

Periodic Review Report Template

Department and Faculty	Department of Computer and Information Sciences Faculty of Engineering and Environment
Date of Review	7 and 8 March 2017
Review Panel (approved by Programme Approvals & Review Sub-committee)	<p>Chair Gill Rowe, Faculty Associate Pro Vice-Chancellor, Learning and Teaching (ADSS)</p> <p>Non Faculty Tony Machin, Faculty Director of Learning and Teaching (HLS)</p> <p>Faculty Internal Paul Ring, Faculty Director of Learning and Teaching (EE)</p> <p>Students' Union Adam Crawley, President</p> <p>Quality and Teaching Excellence Ann MacFadyen, Academic Development Officer, Academic Registry</p> <p>External membership Professor William Alexander Grey (Professor of Advanced Information Systems, Cardiff University)</p>
Method of Review	This review was conducted using the periodic review procedure defined in Northumbria's Review Framework available from https://www.northumbria.ac.uk/sd/central/ar/qualitysupport/reviewframework/
Notes:	
<ul style="list-style-type: none"> • Review reports are expected to be short and succinct, typically 3 to 4 sides of A4 • Sections highlighted in blue below, together with the header above, make up the published summary of this review. This will be published on the University's Teaching Quality Information web pages (https://www.northumbria.ac.uk/sd/central/ar/qualitysupport/PQI/) 	

Section 1	Department Context
	<ul style="list-style-type: none"> • Short summary of scope of review – programmes or programme areas included, total student and staff numbers • Short statement of the main aims of the department • Short statement of any necessary contextual information (e.g. physical and organisational location, any recent restructuring etc.) <p>The Faculty of Engineering and Environment and Department of Computer and Information Sciences aim to provide research inspired undergraduate and postgraduate programmes designed and delivered to ensure graduates are:</p> <ul style="list-style-type: none"> - equipped with contemporary knowledge of theory, research and professional practice related to their programme of study; - able to utilise their knowledge through critical analysis to create new knowledge and / or innovative approaches to practise proportionate to their level of study; - equipped for employment or further study through transferrable lifelong learning, employability and research skills; and - culturally and ethically aware and equipped to contribute positively to a diverse and global community. <p>A review of the academic structure of the University in Summer 2012 resulted in the formation of four Faculties. The Faculty of Engineering and Environment established in November 2012, was a merger of the School of the Built and Natural Environment with the School of Computing, Engineering and Information Sciences. The Department of Computer and Information Sciences was formed in September 2016 from the former Departments of Computer Science and Digital Technologies and part of the Department of Mathematics and Information Sciences. The Department and the Faculty transitioned to the current management structures between September 2016 and January 2017. This review focuses solely on the programmes in the Department of Computer and Information Sciences.</p>

The Department currently has 69 staff based on the Newcastle campus broken down into the following staff categories: Senior lecturers/lecturers (47), Professors (7), Associate Professors / Readers / Teaching Fellows / Enterprise Fellows / Principal Lecturers (13), Research (10) and Senior Management (2).

Academic communities and specialist laboratories are currently housed in Pandon Building. From January 201, the main student reception area can be found in the centralised support at Student Central and City Campus Library, Ground Floor. The Department's professional support is based in Ellison Building. The Department's technical support is based in Pandon Building, close to the majority of the Department's laboratories. The Department also makes use of laboratories in Ellison Building. Students' hub areas are available in all buildings, the latest being "The Zone" which has 24-hour access. "The Zone" has received excellent feedback from student representatives.

Computing and IT facilities in the Department have continued to be developed and invested in. There now is: one 48-seat IT lab with retractable monitors to enable students to use their own hardware; one 48-seat IT Lab specialising in Computer and Digital Forensics; one 36-seat IT Lab specialising in Computer Networking; one 21-seat IT Lab specialising in Computer Networking; three 24-seat IT labs; separate specialist labs for games, real-time, embedded systems, user interface design and motion capture, multimedia and a vfx, camera and compositing studio; and a popular Open access area with 150 PCs, specialist software in clustered sections for all taught programmes including 24/7 access via swipe card.

