



# Proposal for New Degree Programme

## Stage 1

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## OVERVIEW OF PROGRAMME

Grey text has been added to provide guidance. Please delete as you add your own text, remove italics, and change the font colour to black.

ABOUT THE PROGRAMME		
<b>Title of programme</b>	<i>PhD in Data Science and Artificial Intelligence</i>	
<b>Intended Award</b>	<i>PhD</i>	
<b>Alternative awards</b>	PGDip, PGCert	
<b>School</b>	School of Informatics	
<b>Programme Director</b>	Amos Storkey	
<b>Programme start dates</b>	01/09/2019	
<b>SCQF level of highest award</b>	12	
<b>Total credit value of programme (<i>for highest award</i>)</b>	540	
<b>Partner institution(s) if any</b>		
<b>Mode of delivery</b> <i>(Please ✓ those which apply to this programme)</i>	On campus	X
	Online	
	Blended learning	
	FT	X


	PT	
	Intermittent	
<b>Expected length of programme</b>	FT	<b>3 years</b>
	PT	
	Intermittent	
<b>Description of the programme and its structure (maximum 150 words)</b>		
<p><i>The PhD in Data Science and Artificial Intelligence is a 3 year programme of intensive research, unifying the fields of Data Science and Artificial Intelligence, covering machine learning, statistics, artificial intelligence, computer vision, agent-based systems, speech and language processing amongst many others. The PhD programme has a research focus, but also involves direct engagement with company and public sector partners, training in responsible research and innovation, public engagement and transferable skills.</i></p>		
<b>Career, employability and opportunities for continuing professional development.</b>		
<p>Data Science and Artificial intelligence are impacting every area of society, and there are few professions where the skills of students from this programme are not needed. Students with the skills this programme provides are in exceptionally high demand, and we expect graduates from this programme to go on to be leaders in the field. Graduating students enter many careers from academic and company research posts, startups, data-scientist and AI roles in companies, or research posts in applications of AI in other fields.</p>		

## BUSINESS CASE

This section should be used to outline the business case for the proposed programme. Before completing this section market research should have been undertaken.

STRATEGIC PLANNING, RECRUITMENT & COMPETITOR ANALYSIS			
<b>Programme Title</b>	PhD in Data Science and Artificial Intelligence		
<b>Programme Proposer</b>	Amos Storkey		
<b>Strategic Planning</b>	Data Science and AI are key to the whole University plan. This PhD programme is vital to Informatics, to the Bayes Centre and to the University as a whole. It has the backing of companies to the tune of 3.1M cash contribution from company partners.		
<b>Recruitment</b> <i>Please provide a detailed commentary on your marketing and recruitment strategy.</i>	This PhD programme continues on from the PhD in Data Science, which had as many applications as the rest of Informatics combined. Recruitment will involve advertising across many channels, including channels that promote inclusivity, and recruitment involves a three stage shortlist, assessment and interview programme.		
<b>Competitor Analysis</b> <i>A competitor analysis report provides a better understanding of the marketplace and competition, from the going rate for tuition fees to the unique selling points and marketing strategies of competitor programmes.</i>	There are no UK competitors who can touch this programme: it continues from an established programme for the last 5 years. UCL's proposed programme is likely to be the nearest competitor, but it is not clear yet. As they do not yet have the programme, we cannot state their fees.  Competitors in the US include Stanford, Berkeley, MIT, University of Washington, Montreal etc.		
<b>Competitor Fees</b> <i>Provide the fee structure (in British pounds) of three competitors, preferably</i>	Institution	Programme	Fees
			Home

<i>those mentioned in the competitor analysis. These may be UK or International competitors.</i>	MIT	PhD in Computer Science	\$49,892	\$49,892
	University of Washington	PhD in Computer Science	\$18,852	\$32,760
	UCL	PhD in Computer Science	£9,000?	£21,000?

