



University College Dublin

Programme Quality Review Report

BSc Computer Science

University College Dublin and Fudan University

Important Note

Following the Quality Review of the UCD-Fudan BSc Computer Science, the UCD School of Computer Science & Informatics, UCD College of Science and the Software School, Fudan University reviewed the future potential of the programme and mutually concluded that it had reached the end of its current lifecycle. In addition, both UCD and Fudan consider the business case for the programme partnership to be no longer valid. Both institutions have approved the withdrawal of the programme and no further students will be admitted. UCD and Fudan agree that there remains potential for inter-institutional developments in the future.

The Quality Review Report identified a significant number of recommendations for enhancement. There are important lessons to be learned arising from the Review Group findings and these will be fed into the redevelopment of the University Framework for Collaborative and Transnational Provision - Approval, Monitoring and Review. The lessons learned from the Review process will also inform the enhancement of College and School arrangements for the management and monitoring of collaborative and transnational taught programme provision. While no further students will be recruited onto the programme, an action plan will be developed by the College and School in order to address appropriate Review Group Report recommendations, safeguard academic standards and support remaining students for the duration of their studies.

May 2013

Accepted by the UCD Governing Authority at its meeting on 17 December 2013

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1. Introduction and Overview

1.1 Background of the Review Process

- 1.1.1 This Report considers the BSc Computer Science collaborative arrangement between University College Dublin (UCD) and Fudan University, Shanghai, China. The School of Computer Science and Informatics (formerly the Department of Computer Science), University College Dublin and The School of Software, Fudan University have been collaborating on delivering a Software Engineering Programme (herein referred to as the “UCD-Fudan Programme”) in Fudan since 2002. On completion of their four years of study on the UCD-Fudan Programme, students are conferred with two degrees, a BSc Computer Science from UCD and a BE in Software Engineering from Fudan.
- 1.1.2 Under the Qualifications and Quality Assurance (Education and Training) Act 2012, a ‘designated awarding body’ i.e. UCD, is legally required to review the quality assurance procedures of a ‘linked provider’ i.e. Fudan, where an award in respect of a programme of education of the ‘designated awarding body’ is delivered wholly or in part by the ‘linked provider’.
- 1.1.3 The purpose of the programme review and site visit to the collaborative partner sites was to assist the University to assure itself of the quality and standards of its own provision and provision validated by UCD, delivered at off-campus locations – namely to ensure:
- (i) programmes meet the requirement for the relevant award and are of the appropriate standard;
 - (ii) resources in relation to staff, library, IT and teaching facilities are appropriate to allow the delivery of the programmes to the required standard;
 - (iii) appropriate quality assurance mechanisms are in place to ensure the operation of the programmes at the required standard.

1.2 Review Methodology

- 1.2.1 The Review Group received a Self-assessment Report (SAR) prepared by the UCD School of Computer Science and Informatics, in collaboration with its partner, the Software School, Fudan University. It was of concern to the Review Group that the Self-assessment Report from the UCD School was submitted at an extremely late stage in the review process. This affected the Review Group’s ability to digest the contents to the extent to which they would have liked, prior to the site visit meetings. The absence of key data in the SAR also made it difficult for the Review Group to acquire a reasonable understanding of the holistic nature of the programme.
- 1.2.2 The Review was conducted by the following reviewers:

- Professor Stan Scott, Head, School of Electronics, Electrical Engineering and Computer Science, Queen's University Belfast (Chair)
 - Professor Ruibin Bai, Associate Professor in Division of Computer Science, University of Nottingham Ningbo, China
 - Dr Mark Richardson, Head, UCD School of Civil, Structural and Environmental Engineering
 - Dr Roy Ferguson, UCD Director of Quality (Deputy Chair)
 - Ms Elaine Hickey, UCD Quality Officer (Rapporteur)
- 1.2.3 The site visit comprised a series of meetings in the School of Computer Science and Informatics in UCD and a day of meetings in Fudan, where the UCD-Fudan BSc Computer Science is delivered:
- **24 May 2013 – School of Computer Science and Informatics, University College Dublin**
 - **27 May 2013 – The Software School, Zhangjiang Campus, Fudan University, Shanghai**
- 1.2.4 At the meetings in UCD, the Review Group met with the Principal of the UCD College of Science, the Head of School and UCD staff who teach on the UCD-Fudan Programme. In Fudan, the Review Group met with: the Irish Consul-General; the Dean of the Software School; the Associate Dean of Teaching and Learning; UCD staff engaged in the delivery of the UCD-Fudan Programme; Fudan staff engaged in teaching and administration of the UCD-Fudan Programme; students from Stages 2, 3 and 4; graduates; employer and industry representatives. The Review Group also toured the facilities of the Software School, Fudan University. The site visit timetable is set out in Appendix 1.
- 1.2.5 In addition to the site visit meetings, the Review Group was presented with, and considered a limited and incomplete range of documentation, including: sample examination papers, sample exam scripts, quantitative data (e.g. student numbers, student progress, financial etc), Quality Assurance arrangements, and small sample of summary CVs of UCD staff.
- 1.2.6 **Note:** Upon Governing Authority and UCD Programme Board acceptance of this report, a Quality Improvement Plan (QIP) will be prepared by the UCD-Fudan Programme Team, outlining how each of the report recommendations will be (or are planned to be) addressed. This follow-up report will be considered by the UCD Programme Board (and UCD Academic Council Committee on Quality) and the appropriate bodies in Fudan.

Recommendations

- 1.2.7 The Review Group recommends that in any future quality review process, the UCD School of Computer Science and Informatics adheres to the UCD Guidelines for quality review and meets the agreed deadlines. Supporting documentation for the review, as agreed with the

UCD Quality Office, was not submitted by the School. Some additional documentation was, however, made available at Fudan by the Software School. The absence of key data, including *inter alia* programme specification and module descriptors, limited the Review Group's ability to fully assess the appropriateness of some elements of the review, including the programme curriculum and quality assurance arrangements. The Review Group recommends that in future review processes, the School should make supporting data and documentation available timeously in advance of the site visit. This should include quantitative data on application numbers, admission numbers, retention and progression rates, student satisfaction, employability and examination performance, each measured against suitable benchmarks.

1.3 The Partners

University College Dublin

1.3.1 University College Dublin (UCD) is a large and diverse university whose origins date back to 1854. The University is situated on a large modern campus about 4 km to the south of the centre of Dublin.

1.3.2 The University Strategic Plan (to 2014) states that the University's mission is: "to advance knowledge, to pursue truth and to foster learning, in an atmosphere of discovery, creativity, innovation and excellence, drawing out the best in each student, and contributing to the social, cultural and economic life of Ireland in the wider world".

1.3.3 The University is organised into 38 schools in seven colleges:

- UCD College of Arts and Celtic Studies
- UCD College of Human Sciences
- UCD College of Science
- UCD College of Engineering and Architecture
- UCD College of Health Sciences
- UCD College of Business and Law
- UCD College of Agriculture, Food Science and Veterinary Medicine

1.3.4 UCD supports a broad, deep and rich academic community. There are currently more than 24,000 students (15,400 undergraduates, 6,900 postgraduates and 1,900 Occasional and Adult Education students) registered on University programmes, including over 4,600 international students from more than 120 countries.

