The Quality Assurance Agency for Higher Education

Academic Review

Computing, University of Wales, Aberystwyth

November 2002

Summary of the main review outcomes

Subject provision and overall aims

Computing programmes at the University of Wales, Aberystwyth were reviewed in the academic year 2002-03. Judgements were made about the academic standards achieved and the quality of the learning opportunities provided.

The review covered the following programmes:

- BSc (Hons) Computer Science;
- BSc (Hons) Computer Science and Artificial Intelligence;
- · BSc (Hons) Internet Computing;
- · BEng (Hons) Software Engineering;
- BEng (Hons) Internet Engineering;
- · MEng (Hons) Software Engineering:
- · BSc (Hons) Computer Science with a minor in another subject:
- · Joint honours degrees in Computer Science and another subject;
- · Honours degree in another subject with a minor in Computer Science; and
- PgDip/MSc Computer Science.

Academic standards

Overall, the reviewers have confidence in the academic standards achieved by the programmes in computing at the University of Wales, Aberystwyth.

Strengths include:

- students are fully aware of the programmes' learning outcomes, which are clearly defined and appropriate to the level and subject area of the qualification;
- in all cases, the learning outcomes of modules meet the aims of providing relevant, intellectually
 challenging computing programmes consistent with producing good-quality computer scientists who are
 highly sought after by industry;
- there is both coherence and a sensible degree of flexibility in the undergraduate curricula;
- the design of all courses is properly informed by the appropriate benchmarking statements, the requirements of the British Computer Society, external examiners' reports and input from employers;
- a variety of assessment methods is used within the Department; current students expressed satisfaction with the Department's efforts to ensure a fairly spread workload;
- the MAP system of on-line directed learning and assessment is an innovative and exciting development;
- the Department has made a sound response to external examiners' criticisms in 2002 of the rote learning demands of a significant number of examination papers, and of there being too many modules in which the average mark was below 50 per cent;
- external examiners are satisfied with the marking standards and the integrity and probity of the assessment procedures;
- levels of student achievement are high; students met by the reviewers were well prepared for teamwork and presented themselves confidently;
- the programmes succeed in meeting their aims of preparing students for employment in the computing industry;

 the programmes succeed in preparing students for further study at masters or doctoral level, even though this is not an explicit aim.

Issues Include:

although students are satisfied with the speed with which marked coursework is returned to them, the
marks awarded and the amount of formative feedback they receive, the Department might wish to
consider the advisability of encouraging staff to provide full written feedback in a more consistent manner.

Quality of learning opportunities

Student progression

The quality of student progression is commendable:

- students confirmed that streaming the first year in terms of programming ability works well;
- the tutorial system works effectively and students feel well supported while away for their year in industry;
- current and recent former students praised the quality of support received from academic staff;
- the Aberdyfi team-building weekend for first-year students is important in establishing an ethos of friendly, open communication between staff and students;
- the Gregynog second-year team-building development event successfully facilitates students' transition to a more independent style of learning;
- the Department monitors undergraduate students' progress carefully during the first year so that they
 can be counselled appropriately if they wish to transfer between programmes;
- the complex rules for progression and transfer and those for resit opportunities are explained well;
- the Department has improved the help given to first-year students over the five intakes since 1996, and a slightly reduced rate of withdrawal has resulted.

Learning resources

The quality of learning resources is commendable:

- staff qualifications and expertise are appropriate for the programmes;
- the mentoring scheme is successful in providing help to new academic staff when needed;
- staff are well supported by a range of courses made available by the Staff Development Unit, with significant take-up by staff from the Department;
- the Department's computing resources are all fit for their purpose and sufficiently up to date;
- the software provided on the computer systems is up to date, relevant and underpins the requirements
 of the taught modules;
- the library contains sufficient copies of all recommended course books and is well stocked with relevant journals.

Maintenance and enhancement of quality and standards

The Department's quality assurance procedures are embedded within those of the institution and the University of Wales. External examiners' reports are given careful consideration by the Department. The Department is giving proper attention to each of the significant matters raised by external examiners in 2002, The Department mity wish to consider the advisability of keeping a systematic sample of marked student coursework. The Department's assessment process would be more secure if the institution's policy on second-marking were to be followed. The staff-student committees for the undergraduate and MSc programmes were praised highly by students, who said that their suggestions are taken up. Regular and frequent staff meetings result in the sharing of good practice and timely responses to problems when they arise.