A new custom designed building to house to Department is under construction, with the intention to take occupancy from January 2018. The new building is adjacent to Ellison Building and will be sited on the location of the former Rutherford Hall. The new building will provide opportunity to further enhance the student experience. Regular and significant investment is made in new equipment and software to ensure students are equipped with knowledge and skills reflecting the latest industry developments. The quality of our lab provision was highlighted as best practice by the BCS, The Chartered Institute for IT at their last accreditation visit (May 2013). There is free wireless access available across the whole University campus. Where possible, academic staff offices are situated close to lab areas meaning students and academic staff form learning communities. In support of the learning experience, students can also borrow a variety of equipment through our Technical Support team. Students may book equipment online. Student can then either arrange when to collect the equipment or make use of the Faculty lending facility, which is open Monday-Friday from 10am to 1pm. Highly skilled technical support colleagues also provide additional assistance in delivering laboratory-based sessions supporting both teaching and research activities.

The Department works closely with QA Education in the development and delivery of programmes upon our London campus. Internationally the Department has collaborative ventures with the Management Development Institute of Singapore Pte Ltd (MDIS), KDU Penang University College (Malaysia) and Seoul National University of Science and Technology (SeoulTech), Seoul, Korea.

Section 2		Judgement Criteria
Focus of judgements	Judgements	Outcome
The setting and maintenance of threshold academic standards	<ul style="list-style-type: none"> meets UK and NU expectations, 	✓ Subject to recommendations being met by the timeframe specified below
	<ul style="list-style-type: none"> requires improvement to meet UK and NU expectations, 	
	<ul style="list-style-type: none"> does not meet UK and NU expectations. 	
The quality of students' learning opportunities	<ul style="list-style-type: none"> commended, 	
	<ul style="list-style-type: none"> meets UK and NU expectations, 	✓
	<ul style="list-style-type: none"> requires improvement to meet UK and NU expectations or, 	
	<ul style="list-style-type: none"> does not meet UK and NU expectations. 	

Focus of judgements	Judgements	Outcome
Information about higher education provision	<ul style="list-style-type: none"> • commended, 	
	<ul style="list-style-type: none"> • meets UK and NU expectations, 	√
	<ul style="list-style-type: none"> • requires improvement to meet UK and NU expectations or, 	
	<ul style="list-style-type: none"> • does not meet UK and NU expectations. 	
The enhancement of students' learning opportunities	<ul style="list-style-type: none"> • commended, 	
	<ul style="list-style-type: none"> • meets UK and NU expectations, 	√
	<ul style="list-style-type: none"> • requires improvement to meet UK and NU expectations or, 	
	<ul style="list-style-type: none"> • does not meet UK and NU expectations. 	

Section 3	The setting and maintenance of threshold academic standards
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The Panel identified the following strengths:

- Significant redesign and rescaling of programme portfolio to reduce complexity and assessment load;
- Significant strengths across the department acknowledged through external examiners' reports in relation to curriculum content, innovative delivery and assessment methods;
- Peer assessment applauded where included as an element of group work.

The Panel made the following recommendations and timescales for further development:

- To explore and create further opportunities to share good practice across the newly formed department in the current academic year.
Evidenced by a calendar of events and attendance register to be supplied to FAPVC(L&T) at end of 2017/18;
- Consistent implementation of the NU personal tutor policy by ensuring meetings take place as outlined in the policy.
Evidenced by active monitoring and audit of meeting records until the end of 2017/18 academic year;
- To form a departmental task and finish group to establish a consistent approach to marking criteria, the compilation of assessment briefs (and associated approval), and to internal moderation and marking schemes., including a plan for dissemination to academic colleagues and students
Evidenced by meeting notes, a robust auditing of assessment processes to check against the Assessment for Learning and Achievement policy principles and a dissemination plan for staff and students for delivery 2017/18
- Full engagement with MED and PED completion and associated action planning
Evidenced by completion within University published deadlines with monitoring of associated action planning for 2016/17 reviews.

The Panel made the following observations:

- On the basis of discussion with employers, the panel acknowledges the ongoing need for agility and future proofing of the curriculum;
- The panel recognises the improving research profile and the embedding of research specialisms within the curriculum.

Section 4	The quality of students' learning opportunities
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The Panel identified the following strengths:

- Many examples of good practice cited by staff, students and employers;
- The volume and scope of successful PSRB accreditation;
- Praise for enthusiasm and approachability of staff to secure academic support;
- London staff engagement with Panopto and other casting software.