UCD School of Computer Science and Informatics (CSI)

- 1.3.5 The UCD School of Computer Science and Informatics is one of 7 schools within the UCD College of Science. The School was formed from the Department of Computer Science during the academic restructuring in UCD in September 2005. The original Department was established in the early 1970s as part of the Faculty of Science. It originally offered BSc (General) Degrees: in 1979 the first students graduated with BSc (Honours) Degrees. The School now offers a range of qualifications, including BSc (Computer Science), a number of taught Master's Programmes, Master's Degrees by Research, PhDs and a number of Certificate and Diploma qualifications.
- 1.3.6 The School considers the development of its international programmes to be important. As the UCD Department of Computer Science, it was involved in delivering a Programme in Sri Lanka as far back as 1989. The Department commenced teaching on the UCD-Fudan Programme in Fudan University in 2002. Since then, new collaborations have been established with: Wuhan University, China; Harbin Institute of Technology, China; Beijing University of Technology (BJUT)/Beijing-Dublin International College (BDIC), China; and a new BSc (Computer Science) Programme has been started in Sri Lanka.
- 1.3.7 The School currently has around 250 undergraduate students, 120 research postgraduates and over 600 taught postgraduates. It has 30 academic, administrative and technical staff.

Fudan University

- 1.3.8 Fudan University is located in Shanghai, Eastern China. In 1917, Fudan University began to offer undergraduate programmes. It became one of the national elite universities in China after the founding of the People's Republic of China in 1949. It is a member of the C9 League and the Universitas 21 group. It is widely regarded as being in the top three universities in China. Fudan University is ranked at 23 in the 2013 QS World University Rankings (Asia), and is placed in the top 100 QS World Subject Rankings for Computer Science and Information Systems.
- 1.3.9 Fudan comprises 17 Schools and 69 Departments. It offers 73 Bachelor's Degree Programmes, 201 Master's Degree programmes and six professional degree programmes. 22 disciplines and 134 sub-disciplines in the University may offer PhD degrees. The University has ten teaching hospitals, 77 research institutes, 112 cross-disciplinary research institutes and five national key laboratories.
- 1.3.10 Fudan University has four campuses: the original campus, on Handan Lu, is where the main Administration Building is located, while the Software School and the School of Computer Science are to be found on the Zhangjiang campus, situated in Zhangjiang High-Technology Park, Pudong, in the East of the city.
- 1.3.11 Fudan University has over 45,000 students, including full-time students and students in continuing education and online education. Fudan was one of the first institutions in China to enrol international students, starting in the 1950s. There are around 4,500 overseas

students, which makes Fudan University the second ranked university in China for the number of international students in attendance. It has almost 2,500 full-time teachers and researchers, including over 1,000 Professors and Associate Professors.

Fudan University Software School

- 1.3.12 The Software School is part of the Fudan School of Computer Science. The Software School of Fudan University was founded in 2002 and is one of 37 national demonstration Schools of Software in China. The Software Schools were established to provide a more practical education in Computer Science and Software Engineering to better serve the Information and Communications Technology (ICT) industry in China as it moved into a phase of rapid development at the start of the 21st century and as the Chinese economy moved from one that was largely based on agriculture and traditional industries to a high-technology one.
- 1.3.13 The principal goal of the School has been the development of high-quality programmes producing graduates educated to a high level to serve the Chinese ICT industry. The School offers a number of Bachelors, Masters and PhD degrees. The Chinese Ministry of Education has given Fudan the right to offer Bachelors and PhD degrees in Computer Software and Theory, Computer Application Technology and Computer System Architecture. The School also offers undergraduate degrees in Computer Science and Technology, Information Security and Software Engineering, a full-time professional degree of Master of Engineering in Computer Technology and part-time professional degrees of Master of Engineering in Computer Technology and Software Engineering. The School also provides basic Computer Science courses for students from other Schools in the University.
- 1.3.14 In addition, the School's teaching laboratory has been honoured as a Shanghai Experimental Teaching Center. At the end of 2010, the School had an enrolment of 171 doctoral students, 387 Master's students, 823 undergraduates and 99 full-time and 1159 part-time students on the professional Degree of Master of Engineering. The School has established good relationships with companies and various enterprises in the Shanghai area and includes Internships as part of the curriculum for senior (Final Year) students.

Commendations

- 1.3.15 The UCD-Fudan Programme between UCD and Fudan has been established for 11 years.
- 1.3.16 Both universities have high institutional world ranking positions.
- 1.3.17 This collaboration has been a 'Flagship' for UCD in China and has enhanced UCD's reputation, opened doors and helped to place the University in a strong position to develop collaborations with other universities and industry in China.

Recommendations

- 1.3.18 UCD should distil the experience gained in the development and maintenance of the UCD-Fudan Programme with Fudan, to inform the development of other collaborative relationships in China and other countries.

1.4 UCD-Fudan Degree Programme

- 1.4.1 The creation of the Software School in Fudan University was to facilitate the delivery of new programmes in Software Engineering to better serve the Chinese software industry. Once the Software School was established, Fudan decided to build on its international experience by inviting a foreign university to collaborate with the delivery of its Software Engineering Programmes. Ireland was identified as an English-speaking country that, although much smaller in size and with a population a fraction of China's, was similar, in that it had moved from a largely agriculture-based economy to a high-technology one – an objective held by the Chinese Government. Two parallel programmes were developed:

- (i) A Fudan degree (taught in Chinese) – BE in Software Engineering; and
- (ii) A UCD degree (taught in English) delivered jointly by UCD and Fudan, hereafter referred to as the UCD-Fudan BSc in Computer Science

It is the UCD-Fudan BSc in Computer Science that is the subject of this review process.

- 1.4.2 Students on the UCD-Fudan Programme are awarded two degrees on completion of the Programme: the BE Degree in Software Engineering from Fudan University and the BSc Computer Science Degree from UCD. After approximately a year of negotiations, UCD began its involvement in the UCD-Fudan Programme in the 2002/2003 academic year, with the first students graduating from the UCD-Fudan Programme in July 2005. Each year, around 50 students enrol on the UCD-Fudan Programme.

1.5 Governance

- 1.5.1 A clear Memorandum of Agreement (MoA) between both partners, setting out the duties and responsibilities of both, and signed by the President of each university (or their nominee) is in place. Although the MoA has been renewed approximately every two years, no evidence was presented to the Review Group that any formal, documented programme review had taken place during the 11 years the UCD-Fudan Programme had been offered.
- 1.5.2 The MoA outlines the duties and responsibilities of both partners including: the admission numbers and recruitment; programme management; registration; examination arrangements; student complaints and appeals; quality assurance arrangements; marketing and advertising; facilities; awards - certificates and transcripts; financial arrangements; indemnity and liability; dispute resolution; legal jurisdiction; duration; termination; and communication. However, despite good intentions, it was not clear to the Review Group

that the duties and responsibilities outlined in the MoA were being fully implemented e.g. annual programme reporting.

- 1.5.3 It is also unclear if the duties and responsibilities outlined in the MoA are sufficiently monitored at the College and University level in UCD. For example, some financial issues were not addressed as quickly as they should have been in the early years of the partnership and such delays, had they been allowed to continue, may have impacted negatively on the viability of the UCD-Fudan Programme.
- 1.5.4 It was clear to the Review Group that a constructive, informal and collegial relationship has developed between the partners over the eleven years of the collaborative arrangement. At a certain level, this relationship appears to have worked well to date and both Schools seem to engage positively with each other. However, this informality has resulted in a lack of formal action being taken and records maintained, in relation to, for example, annual monitoring of the programme (no reports were provided), no notes or minutes have been maintained of programme management meetings, as required by the MoA.
- 1.5.5 The Review Group was also concerned that some staff delivering the programme did not seem to be aware of the content of the MoA governing the partnership and the management of the programme specifically. The Review Group consider it to be good practice to ensure that members of staff engaged in delivering a programme with a collaborative partner are made aware, as a minimum, of the formal programme management arrangements in place before teaching on a Joint Programme.
- 1.5.6 The Irish HE environment is now very different to that existing when the partnership was established in 2002. In particular, the impact of the Quality and Qualifications Act 2012 makes formal reporting and formal review an explicit legal requirement. The Review Group acknowledges that the informal approach to programme oversight has, to date, worked reasonably well, however, formal monitoring and record keeping must be the *modus operandi* for the future.
- 1.5.7 The Review Group was presented with conflicting information regarding the financial viability of the UCD-Fudan Programme. This conflict appears to be rooted in the difference between marginal cost and full economic cost comparisons. The Review Group did not have the time, nor the data, to forensically drill into this issue. It was clear to the Review Group, however, that if the collaborative arrangement is to have a future, the underpinning income/expenditure issues need to be clarified and discussed at UCD School, College and University level. The Dean of the Software School at Fudan University was concerned with the financial implication of introducing different programme management practices, considering the small margins under which the programme operates. This discussion should be informed through a cost benefit analysis that recognises both the full economic cost, on the one hand, and the reputational value for UCD in China, on the other hand, of this Irish-Sino example of an enduring and successful partnership between highly ranked universities.

