Loughborough University

Proposal for a New Programme

This form is available for downloading from admin/ar/templateshop (item 3.1)- spaces can be expanded as required.

This proposal is in **Strategic Phase**	☐
Operational Phase	▨

1. Name of Department and Departmental contact: *Dr Colin Machin* Name of intended Programme Director: *Dr Colin Machin*	

2. Award and Title of proposed new programme *(see * below)* *MSc, PGD and PGC in Digital Imaging, Computer Graphics and Vision*	Proposed JACS code (see ** below): *G450*

3. Month and Year of first intake to the programme

October 2009

Will the programme be offered as:

☐ full-time

☐ part-time

☒ full-time and part-time

4. If the proposed new programme is a revised version of an existing programme, state how this will be phased in, i.e. - year(s) that Parts B, C, D will commence; pathway for students currently on placement/leave of absence and resit students

5. List the module codes of any new modules proposed.

COP521, Digital Imaging
COP522, Computer Graphics and Visualisation

List the module codes of any restructured modules (changed credit weighting) proposed.

6. Is it intended that any modules will be available by full/partial Distance Learning?   ☐ Yes   ☒ No

Is it intended that the programme will be fully Distance Learning?   ☐ Yes   ☒ No

Guidelines on full/partial DL provision are available on the intranet at:
https://internal.lboro.ac.uk/admin/registry/uniwide/

The QAA Code of Practice on Collaborative Provision and Flexible and Distributed Learning
(including e-learning) should be followed and is available at:
http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/section2/default.asp

7.	Reasons for the proposal: its purpose and relevance; how it will enhance calibre of teaching and learning; implications for existing programmes and modules in the department *(see * below)*
	This programme will add to the department's portfolio of postgraduate programmes, building on the strengths of the existing specialist programmes and the department's research strengths in digital imaging and graphic and their applications. It makes use of a number of modules from other specialist programmes, but has a flavour of its own by virtue of the two new modules mentioned above. Changes to an existing module, Foundations of Multimedia (note a minor change in name also), will not only make it suitable for the proposed new programmes, but will improve its position in the existing programme portfolio.
8.	Expected student numbers
	15 to 20.
9.	Staffing implications - adequacy of existing departmental resources; net increase/reduction in staff teaching effort or demands on support staff
	The additional modules that identify the proposed new programme will incur no increase in staff beyond the two additional posts approved by the University in 2008.
10.	Additional Library requirements
	None.
11.	Additional Computing Support required
	☐ Network/Software (*please elaborate*): ☐ Lab Space (*please elaborate*): *All MSc modules in Computer Science are supported in the department's own MSc laboratories.*
12.	Other resource implications, e.g. - lecture room, lab and other space requirements; equipment, materials; timetabling constraints (block-teaching for example); any special residential requirements
	As only two new modules are required for this programme, the impact on space is minimal. As with all of our MSc programmes, the modules will be delivered in a "block-teaching" format.
13.	Implications for other departments both providing and receiving
	All modules are provided by Computer Science and none are, as yet, available to students from programmes outside Computer Science.

14. Evidence of demand and suitability; views of lecturers; current/prospective students; external examiners/ assessors, professional/industrial bodies etc.

The three key subject areas to be covered within the proposed MSc programme (imaging, vision and graphics) have very high demand in industry, both nationally and internationally. This unique combination of the three subject areas have potential applications within the thriving UK, EU, Chinese industry requiring a highly skilled workforce in imaging (Mobile Communications, IPTV, Digital TV), vision (Security & Surveillance, Transport, Automobile, Industrial Automation) and graphics (Computer Games, Digital Cinema, VR Systems). Feedback received from industry has highlighted the critical and urgent need for highly skilled graduates/postgraduates with advanced algorithmic, programming and application development knowledge in these areas (at present most MSc programmes in offer either cover one area and do not cover the depth required). Some evidence gathered in support of this case can be listed as follows:

