities for individuals or groups on certain aspects or subjects within a particular academic discipline or specialism; monitor performance giving feedback and guidance; act as catalyst for further development or learning?	Yes		
49. deliver a range of teaching or development activity within a particular academic discipline or specialism, teaching across the breadth or depth of the subject; challenge thinking and fosters debate; encourage the development of intellectual reasoning and rigour?	Yes		
Do you:			
Provide standard information or delivers teaching or training?	Yes		
Design content or learning materials within existing frameworks; make appropriate modifications to existing materials on the basis of the knowledge or experience of the learner(s)?	Yes		
Develop innovative approaches to the learning experience and the curriculum; originate content and methodology?	Yes		

Knowledge & Experience:		
ls t	he role holder required to:	
Α.	be a leading authority in their subject or profession with widespread professional or public recognition?	No
В.	be recognised as an authority in your field or specialism within the institution or amongst external peers, based on demonstrated expertise; shape and influence developments within the institution through your own contribution to your area of expertise?	No
C.	apply a breadth or depth of experience showing full working knowledge and proficiency of your own area of expertise; act as a point of reference to others; demonstrate continuous specialist development, acquiring and refining skills and expertise in new or related areas through undertaking and encouraging internal or external development activity?	No
D.	apply working knowledge of theory and practice, sharing this knowledge with other s as appropriate; demonstrate continuous specialist development by acquiring relevant skills and competencies?	Yes
E.	have sufficient knowledge or expertise to work on day to day issues in your own area without direct or continuous reference to others?	Yes
F.	be aware of basic principles and practices; have an understanding of the systems and procedures which directly impact on your own work and be supervised or works closely with colleagues you can turn to for support?	Yes

Please confirm: The above represents a true and accurate picture of the current requirements of the role.				
Completed by:	Robert Hairstans	Date:	27/02/2019	
Signed:	16th			
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