Commendations

- 1.5.8 A clear MoA, signed by appropriate members of each university is in place.
- 1.5.9 A strong collegial relationship exists between the partners.
- 1.5.10 It was noted that UCD had introduced, for 2012-13, an institutional mechanism for annual reporting for all taught collaborative and transnational provision. This is considered good practice.

Recommendations

- 1.5.11 UCD should consider reviewing the effectiveness of College and School level administrative oversight of taught collaborative and transnational arrangements, with particular reference to programme finance and monitoring issues.
- 1.5.12 To date, the informal programme management arrangements appears to have been partially successful, however, under the new Irish quality legislative framework, it is no longer fit-for-purpose. Both partners are at risk in the absence of formal programme management processes and record keeping. The Review Group recommends that formal annual monitoring, module evaluation, periodic review and other appropriate programme management mechanisms, including relevant record keeping, are put in place immediately.
- 1.5.13 The School should consider engaging with the UCD Records Management and Freedom of Information Unit to seek advice on appropriate and proportionate record keeping. This is timely in light of recent legislative developments in Ireland in respect of the Freedom of Information Act and the responsibility of the Office of the Ombudsman for Public Administration, being extended to cover education.
- 1.5.14 New UCD and Fudan staff engaged in the delivery of programmes should be made aware of the formal programme management arrangements that are in place before participating in the programme.
- 1.5.15 The Review Group recommend that the Partnership MoA be reviewed and refreshed, to clarify the entitlements and responsibilities of both parties.
- 1.5.16 If the partnership is to continue, it will need to be on the basis of a mutually agreed financial arrangement. It would seem appropriate and timely that UCD renegotiate the financial arrangements with Fudan (including considering increasing student numbers and re-evaluating the student fee charged) to ensure that the funding basis permits adequate staffing and academic standards to be maintained.

2. Teaching, Learning and Assessment

2.1 Programme Content and Delivery

- 2.1.1 As stated above, the Software School in Fudan offers two separate four-year full-time programmes in Computer Science and Software Engineering. All students take a common first year in the Fudan Software Engineering School, which is delivered in Chinese. Towards the end of the first year, students choose whether to apply for entry to the UCD-Fudan Programme (joining it in Stage 2), or whether to stay on the Fudan Programme.
- 2.1.2 The structure and content of the UCD-Fudan Programme is based on that of the UCD BSc Computer Science Degree Programme, a four-year Honours Degree Programme, in place at the time of the initial MoA. At the end of the UCD-Fudan Programme, students are awarded a BE Software Engineering Degree by Fudan University and a BSc Computer Science Degree by UCD.
- 2.1.3 UCD delivers a total of 12 modules per annum on the UCD-Fudan Programme: three in Stage 2 (Second Year), three in Stage 3 (Third Year) and six in Stage 4 (Fourth Year). The modules taught by UCD staff include: Data Structures and Algorithms; Object-Oriented Programming; Functional Programming; Logic Programming; Computational Theory and Formal Syntax; Formal Principles of Software Construction; Artificial Intelligence; Philosophy and Practice of Science; and Advanced Operating Systems.
- 2.1.4 UCD staff also teach three Advanced Topic modules as part of the UCD Degree. The Advanced Topic modules typically involve a UCD lecturer delivering a module on their research area or on a developing area of Computer Science or Software Engineering. Subject areas that have been taught as Advanced Topic modules include: Advanced Information Retrieval; Text Retrieval; Machine Learning; and Agent-Oriented Programming.
- 2.1.5 Stage 1: Students in Stage 1 of the Fudan Software Engineering Programme take a total of 17 or 18 modules, all delivered by Fudan University staff. The Review Group were informed that in most Chinese universities, the first year of a programme is quite a general year, with only a small number of modules being specific to the subject of the particular programme. It was noted that not all modules carry equal credit. At the end of Stage 1 of the Fudan Software Engineering Programme, students who transfer to the UCD-Fudan Programme are awarded 60 credits under the European Credit-Transfer System (ECTS) and are progressed to Stage 2 of the UCD-Fudan Programme.
- 2.1.6 Stage 2: Students in Stage 2 of the UCD-Fudan Programme take a total of nine modules (3 delivered by UCD staff) with a total of 55 ECTS credits. The modules in Stage 2 also include elective modules from the Fudan University curriculum.
- 2.1.7 Stage 3: Students in Stage 3 of the UCD-Fudan Programme take a total of 10 modules with a total of 65 ECTS credits. Students take all their modules in Computer Science at this stage. As in Stage 2, UCD staff deliver three modules in Stage 3. Five credits must be transferred from Stage 3 to Stage 2 for each student in order to give them 60 credits in each of Stages 2

and 3 to make them Stage-compliant for Stage 2 and Degree-compliant. UCD staff deliver a module on *Western Philosophy and Practice of Science* in Stage 3. This module introduces Chinese students to various aspects of Western scientific thinking, focuses on the scientific method and its relevance to the study of Computer Science and places the study of Computer Science in a scientific, rather than technological, context.

- 2.1.8 Stage 4: Students in Stage 4 of the UCD-Fudan Programme take a total of nine modules (6 delivered by UCD staff) and complete a major project giving a total of 60 ECTS credits. Students go into much greater depth in the subject and, as discussed above, a feature of Stage 4 is the Advanced Topic modules given by UCD staff, typically in their own research areas, which are not available to students outside the UCD-Fudan Programme. Stage 4 students also participate in an internship in a company or in a research laboratory from Monday to Thursday each week, returning to the University for classes on Fridays and Saturdays. Students typically take most of their modules in Semester 1, only taking the three modules that are given by UCD staff in Semester 2. Students also complete their Graduation Thesis in Semester 2.
- 2.1.9 Student representatives indicated that they were happy with the overall module content and the quality of the teaching. They were satisfied that the complementary nature of the partnership, using both a Confucian and a Western model of education, was of great benefit to them, especially in the Information and Computer Technologies sector. They also benefitted from learning through English. The students, however, reported some repetition in subject content between the Stage 1 curriculum and the early part of stage 2 of the UCD-Fudan Programme curriculum and felt that they could be challenged more.
- 2.1.10 The Review Group could only make a marginal assessment of the currency and appropriateness of the UCD-Fudan programme content, in the absence of a programme specification and module descriptors. The absence of these documents was a significant constraint on the Review Group.
- 2.1.11 Current students and graduates, separately and unprompted by the Review Group, expressed some frustration at the apparent lack of programme coherency. The Review Group had only a general impression of the curriculum content but felt that the Schools need to review the content periodically to remove or minimise duplication/overlap and ensure that the programme has, and maintains, a coherent and appropriate structure. The development of a programme specification should help to facilitate this. The Review Group also felt that there is scope to introduce additional content to explicitly focus on, for example, transferrable skills that are important in today's global business environment, such as, presentation skills, problem-solving and critical thinking, and debate. The Review Group also concluded that there may be benefit in delivering an 'English for Computer Science' module taught by a native English speaker.