- *Direct feedback/request from industry and government agencies involved in collaborative projects with staff – BAE systems, HP, Nokia, Motorola, IBM, GSK, GoScience, QintiQ, Apical Imaging, COGNEX, Imsol, PERA Innovations, EMDA, Home Office, etc. (proof can be provided on request).*
- *EU and UK government investment in these areas through, EU FP7, TSB, MOD and the EPSRC. Current funding calls in Digital Economy, Health Informatics & Technologies for Assisted Living, Security are examples of the EU's recognition of the strategic importance of these areas.*
- *Very high demand for research positions in these areas from China and India. These potential PhD candidates have enquired the alternative possibility of following a one year MSc programme in similar areas (due to financial reasons), giving them the opportunity to apply more widely for postgraduate study scholarships or employment after graduation.*
- *Substantial number of MSc MINC & IT students from the Middle East, Asia & China who have selected dissertation projects in this area in the past, suggesting that there is high demand in these countries for such qualifications/experience. At least 10 of these students (during the past 4-5 years) have progressed beyond their MSc's to register for PhD degrees.*
- *Current Socio-Economic and Political Trends in the world requiring technology in support of many aspects of day to day life.*

15. Implications for employability

Currently there is a critical demand for knowledge and experience in the areas to be covered by the proposed MSc programme. A number of companies have offered to send their employees on the proposed programme and assist in its scoping and delivery if required. In the recent past most students completing their PhD degrees in these areas have found excellent employment offers even before the defence of their theses. Feedback received from graduates completing their final year projects in this area suggests that their knowledge/experience has helped them to find good employment. International students (particularly from China and India) with a MSc degree in the subject areas proposed will be able to meet the urgent demand for such skills from the industry of their respective countries. These students will also see this as an opening to employment prospects in the EU.

16. Any other relevant information

It is proposed that the department will focus recruitment for this MSc programme by organising an information day for representatives of those industrial and government organisations who have already shown an interest. The modular format of the course will also help prospective students working full time in industry. Further it is planned to make targeted visits to Chinese, Indian and Middle Eastern Universities to promote the programme.

* A department proposing a group of new programmes/titles with a high proportion of common modules, or proposing to add a new programme/title to an existing group of this kind, should produce information clearly defining the award pathways and justify the differentiation of the award titles. Proposals of this type should be flagged up during the strategic phase, bearing in mind that the case may be driven by non-pedagogic issues (such as marketing, recruitment or administration). For proposals of this kind, Departments are advised to produce a single set of Programme Regulations and one Programme Specification, identifying clearly the pathways to, and the ILOs for, the award titles.

OPERATIONAL PHASE

Programme Regulations attached (with any Distance Learning Modules identified) ☐

Programme Specification attached
(*see Template Shop website for updated Prog Spec Template and Guidance Notes,
and Prog Spec Exemplar Intranet Site for exemplars. Sections 8 and 9 of the Programme
Specification, except where containing information specific to the programme/ department,
should refer only to the website where the generic information is held
(http://www.lboro.ac.uk/admin/ar/template/notes/lps) rather than present the generic text.*) ☐

New and Restructured Module Specifications (*LUSI* versions) attached
*(to include a completed proposal form for module changes as used for
the Annual Update process, excluding the Approval Route page for signatures
– one form will suffice for common responses)* ☐

Curriculum Map attached ☐

Assessment Matrix attached (for *all* modules) ☐

Evidence of External Support attached
(N.B. see guidance notes for new requirements) ☐

Consultation forms attached and considered:

*Other Academic Departments
(Please list)* ☐

Library ☐

Careers Centre ☐

IT Services ☐

Facilities Management ☐

*Teaching Centre (where appropriate for the development,
support and provision of distance learning)* ☐

Head of Department Signature:……………………………………………………………….

Date: ………………………………..

Comments from the Associate Dean (Teaching):

This proposal can now be submitted to Curriculum Sub-Committee

Associate Dean (Teaching) Signature: …………………………………………………………..

Date: …………………………………

Forms not including both the Head of Department's and Associate Dean (Teaching)'s signature will not be accepted.

WHEN SUBMITTING OPERATIONAL PROPOSALS please forward an electronic copy of the proposal form and the programme regulations/specification as an email attachment to J.E.Elliott

(July 2008)