The Panel made the following recommendations and timescales for further development:

- Programme teams to strengthen and widen engagement with employers and placement providers (beyond the Employers' Advisory Board) in order to inform curriculum development and learning

- opportunities for 2017/18 intakes;
- To ensure students are made aware of developments and enhancements made as a result of student feedback for 2017/18 intakes.
- To undertake robust monitoring of programme NSS action plans at programme and departmental levels, as evidenced by written detailed reports to Faculty Associate Pro Vice-Chancellor, Learning and Teaching, on a monthly basis during 2017/18 cycle (2017 results)

The Panel made the following observations:

- Regular informal staff student interactions were reported by both staff and students to address issues as they arise.
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Section 5

Information about higher education provision

The Panel identified the following strengths:

- Overall health of student recruitment.

The Panel made the following recommendations and timescales for further development:

- To review undergraduate and London Campus marketing materials to promote a greater understanding to potential students of the learning philosophies underpinning programme deliveries for 2018 entry (or earlier e.g. open days);
- To formally evaluate the impact of the current NSS departmental action plan on teaching and assessment feedback practices;
- To keep monitoring good degree performance.

The Panel made the following observations:

- None noted

Section 6

The enhancement of students' learning opportunities

The Panel identified the following strengths:

- Evidence of good preparation for employment, strong industrial links, demonstrated by the continued support for placements and involvement of external stakeholders across the programmes and in specific modules;
- Student complimentary feedback on staff commitment to facilitate preparation of placement;
- Sense of community achieved by proximity and distribution of staff offices to learning environments.

The Panel made the following recommendations and timescales for further development:

- To recommend a departmental task group (to include students) to develop and establish a consistent approach to assessment and feedback practices by 2017/18;
- To continue to build the identity of the new department, capitalising on existing strengths;
- To consider how to maintain this sense of community within the new building.

The Panel made the following observations:

- More advantage could be taken to build on students' experience of their placement to benefit the wider student cohort;
- Time devoted to enhancement activities appears to be pressured, partly due to the restructuring and introduction of new roles within the department;
- To extend the use of authentic learning opportunities currently offered on several programmes;
- The panel compliments the staff on their positive attitude to the formation of the new department.

Section 7	Further Quality Assurance Monitoring	
	<i>This section is copied from the self-evaluation document to acknowledge actions which the Department/Faculty has already identified and is already actioning.</i>	
Affirmations ¹	Please list any affirmations identified and accompanying actions (<i>add extra rows as needed</i>)	
	Issue	Action
	NSS Action Plan	Implement Department and Programme action plans, review in line with results from 2016-17 and redevelop plans.
	Quality Assurance in collaboration with London Campus	Implement actions identified (in part) to external examiners reports and review
	Enhancement of Electronic Module boxes	Implement actions identified (in part) to external examiners reports and review
	Develop and implement Department PTES action plan	Develop Department action plan related to PTES
	Develop Department grade criteria as expected by university standard	Establish working group to develop, consult and implement criteria
	Retention, Progression, Attendance and Engagement	Develop and implement Department action plan for engagement and attendance.
	Ensure staff meet the NU Professional Standards Framework	Develop action plan to increase number of HEA Fellows and Senior Fellows in the Department
Audit Trails	No Panel Comments.	
Compliance Checks	No Panel Comments.	

Section 8	Department Response to Report
The setting and maintenance of threshold academic standards	
<p><i>a) To explore and create further opportunities to share good practice across the newly formed department in the current academic year.</i></p> <p>We are continuing to develop our community of L&T practice and intend to develop a schedule of good practice sharing events for 2018-19 and in future years.</p>	
<p><i>b) Consistent implementation of the NU personal tutor policy by ensuring meetings take place as outlined in the policy.</i></p> <p>The Department implemented the NU personal tutoring policy but we plan to re-assess the usefulness of this and identify appropriate Department based enhancements.</p>	
<p><i>c) To form a departmental task and finish group to establish a consistent approach to marking criteria, the compilation of assessment briefs (and associated approval), and to internal moderation and marking schemes., including a plan for dissemination to academic colleagues and students</i></p> <p>This task is still in progress.</p> <p>The Department has completed an audit of assessments related to the Northumbria University Policy on Group Work Assessment. In 2017/18 only one module in Department is out of line with the policy. The intention is the module will comply with the policy for 2018/19.</p> <p>In line with the University's Assessment for Learning Policy, the task and finish group has developed a draft set of department grading criteria. These are being discussed with the department on Wednesday 25/04/18. The intention is the criteria will then be refined and</p>	

¹ examples of developments, planned or in train which seek to address issues previously identified

implementing will commence in 2018/19.

d) Full engagement with MED and PED completion and associated action planning

For 2016-17 all the required PEDs and MEDS related to the department were completed. For 2017-18, the department plans to engage with the Faculty Review and Preview Week to encourage earlier completion.