Commendations

- 2.1.12 The inclusion of the *Western Philosophy and Practice of Science* module is to be commended.

- 2.1.13 The Advanced Topic modules in Stage 4 have many benefits, including: exposing students to research being carried out or directed by staff lecturing on the UCD-Fudan Programme; allowing flexibility to include new subjects in a fast-changing field; and increased focus on UCD staff specialist areas.
- 2.1.14 As indicated above, the Review Group would endorse the decision by UCD to introduce an annual programme review process for collaborative and transnational provision.

Recommendations

- 2.1.15 The UCD-Fudan Programme specification and module descriptors should be prepared as a matter of urgency for consideration by the UCD Science Programme Board.
- 2.1.16 As part of the process of preparing a programme specification and module descriptors, the Review Group recommend that a fundamental review of the programme structure and content takes place immediately.
- 2.1.17 The Review Group recommends that the Advanced Topics be agreed in advance each year so that any gaps/overlaps in the overall UCD-Fudan Programme curriculum can be identified and addressed. However, the Advanced Topic modules should not be used as a way to address gaps in the curriculum.
- 2.1.18 While the inclusion of the Advanced Topic modules has many advantages and allows great flexibility, they could have a detrimental impact on the overall coherency of the UCD-Fudan Programme learning outcomes, if the curriculum is not regularly monitored and reviewed.
- 2.1.19 The UCD-Fudan Programme Team should enhance the transferrable skills elements included in existing modules, including *inter alia* presentation skills, critical thinking, etc.
- 2.1.20 The Review Group recommends that a module on English for Computer Science, taught by a native English speaker, should be introduced into the curriculum.

2.2 Programme Credits

- 2.2.1 UCD uses the European Credit-Based System (ECTS), whereas China uses its own credit system and after some examination of the modules, workload, etc, it was agreed between the two Schools that 5 ECTS credits is approximately equivalent to 3 Chinese credits. Fudan modules count towards the credit total for the UCD Degree using a form of "currency exchange". The Review Group were not presented with documented evidence of how this 'harmonisation process' works in practice.
- 2.2.2 Students on the UCD-Fudan Programme must attain a total of 240 ECTS credits to be awarded a degree from both Fudan and UCD. The Review Group was concerned that students can be awarded a UCD degree based, apparently, on only 60 ECTS credits delivered by UCD.

- 2.2.3 There appears to be some incompatibility between the UCD and Fudan system management process for modules, e.g. the amount of credit a student can earn in a given study year. UCD and Fudan need to work together to resolve these issues in a more permanent and systematic way.

Recommendations

- 2.2.4 The Review Group would recommend that UCD consider, as a minimum, that a UCD award can only be made if at least 50% of a programme's credits are from UCD delivered modules. The Review Group recommends that UCD review and agree a minimum threshold to guide future collaborations and to ensure consistency of practice within the University and across partnerships.
- 2.2.5 The Review Group recommends that consideration should be given to redesigning the UCD-Fudan Programme as a Joint rather than a Dual Degree, and that the Memorandum of Agreement be reviewed, to update finance, programme management, and student recruitment arrangements.
- 2.2.6 The Schools should more effectively communicate and record changes to their programme contributions (e.g. modules being changed from core to optional) to ensure such changes do not impact adversely on the coherency of the UCD-Fudan Programme, and the different programme management systems used by each university.

2.3 Assessment

- 2.3.1 Assignments are given throughout both Semesters with end of module examinations in December/ January and in May. Students are assessed on each module that they take on the UCD-Fudan Programme using a combination of continuous assessment and final written examinations; most UCD modules have a 50-50 split for practical subjects, with greater weight being given to the final examination for more theoretical subjects. Many modules have practicals and major projects, while some have weekly or fortnightly tutorial sheets.
- 2.3.2 UCD and Fudan have different assessment policies, with Fudan requiring a final examination for modules, while in UCD staff have been encouraged to identify a range of assessment techniques to reduce, if not eliminate completely, the reliance on the final written examination. This potentially creates a tension between assessment protocols.
- 2.3.3 The UCD-Fudan Programme uses Teaching Assistants (TAs) and Student Teaching Assistants (STAs) to support teaching staff (see also 4.1.4). STAs are often involved in grading continuous assessment assignments. Sample solutions and grading guidelines are provided by the UCD lecturers. The UCD lecturer meets with TAs and STAs to review the grades, discuss difficulties experienced by the students, identify instances of possible plagiarism or other anomalies, and have a general discussion on the students' performances. TAs are sometimes involved in grading final examinations using sample solutions and grading guidelines provided by the UCD lecturer.

- 2.3.4 The TA and the UCD lecturer also meet to examine the overall grade distribution once all component grades are combined to produce the final grade for a module. This is an important part of the overall assessment process in both universities, but particularly so in Fudan, where modules are graded “on a curve” i.e. a statistical method of assigning grades designed to yield a pre-determined distribution among the students in the class. The Review Group was concerned that two different grading schemes are in use on the UCD-Fudan Programme. (See also 2.4.3 below).
- 2.3.5 Further differences include the disparity in the range of grades used in UCD and Fudan, and the divergence due to the setting of grade boundaries in Fudan, as a consequence of the policy of ‘grading on a curve’, which has required adjustments on the part of both Schools.
- 2.3.6 Both Schools use External Examiners to review exam papers and scripts, however, the External Examiner system at UCD is wider in scope, in that it also involves feedback on curriculum content, programme development, teaching and assessment methodologies.

Commendations

- 2.3.7 The two Schools have devised an adapted system of assessment that addresses the requirements of both institutions.
- 2.3.8 The UCD-Fudan Programme Directors and staff on the UCD-Fudan Programme meet to discuss grade distribution and student performance on a regular basis.

Recommendations

- 2.3.9 The UCD-Fudan Programme Directors should consider additional ways to formally reconcile and document the different grading schemes that are currently in use on the UCD-Fudan Programme. As a minimum, the differences in the range of grades should be resolved.
- 2.3.10 The Review Group recommends that the UCD-Fudan Programme consider seeking broader input from the External Examiners, especially in respect of curriculum content and assessment methodologies. A common external examining system should be considered for the UCD-Fudan Programme.
- 2.3.11 Both Schools should ensure that TAs and STAs receive appropriate induction and are familiar with Fudan and UCD programme requirements.

2.4 Grade Approval Systems

- 2.4.1 There are two semesters per annum in Chinese universities, each with approximately 16 weeks for teaching and two weeks for examinations. There are also two semesters in Irish universities, but each has approximately 12 weeks for teaching, 1-3 weeks for fieldwork/study/revision and two weeks for examinations. The longer Semesters in Fudan and their different timings compared to UCD, appear to cause problems with the Grade

Approvals Process timeline in UCD, which places UCD CSI under significant time pressure for entering grade data.

- 2.4.2 The final decisions on grades are made in Fudan at School level, in contrast to the system of Programme Examination Boards used at UCD. UCD standard practices include External Examiners, an Exam Paper approval process and a Grade Approval Process. The Grade Approval Process involves a Pre-Exam Review Committee, School Module Exam Committee and a Programme Exam Board, along with local School review and monitoring. UCD has a strict timetable for grade entry, however, the longer semesters and different grade preparation timings in Fudan can make it difficult for UCD CSI to adhere to the UCD timetable. For example, Stage 4 students may only finish their final assessments about a week before Graduation Day. The timing constraints can, subsequently, have a knock-on effect on the production of parchments for graduating students.
- 2.4.3 As referenced in 2.3.4 above, two different grading schemes are in use on the UCD-Fudan Programme, which may potentially result in the two degrees being awarded with different classifications. In discussions with students and graduates, it became evident that students differentiate between the Awards. They indicated that, as appropriate, they choose which Degree they use when applying for postgraduate programmes and jobs, depending on the institution or country to which they are applying. The different grading systems make this possible. The Review Group believe that both Awards should have the same classification.
- 2.4.4 Graduates also indicated that the restrictions in relation to accessing the UCD online system (addressed in 4.2.5), impacts on their ability to access online Certificates of Attendance, Academic Transcripts, Statements of Results, Academic Statements and Diploma Supplements. In particular, online access to Academic Transcripts is important for students and graduates as it lists their complete academic history, modules attended, breakdown of marks/grades achieved, the degree awarded, overall grade and conferring date. This does not appear to be an issue for the Fudan Degree.