<b>FEES AND COSTING</b>				
<b>Programme fees</b>  <i>Fees are expressed per academic year in British pounds. For PGT programmes, a Programme Costing Template will also be required for Fee Strategy Group.</i>	Home-Scotland / EU		£4,260	
	Home-RUK		£4,260	
	Overseas		£21,000	
Fees for each new PGT programme are sent by College to the Fee Strategy Group (FSG) for review and approval. The FSG has developed a Programme Costing Template to give FSG insight into the anticipated profitability of a programme and where it sits within its market. The Fees Costings template, and guidance from FSG on filling out the template is included in the spreadsheet attached to the right.			 FSGProgrammeCostingTemplateFinalHS	
<b>Additional Programme Costs (PGR only)</b>				
<i>Additional costs to the student should be noted and justified in the table below. These should consist of items that are over and above the basic provision that should be available to all students and should reflect the special additional costs associated with the specific programme of study. Individual items over £200 should be noted on a separate row.</i>				
Item		Cost	% of Total	
Travel		7500	100	
Computing Costs		12500	100	

<b>Total:</b>		100%
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<b>ANTICIPATED AND PROJECTED ENROLMENTS</b>			
<i>What are the anticipated and projected enrolments over the next three years?</i>			
	Year 1	Year 2	Year 3
<b>Home</b>	<b>12</b>	<b>12</b>	<b>12</b>
<b>International</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Supporting Research</b>  What market research has been planned or completed to support the predicted student numbers?	None is needed this is a continuation of an existing programme (PhD in Data Science) that is receiving 250 applications a year, and already recruiting these numbers.		

<b>PLANNING AND RESOURCES</b>	
<b>New Courses</b>	No new courses needed.
<b>Facilities and Equipment</b>	Facilities are either standard (lecture halls), have been budgeted for (desk space) or are budgeted via the CDT (compute resource).
<b>Staff</b>	There are 85 potential supervisors for this programme.
<b>Resource Sharing</b>	Resources are shared where applicable (e.g. the Responsible Research training).

## COLLABORATIVE PROGRAMMES

Additional information is required for new programmes that are collaborations with external institutions or organisations which will result in a joint award and/or where taught components are shared. International partnerships must have a Memorandum of Understanding (MoU) in place before the programme can be approved by College.

Should the proposal be progressed to Stage 2 a draft Memorandum of Agreement (MoA) will need to accompany the submission.

Separate guidance is available for the development of collaborative programmes.

<http://www.ed.ac.uk/governance-strategic-planning/collaborative-activity/guidance-templates>

N/A

## CONSULTATION AND APPROVAL

<b>Programme Title:</b>	PhD Data Science and Artificial Intelligence
<b>Programme Proposer:</b>	Amos Storkey

### STAGE 1: CONSULTATION

Please confirm consultation with relevant stakeholders has taken place.

Stakeholder	Yes	NA
School Director of Professional Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>
School Academic Administration Staff	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Information Services (including Academic Support Librarians)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Student Body (SSLC/Student representatives)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Partner School Staff (E.G. Joint Programmes/shared courses etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Employers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Industry and Professional Bodies	<input checked="" type="checkbox"/>	<input type="checkbox"/>
External Consultation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Please note any other consultation		

Please provide a brief comment on the consultation process

Extensive as part of a CDT bid.
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Please provide a brief comment on the consultation process with External consultants

~40 external partners. Advisory board of high profile academic and company advisors.
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## STAGE 2: SCHOOL BOARD OF STUDIES REVIEW AND APPROVAL

Confirmation of approval of the proposal at the School Board of Studies should be entered below.

Date of BoS:
Convener Name:
Comment and Approval (BoS Minute): <i>Please provide either a link to the minutes of the Board or a copy of the relevant text from the minutes.</i>

## STAGE 3: HEAD OF SCHOOL REVIEW AND APPROVAL

Head of School: <i>Please print name</i>
Comment and Approval:
Signature:

## STAGE 4: COLLEGE CURRICULUM APPROVAL BOARD REVIEW AND OUTCOME

Date of CCAB:	
Convener Name:	
Stage 1 Outcome (please select as appropriate)	
Permission to proceed to Stage 2	<input type="checkbox"/>
Permission to proceed to Stage 2 with conditions	<input type="checkbox"/>
Proposal rejected with recommendations	<input type="checkbox"/>

Proposal rejected	<input type="checkbox"/>
Comment:	

**Document Control**

Date approved: Start date:	Amendments:	Date for next review: April 2018
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If you require this document in an alternative format please email: <a href="mailto:deanga@exseed.ed.ac.uk">deanga@exseed.ed.ac.uk</a>		