The quality of students' learning opportunities

a) Programme teams to strengthen and widen engagement with employers and placement providers (beyond the Employers' Advisory Board) in order to inform curriculum development and learning opportunities for 2017/18 intakes

These actions remain a work in progress and a priority area for the department. In particular the department: is actively promoting the yearlong undergraduate placement opportunity to students, via level 5 welcome week and at appropriate points within the taught curricula; and expanding the exposure to industry for students who do not successfully secure a placement. The two key mechanisms by which we are seeking to further expose students to industry is by an expansion of guest lectures from industry and are ongoing initiative to further develop "live" projects in the curricula.

b) To ensure students are made aware of developments and enhancements made as a result of student feedback for 2017/18 intakes.

The Department recognises it could continue to improve the mechanisms it employs related to student feedback. For 2017-18 programme leaders (or year tutors) are meeting with student representatives on a regular basis (normally fortnightly), this is in addition to seeking feedback from the entire cohort on at least a termly basis. Minutes of SSPCs are being circulated to the full cohort of students (historically we only circulated to programme representatives). We are exploring whether in the future it would be best to make use of a Blackboard Organisation or whether we could make use of ongoing enhancements to the Departments Web presence.

c) To undertake robust monitoring of programme NSS action plans at programme and departmental levels, as evidenced by written detailed reports to Faculty Associate Pro Vice-Chancellor, Learning and Teaching, on a monthly basis during 2017/18 cycle (2017 results)

The Department is fully compliant with the incoming University Programme Based NSS Action Planning process.

Information about higher education provision

a) To review undergraduate and London Campus marketing materials to promote a greater understanding to potential students of the learning philosophies underpinning programme deliveries for 2018 entry (or earlier e.g. open days)

This action has been completed. However, it also clearly an ongoing process for the Department to ensure our marketing materials / activities and specification documentation (for example programme and module specifications) continue to be an accurate reflection of our practice.

b) To formally evaluate the impact of the current NSS departmental action plan on teaching and assessment feedback practices

The 2016/17 plan was in part effective and resulted in a general upward move of NSS results across the programme portfolio. The approach adopted could have generally classified as managerial in tone and focused heavily regarding how the Department Management were going to attempt to improve the NSS results.

In 2017/18, the NSS planning process employed by the University has become more programme focused and less department focused. We are following this lead and have attempted to adopt a more collegiate approach for this academic year. We have continued many of the initiatives from 2016-17 but these are completed in a different manner. For example in 2016/17, use of class observations by grade 8 and 9 staff was completed. For 2017/18, we have replaced this activity by a Department steer to make use of the Observation of colleagues as part of the University

Peer Support Scheme. Equally, in 2016/17, Grade 8 and 9 colleagues audited the Departments Module Blackboard sites, in 2017/18, moderators have completed this activity. From the 2016/17 plan we have continued with the increased frequency of meetings with students and student representatives (see above). In line with the Faculty steer we are attempting to move to electronic submission and feedback as the normal process. We have produced programme based schedules for assessment hand in and feedback and have been endeavouring to follow them. As indicated above the Department has developed an active programme of good practice sharing and discussion. We also have emphasised the currency of our programmes with respect to industry practice by the expansion of guest lectures from industry for all final year undergraduate programmes.

c) To keep monitoring good degree performance

We have been and will continue to monitor good degree performance as part of QBR and annual review.

The enhancement of students' learning opportunities

a) To recommend a departmental task group (to include students) to develop and establish a consistent approach to assessment and feedback practices by 2017/18

Please see above.

b) To continue to build the identity of the new department, capitalising on existing strengths

We are continuing to monitor and review our programme portfolio and exploit developments in our research base and the market expectations. 2018-19 will be the first delivery of level 6 of our post-PFNA Undergraduate programmes. 2019-20 will be the first delivery of level 7 of our post-PFNA MComp programmes. We will actively review these deliveries to ensure they are correctly calibrated.

The Department, continues to actively collaborate with developments upon the London Campus.

The Departments collaborative provision, is evolving and we are actively considering establishing new provision with new partners.

New research groups are now active with all staff engaged in at least one group.

c) To consider how to maintain this sense of community within the new building

The Departments staff have moved into new accommodation. Students will have full access to new Facilities from Semester 1 2018/19. The design of the new building is intended to promote development of a more open community. The Department is in the process of developing plans for the exploitation of the open access areas of the new building as mechanisms to support the building of a sense of community.