Commendations

- 2.4.5 To date, UCD CSI has managed to meet the UCD Grade Approval Process scheduling requirements through the co-operation and flexibility of UCD Registry (Assessment).
- 2.4.6 The UCD Grade Approval Process is thorough and consistent.

Recommendations

- 2.4.7 UCD and Fudan should seek ways to harmonise key grading and Grade Approval process mechanisms to bring about a better alignment and more timely production of results.
- 2.4.8 The Review Group recommends that UCD consider adding the Grade Point Average (GPA) to Academic Transcripts for students on the UCD-Fudan Programme, to ensure that the information provided for both Awards is comparable.

- 2.4.9 The Review Group recommends that UCD endeavours to make online student data, routinely available to Belfield students, accessible to UCD-Fudan Programme students and graduates, for example, Academic Transcripts. Please also see Recommendation 4.2.9.

2.5 Plagiarism

- 2.5.1 It was agreed by both Schools that plagiarism is a significant issue with students on the collaborative programme. While this issue is not unique to this particular programme, addressing the issue is of great significance in the context of cultural differences between Western and Chinese society in respect of perceptions regarding the appropriate use of intellectual property that is in the public domain. Staff are attempting to address this issue informally, but it was agreed that a more formal approach by both Schools is required. One of the reasons that students choose the UCD-Fudan Programme is to experience Western education methods and culture. As the students are UCD registered students, the Review Group believes that increasing student awareness that plagiarism is culturally unacceptable in Western educational institutions is an important learning outcome for the UCD-Fudan Programme.

Recommendations

- 2.5.2 The Review Group recommends that the Schools agree a formal policy to address plagiarism. The policy should be communicated clearly to students (for example, in the student handbook or during student inductions), including examples of acceptable ways to reference material. The policy should also set out the consequences for plagiarism, for example, a 0% grade on an assignment and/or a repeat assignment with the maximum mark capped. A tiered system of sanctions should be considered.

3. Programme Management

3.1 Programme Management

- 3.1.1 The two Schools have indicated that the UCD-Fudan Programme is jointly managed. The recruitment of students is the responsibility of Fudan and the two Schools have stated that they collaborate on programme delivery, review of programme content, examination processes and quality assurance procedures. Insufficient evidence was provided to the Review Group, however, to confirm this is the case in all areas e.g. governance and quality assurance. Each School has its own UCD-Fudan Programme Director/Co-ordinator, who liaise about programme content, delivery and assessment issues. In Fudan, the UCD-Fudan Programme Co-ordinator reports to the Teaching Dean and the Dean of the School; in UCD, the UCD-Fudan Programme Director reports to the School Head of Undergraduate Teaching and Learning and the Head of School.
- 3.1.2 Each School has its own Programme Board/Committee Structure. In Fudan, there is a Programme Committee, with the following membership: the Dean of the Software School and School of Computer Science; the Vice-Dean of the Software School and School of

Computer Science; the Vice-Dean of the Software School; and the Director of the Administrative Office of the Software School.

- 3.1.3 In UCD, undergraduate programmes are the responsibility of a Programme Board. The Board is responsible for the overall performance of students, their progression through the programme and their eventual graduation. The Board also oversees programme design, delivery, regulation and quality. The BSc Programme Board is chaired by the UCD College of Science Associate Dean for Undergraduate Programmes.
- 3.1.4 Timetabling for the Programme is the responsibility of the central Fudan Administration, with input from the Software School and UCD, regarding when the UCD staff will be in Shanghai and which modules they will be delivering. Typically, lectures (and occasionally practicals) take place from 8:55am until 11:35am. After lunch, lectures and practicals take place between 13:30pm and 17:00pm. In the evenings, there can be practicals (or other teaching and learning activities) from 18:00pm to 20:00pm or even later. Lectures and practicals are held from Monday to Saturday and most modules are delivered in two or even three contiguous lecture slots to facilitate students spending full mornings or afternoons in either the Handan Lu campus or Zhangjiang campus to reduce the amount of travel required between campuses (a 60-90 minute journey by shuttle bus). Stage 4 students have lectures on Fridays and Saturdays as they work on their Internship Programme from Monday to Thursday.
- 3.1.5 Students indicated that, in practice, many choose to complete a higher number of modules in the early stages of the UCD-Fudan Programme to facilitate reduced lecture requirements in Stage 4, thus allowing them to concentrate on their Internships (see 2.1.8 above).
- 3.1.6 Examination grades are approved at School level at a School Modular Examination Committee Meeting and are approved at BSc Programme Board level at a Programme Examination Board Meeting. As discussed above, because of the different timing of exams and other assessments in Fudan, compared with UCD, the meetings to approve the UCD-Fudan Programme grades usually have to be convened separately. The BSc Programme Examination Board Meeting is chaired by the UCD College of Science Associate Dean for Undergraduate Programmes, or nominee (usually a senior academic in the UCD College of Science).
- 3.1.7 In the UCD School of Computer Science and Informatics, the Head of School is currently in the process of setting up explicit School-level Programme Committees for each of the School's programmes. It is the intention that the UCD-Fudan Programme will also have a School-level Programme Committee, and that Fudan will have representation on this Committee.
- 3.1.8 There are two conferring ceremonies, one exclusively for the UCD-Fudan Programme, where the graduates of the UCD-Fudan Programme receive their UCD Degrees, the other is the Fudan Conferring Ceremony where the graduates receive their Fudan Degrees. The Review Group noted that the two separate conferment ceremonies enhances the partnership because students get the direct involvement of Senior Management from both universities

at the separate ceremony e.g. last year's ceremony included the UCD President and the Fudan Vice-President. The Fudan President has participated in at least half of the conferment ceremonies to date. If the separate conferment wasn't in place the small UCD-Fudan cohort would get subsumed into the very large Fudan conferment event.

- 3.1.9 The Review Group was concerned that, despite referring to many of the programme processes and procedures as 'joint', in effect, the programme management appears to operate as two separate parallel systems, with little overlap. There is scope to enhance the level of collaboration by engaging in some relatively minor steps, for example, including representation from UCD at the Fudan Programme Committee, with a translator if necessary, and including a representative from Fudan at the UCD Programme Board, perhaps using conferencing facilities e.g. Skype.

Commendations

- 3.1.10 Each School has clear systems in place for the management of their respective undergraduate programme elements.
- 3.1.11 Students are very positive about the UCD-Fudan Programme and their learning experience.
- 3.1.12 Each School has clear reporting lines for the review and approval of examination grades.
- 3.1.13 The Review Group supports the UCD School of Computer Science and Informatics development of an explicit School-level Programme Committee for the Programme, with Fudan representation on the Committee.

Recommendations

- 3.1.14 The Schools should review the UCD-Fudan Programme management processes and procedures to identify opportunities to include more formal and genuine collaborative processes, e.g. joint annual monitoring.
- 3.1.15 The Review Group recommends that the Schools consider developing programme structure 'maps' to identify areas of separate activity that could be restructured to involve both parties.
- 3.1.16 The timetable for students, especially those in Stage 4, appears to be very intensive. The Review Group recommends that consideration be given to restructuring lecture schedules to reduce the workload on students in Stage 4, which will enable them to focus on their Internship.

3.2 Student Recruitment and Retention

- 3.2.1 The recruitment of students onto the Software Engineering Programme and subsequently onto the UCD-Fudan Programme is carried out by the Software School in Fudan, with input from UCD. Students recruited onto the BE Software Engineering Programme are enrolled by

Fudan University based on the Chinese college entrance examination (including English language attainment), independent enrolment and recommended admission routes. Each year, 40-50 Stage 1 students from the Fudan Software Engineering Programme apply and are selected to join the UCD-Fudan Programme.

- 3.2.2 Before they apply, the candidates receive an introduction to Ireland and Irish culture. From March to April each year, the School introduces a cultural programme to Stage 1 Software Engineering students. The School also holds a recruitment meeting for all Stage 1 students, in which senior staff in the School, the Fudan Programme Director/Co-ordinator, teachers, the UCD Programme Director/Co-ordinator and UCD lecturers, together with student representatives from the Stage 2, 3 and 4 classes, participate. After the cultural programme and the recruitment meeting, interested students submit application forms for the UCD-Fudan Programme to the Software School, which undertakes the selection and confirms the enrolment list, with input from UCD.
- 3.2.3 The Review Group were of the view that restricting the pool of potential applicants to only the Stage 1 cohort of the Fudan Software Engineering Programme was immediately restricting student numbers and limiting the scope to increase student numbers. The Review Group believes that there is an opportunity to widen the recruitment pool by inviting direct application to the UCD-Fudan Programme, so students from the outset in Stage 1 are registered for the UCD-Fudan Programme. However, the current system of recruiting students from the first year of the common stage of the programme should continue.
- 3.2.4 The Review Group was impressed that Irish cultural activities are encouraged and supported by the Software School and UCD CSI and enthusiastically embraced by the students, for example, the Choir and the Irish Dance Troupe. These activities help to make the UCD-Fudan Programme unique and more attractive to students.
- 3.2.5 The Review Group considered progression data and met with students and recent graduates of the UCD-Fudan programme. They were satisfied that progression throughout the programme is monitored and reviewed and that student retention does not appear to be an issue on the programme.
- 3.2.6 It was evident in the Review Group meetings with students that the level of spoken English increased dramatically through the programme stages. Exposure to native English speakers, internships in companies in Stage 4 and internships at UCD greatly improved the students' ability to communicate confidently in English. The Review Group noted that all students recruited to the Fudan Software Engineering Programme are required to achieve the Chinese national English language requirements for entry into Chinese university programmes. However, as the programme is taught through English and the internships require a good English language standard, the Review Group believe that an agreed inter-institutional minimum language standard should be introduced. The Review Group's primary concern is that students are capable of undertaking their studies in English and that they have key competencies in comprehension, writing and speaking skills. It is critical that formal mechanisms are put in place to (i) support the development of students' English Language competence and (ii) to assure their progress in the use of English.

- 3.2.7 Programme publicity material (English version) reviewed by the Review Group did not provide prospective candidates with sufficient information about the programme content or structure. There did not appear to be a formal approval mechanism in place for the content and accuracy of publicity material.

Commendations

- 3.2.8 The students are highly-motivated and high-achieving and are very positively engaged with the UCD-Fudan Programme.
- 3.2.9 Student retention does not appear to be an issue on the UCD-Fudan Programme.
- 3.2.10 The inclusion of Irish cultural activities for students is to be commended.

Recommendations

- 3.2.11 Mindful of the Chinese Ministry of Education's oversight of programmes offered by universities in China, the Review Group, nevertheless, recommends that UCD and Fudan consider, in addition to the current recruitment methods from Stage 1, recruiting students directly into the first year of the common stage of the UCD-Fudan programme and/or marketing the programme more widely in the University prospectus.
- 3.2.12 The Review Group recommends that formally agreed minimum standards for English language competence are agreed for admission and progression through the programme. Reference should be made to other UCD degree programmes offered in China (e.g. in BDIC and in Hong Kong) and advice sought from the UCD Applied Language Centre when determining the minimum language threshold and the support that should be made available to students.
- 3.2.13 All publicity material for the UCD-Fudan Programme should be available in both English and Chinese. UCD CSI should put in place approval processes and monitor all related publicity material to ensure it is accurate and appropriate. UCD CSI should also consider consulting UCD Communications to ensure that all such material takes cognisance of the UCD Branding and Communication Strategy.

4. Staff, Facilities and Student Supports

4.1 Staff

- 4.1.1 UCD modules are taught by UCD staff who travel to Fudan for periods ranging from four weeks to over four months. Two members of UCD School staff go to Fudan each Semester, with each member of staff delivering three modules. The remaining modules on the UCD-Fudan Programme are taught by Fudan staff. The UCD School identified a number of advantages to involving UCD staff for relatively long periods on the Fudan campus, including:

providing face-to-face feedback on assignments and assessments; facilitating direct contact for students with the lecturers on material, assignments, and pace of programme delivery; allowing practicals and tutorials to be more closely synchronised; and providing an international staff presence on the Fudan campus for students on the programme.

- 4.1.2 Since 2002, there have been 11 different UCD lecturers involved in teaching on the UCD-Fudan Programme. There has been a reasonable level of stability in the staff who are involved with the UCD-Fudan Programme, however, the Review Group noted that few senior UCD School staff were involved in teaching and recently there has been a reliance on postdoctoral researchers, which does not appear to be within the spirit of the agreement.
- 4.1.3 It was evident that the UCD-Fudan Programme has “champions” within UCD CSI, who are key to the development and delivery of the UCD-Fudan Programme. However, the Review Group identified a possible risk to the future of the UCD-Fudan Programme if these members of staff are no longer available.
- 4.1.4 The UCD-Fudan Programme also employs Teaching Assistants (TAs) and Student Teaching Assistants (STAs) to support the delivery of the programme (see also 2.3.3). TAs are full members of Fudan teaching staff and fulfil a number of support functions in respect of UCD staff teaching on the programme, including: collecting feedback from students; helping UCD lecturers respond to feedback; acting as a conduit of information between the Fudan School management and the UCD lecturer; on occasion assisting the UCD lecturer in grading examinations; and working with the UCD lecturer to review grades, class performance and overall grade distribution.
- 4.1.5 Student TAs act as tutors in Tutorial sessions and as demonstrators in Lab/Practical sessions, distribute notes, tutorial sheets and practical exercises and often help in grading assignments. They also collect feedback from students “on the ground”, forward this feedback to the UCD lecturer and return responses on the feedback from the UCD lecturer.

Commendations

- 4.1.6 The Review Group was impressed by the dedication of the staff involved on the UCD-Fudan Programme, in particular, those who lecture in Fudan for extended periods of time.
- 4.1.7 The Review Group commended the partners for enabling UCD staff to be present for significant periods of time in Fudan, as it provides longer periods of face-to-face contact for students.
- 4.1.8 The Review Group acknowledged that one of the UCD lecturers on the UCD-Fudan Programme received an award in 2011, as one of the Top Ten external teachers in all the Software Schools in China – the only non-Asian winner of this award.

Recommendations

- 4.1.9 The Review Group recommends that UCD endeavour to continue the practice of extended lecturer visits to Fudan.
- 4.1.10 Primary teaching duties should be delivered by experienced, tenured members of UCD staff with appropriate teaching qualifications. However, opportunities for Post-docs to be involved in the delivery of the UCD-Fudan Programme may be offered when appropriate.
- 4.1.11 The Review Group recommends that UCD CSI consider ways of widening the pool of School staff involved in the delivery of the programme. The School could consider, for example, a facilitated brainstorming session/'Away Day' to discuss options, such as introducing some shared modules with shorter lecturer visits (to familiarise new staff with teaching in Fudan), online lectures, etc.

4.2 Facilities

- 4.2.1 All modules on the UCD-Fudan Programme are delivered in Fudan University. In Stage 1, students have their lectures and practicals on the main University campus on Handan Lu, North-West of Shanghai city centre. From Stage 2 onwards, students have their lectures and practicals on the core modules on the UCD-Fudan Programme on the Zhangjiang campus, in the East of the city, although they continue to attend the Handan Lu campus for some optional and elective modules. A shuttle bus takes students (and staff) from one campus to the other.
- 4.2.2 Lectures on the Zhangjiang campus are normally delivered in 60-seater classrooms, although a number of bigger rooms and lecture theatres are also available. All rooms have modern projection and audio-visual facilities for the delivery of lectures and are also equipped with chalk blackboards. Practical classes take place in laboratories equipped with PCs, although an increasing number of students have their own laptops.
- 4.2.3 Students have access to the Library, computer laboratories and study areas in both campuses in which they have lectures and practicals - Handan Lu and Zhangjiang. The Review Group did not have an opportunity to review central facilities available to students, including library, sports facilities and restaurants etc.
- 4.2.4 Lecture notes and slides, Tutorial Sheets and project specifications are uploaded to an FTP server, from which the students can download the material onto lab PCs, their own laptops or home computers. UCD lecturers do not have access to the FTP server and it is one of the duties of the TAs to upload material for them.
- 4.2.5 Students on the UCD-Fudan Programme are enrolled as UCD students and receive a UCD student number. This should give them access to UCD Connect, Blackboard, Academic Transcripts, the Moodle server in the School of Computer Science and Informatics and UCD e-mail. However, the Review Group were told that restrictions on external internet access in China, limits students' ability to access to these services.

Commendations

- 4.2.6 The Review Group was satisfied that the facilities are appropriate to the modules being delivered.
- 4.2.7 The Review Group was impressed with the 3-D lab and the quality of the interactive demonstration provided.

Recommendations

- 4.2.8 The Review Group recommends that any future reviews of the UCD-Fudan Programme should include a more comprehensive tour of the facilities and virtual learning systems, preferably during term time when they are in use.
- 4.2.9 Comparable online facilities available to UCD students in Ireland should also be available to UCD students in Fudan. The Review Group recommends that UCD review online access to Fudan students and endeavour to make online 'normal' student supports available. If the issue is outside the control of UCD and Fudan (for example, Chinese national restrictions on internet access) then alternative methods of providing these supports should be explored.
- 4.2.10 Until the access issue to UCD online supports (such as Blackboard) for students on the UCD-Fudan Programme are resolved, the Review Group recommends that UCD lecturers are given access to the Fudan FTP server, to enable them to monitor material available to students directly and to upload their own lesson material.

4.3 Student Supports

- 4.3.1 Outside the formal lecture, tutorial and practicals sessions, TAs and STAs provide informal pastoral supports for students. Students also communicate with them via the Bulletin Board System (BBS).
- 4.3.2 Students also communicate with the UCD lecturers by email. Two offices in the Software School have been allocated to the UCD staff and, as most UCD staff operate an "open door" policy with regard to meeting students, many students drop in to discuss aspects of the course material; to request further clarification on topics with which they are having problems; to borrow books and to talk about their studies and their future careers.
- 4.3.3 Cultural differences were given in the UCD-Fudan Programme Self-assessment Report as the reason for not having some supports that are available to students in UCD, for example Student Advisors or Staff:Student Committees. However, if part of the rationale for the UCD-Fudan Programme is to expose Fudan students to Western style education and culture, then Fudan based students should have a broadly similar experience to Dublin based students. The Review Group acknowledges the cultural sensitivities that exist and note that it might take students longer to fully participate in these mechanisms, but believe that Fudan students deserve the same opportunities afforded to Belfield-based students. The

Review Group is also aware that UCD CSI arranged for the UCD School's Student Advisor to visit Fudan for a week to hold sessions with entire classes, smaller groups and some one-on-one sessions, however, it was not financially viable to repeat this arrangement on a regular basis.

Commendations

- 4.3.4 The Review Group commends the open-door policy operated by lecturers.
- 4.3.5 The informal pastoral care provided by TAs and STAs is to be commended.
- 4.3.6 Exposing Fudan students to Western style education and culture should help prepare them to positively engage with international companies during their internships and after graduation.
- 4.3.7 Piloting the inclusion of the UCD CSI Student Advisor in the provision of pastoral support to students on the UCD-Fudan Programme is to be commended.

Recommendations

- 4.3.8 The Schools should consider ways to provide formal pastoral care for students on the UCD-Fudan Programme, equivalent to that provided to students on the UCD campus. Options could include appointing a Student Advisor in Fudan or re-developing the role of some of the TAs to include Student Advisor responsibilities, with appropriate training.
- 4.3.9 The Review Group recommends that a Staff:Student Committee be introduced.
- 4.3.10 Students should also contribute to the annual programme report e.g. via survey feedback or student focus groups.

5. Quality

- 5.1 Both the Fudan Software School and UCD CSI employ a number of different mechanisms, including student feedback mechanisms, to assure the quality of their programmes.
- 5.2 The Fudan Software School has developed guidance and regulations to ensure, at an institutional level, the management and quality assurance of teaching. The Fudan Office of Teaching Affairs arranges mid-term lecture inspections of teaching and lecture records for School management and teachers. The lecture records are used: to feedback information on the teaching and management of the module; to make the School aware of the teaching behaviour of lecturers; to elicit feedback from students and to gather suggestions for maintaining or improving the quality of teaching; by the Teaching Dean to evaluate teaching performance; identify issues to discuss in the school teacher conference; and to inform the School's teaching evaluation system. The Fudan School's teaching evaluation system involves a self-evaluation by the lecturer and feedback from students on the teacher's

performance. The results of the evaluation are used by the Fudan Software School as the basis for granting teaching rewards and determining lecture provision for the following year. The SAR states that a peer review of the teaching performance of the UCD lecturers is carried out by the TA.

- 5.3 The Fudan Software School holds module development meetings and teaching symposia and organises meetings for all teachers in the School to discuss curriculum provision and the revision of course content, with a view to continuously improve the standard of teaching.
- 5.4 Fudan University has an External Examiner who reviews the exam papers and scripts. The University Office of Teaching Affairs also reviews and examines all exam papers and scripts. In addition, every five years the Chinese Ministry of Education conducts an evaluation of the teaching quality of each Chinese university.
- 5.5 The UCD School of Computer Science and Informatics asserts that it has clear procedures for approving, monitoring and reviewing Programme structure and module content. Module and programme changes are approved through the normal UCD mechanisms. Modules are reviewed on a periodic basis to ensure relevance, coherence and topicality in a modern Computer Science/Software Engineering Degree. However, little documented evidence of these processes was produced for the Review Group.
- 5.6 The Review Group noted (and supported) that the CSI External Examiner is conducting a review (May/June 2013) on all modules in the UCD Degree Structure, including those on the UCD-Fudan Programme. This review will include coverage of the subject area within the Degree Structure, analysis of breadth and depth of modules, module content, mode of delivery, results and overall standard.
- 5.7 Student feedback on the UCD-Fudan Programme is gathered in a number of ways. The Fudan Software School Teaching Dean holds forums for all students during the semester to find examples of good practice and to identify issues. This feeds into the Fudan Office of Teaching Affairs midterm teaching inspection and also provides feedback to the relevant lecturers. Students also have the opportunity to communicate with lecturers and School management through the School Website and the electronic Bulletin Board System (BBS). This feedback is also provided to the Fudan Programme Director and/or the module co-ordinators/lecturers. The Fudan Programme Director, TAs and STAs also gather feedback and comments on the UCD-Fudan Programme, modules, lectures and lecturers, and communicate responses to the students. The Schools indicated that these methods have worked well to date and students, staff and management are satisfied that this is an appropriate and culturally-sensitive approach to receiving feedback from students on the UCD-Fudan Programme and responding to it. The Review Group noted that very little evidence was presented of how the feedback loop to students is closed, although examples were provided of programme changes that resulted from student feedback.
- 5.8 The Review Group considered that students should have access to the UCD online module feedback system.

Commendations

- 5.9 Both Schools utilise a variety of mechanisms to assure the quality of the UCD-Fudan Programme.
- 5.10 Student feedback is sought.
- 5.11 External Examiner input is sought.

Recommendations

- 5.12 Two separate approaches to quality assurance and enhancement are in place with little evidence of joint working. The Review Group recommends that Programme Directors discuss ways of integrating the various quality approaches used on the UCD-Fudan Programme.
- 5.13 A systematic approach to gathering module feedback should be introduced, perhaps by introducing the UCD online module feedback system. While the issue with access to UCD online continues unresolved, an alternative local system should be introduced in the interim.
- 5.14 Upon receipt of this Report, UCD CSI should prepare a Quality Improvement Plan (QIP) and should submit it in accordance with the UCD Guidelines for Quality Review i.e. within 12 weeks following receipt of this Report. In addition, the Review Group recommends that the University organise a UCD Quality Improvement Progress Meeting which should be held 6 months and 12 months after submission of the QIP. The meetings should involve the UCD Programme Director and the Head of the UCD School of Computer Science and Informatics, and will review progress on the recommendations. The meetings should be chaired by the UCD Registrar and include the UCD College Principal and representation from the Review Group.

6. Employers and Other External Relations

- 6.1 In meetings with graduates and employer representatives during the review site visit, it was evident that the UCD-Fudan Programme is meeting the demands and expectations of employers. The inclusion of the Internship element at Stage 4 was perceived to be beneficial for students and helpful for their transition to employment after graduation. According to employers, an increase in the teaching of transferrable skills such as presentation skills, problem-solving, project management and time management would improve student employability further. The Review Group was satisfied that student prospects of employment after graduation were good. The employers highlighted the importance of students having a high ability level in speaking and writing in English, as much of their global business is undertaken in English. The employers also emphasised the benefit of the students understanding Western ethical norms in a business/commercial context.

- 6.2 The Review Group met with the Irish Consul-General in Shanghai during the review site visit. It was clear that the UCD-Fudan Programme is well-respected by the Irish Government representatives in China. The Consul-General and his Office have engaged in cultural activities associated with the UCD-Fudan Programme, in a synergetic relationship that helps to further Irish-Sino commercial and cultural networking in the region.

Commendations

- 6.3 The Schools have a positive relationship with the Irish Consulate in Shanghai and with employers.
- 6.4 Employer expectations regarding student performance are being satisfied.
- 6.5 The Internship element in Stage 4 is acknowledged as beneficial by employers and students.

Recommendations

- 6.6 The Schools should continue to develop relationships with employers
- 6.7 The Review Group recommends that embedding of transferrable skills and English language acquisition continue to be enhanced.

7. Conclusion

- 7.1 It is clear that the relationship between the Fudan and UCD Schools is working informally however, if the UCD-Fudan Programme is to continue it needs to be on a more formal basis, in order to meet current UCD and Irish legislative quality requirements. Considering the continued value of the relationship with Fudan University and the many positive aspects of the UCD-Fudan Programme, the Review Group believes that a refreshed or new Programme, placed on a sound economic footing, is the only way to assure a more sustainable programme into the future. The Review Group is of the opinion that the UCD-Fudan Programme, in its current form, has successfully completed its first lifecycle. Changed regulatory and economic circumstances now require a fundamental reappraisal to ensure the sustained quality of the next lifecycle of the programme.

UCD School of Computer Science Informatics Response to the Review Group Report

The UCD School of Computer Science and Informatics welcomes the Report of the Quality Review of the BSc (Computer Science) Degree Programme in Fudan University. All those involved in the Review regarded it as a very useful and constructive process.

In particular, the School welcomes the endorsement given by the Review Group to the academic quality, delivery and quality of graduates of the Programme and the significant commendations contained in the Report. The School is very happy with the statement by the Review Group that the UCD-Fudan collaboration has been a “‘flagship’ for UCD in China”. The School also welcomes the recognition of the longevity and quality of the relationship between the School and the Software School in Fudan. The recommendations in the Report will assist both Schools in their efforts to further develop the Programme. The School would like to endorse the Review Group's commendation of the dedication, commitment and hard work of all staff involved in the Programme.

It is clear that work is required in the area of documentation and record-keeping. In particular, there is a need to record properly Programme and module information. The requirement to have formally-convened meetings and the recording of such meetings was also identified. As was explained during the Quality Review, this is now particularly important, given recent developments in the Irish Education sector, including the provisions of the Qualifications and Quality Assurance (Education and Training) Act, 2012 and the extension in May of this year (2013) of the remit of the Ombudsman to include the publicly-funded third-level institutions, including UCD.

The Site Visit was most helpful in further exploring with the Review Group the way in which the Programme is delivered and the level of co-operation between the staff from both Schools. It also allowed the Review Group to interview graduates, employers and Irish Consular representatives. The School would like to thank the Review Group for travelling to Shanghai for the second part of the Site Visit and for their considerable efforts during the Site Visit and, indeed, in compiling the Review Group Report.

As a reflective exercise, the Self-Assessment gave the School the opportunity to consider and record the scope of the Programme, to identify areas of good practice as well as aspects requiring attention, to reflect on the reasons that the Programme has evolved as it has and to consider how the Programme and the relationship between the two Schools can develop in the future.

The School will work with the Software School in Fudan to examine how to address each of the recommendations over the next few months, with the aim of preparing a Quality Improvement Plan. The School's Self-Assessment Report, the Review Group Report and the Quality Improvement Plan will all be used to inform the Schools on the development of the Programme and their future relationship.



University College Dublin

UCD Quality Review: Fudan University – UCD-Fudan BSc Computer Science

Timetable

May 2013

Friday, 24 May, UCD

Boardroom, Computer Science and Informatics Centre, UCD, Belfield Campus

09.00-10.00	Pre-meeting – Review Group (RG – UK/Irish members only)
10.00-10.15	Break
10.15-11.00	RG meet with College Principal
11.00-11.15	Break
11.15-12.45	RG meet with Head of School and Teaching Staff on the Fudan Programme
12.45-13.15	Lunch – RG only
13.15-16.00	Planning Meeting – RG only

Monday, 27 May, Fudan University

Zhangjiang campus

08.00	Transport from hotel to Zhangjiang campus arranged by Fudan University
09.00-09.30	RG meet Irish Consul-General
09.30-10.15	RG only - planning meeting
10.15-10.30	Break
10.30-12.15	RG meet with key Programme Staff (UCD and Fudan) responsible for

	teaching & learning, student support, quality assurance, programme management
12.15-12.30	Break
12.30-13.30	Working Buffet lunch with representative group of current students (3 students from each year)
13.30-14.00	RG meet to review initial findings
14.00-14.30	Tour of relevant accommodation/facilities
14.30-14.45	Break
14.45-15.30	RG meet recent graduates
15.30-16.00	RG review findings
16.00-16.45	RG meet industry employers/intern employers/others
16.45-17.30	RG review findings
17.30-18.00	RG exit meeting with Programme Team to clarify any outstanding issues (and, if appropriate, communicate preliminary outcomes / recommendations)
19.00	Dinner hosted by Fudan University