



Programme Specification

**BSc Computer Information
Systems
(4 Year Route with
Carmel College)**

Computer Science

**First approved pre 1990
Latest revisions December 2008**

Summary

Title of Programme:	Computer Information Systems (4 Year Route with Carmel College)
Awards:	
BSc (Computer Information Systems)	According to University ordinances and regulations
DipHe	According to University ordinances and regulations
CertHE	According to University ordinances and regulations
Programme Code(s):	G521
Date of First Intake	Pre 1990
Frequency of Intake:	Annually, in September
Duration and Mode of Study:	FT3
Faculty:	Faculty of Science
Parent Department:	Department of Computer Science
Other Contributors:	Subsidiary options, either: Economics, Geography, Mathematics, Philosophy, Psychology and Sociology (25% in Year 2)
Teaching other than at University of Liverpool:	None
Professional/Statutory Body Relationship:	Accredited to 2008 by the British Computer Society (BCS) for those students seeking full BCS membership, and partial accreditation for those seeking Chartered Engineering / Chartered Scientist
Fees	Standard Science
Additional Costs to Students	None
Director of Studies:	Dr. D. Jackson (Department of Computer Science)
Board of Studies:	Board of Studies in Computer Science
Board of Examiners:	Department of Computer Science
External Examiner(s):	TBA
QAA Subject Grouping and last Subject Review Results:	Computing: SPR Autumn 2001: Satisfactory DE review, February 2003: Satisfactory
QAA Benchmarking Standards:	Computing
Other Reference Points:	(1) Subject Benchmark for Computing (2) BCS accreditation guidelines
Senate Approval:	Revisions to Year 1 approved summer 1999. Revisions to Year 2 approved summer 2000. Revisions to Year 3 approved summer 2001.
Review Date:	TBA

A. AIMS OF THE PROGRAMME

1. Aims of the programme

1.1 The degree in Computer Information Systems is addressed, in particular, at potential applicants with a non-science background. The specific aim of this course is to meet the needs of students who may be seeking a career involving the use of computers in some particular application area, especially those outside the traditional fields of science and engineering. In addition to Computer Science, students currently registered for this degree may study a second subject in year 2 of the programme. This subject is chosen from a number of areas in which computing technology may be usefully applied, or which has some influence on the nature of computer information systems (for example: Economics, Geography, Philosophy, Psychology, Sociology, etc.).

The programme learning outcomes, outlined below, fall within the Subject Benchmark for Computing.

Subject-Based Learning Outcomes	Teaching, Learning and Assessment Strategies
<p>Cognitive Abilities. To provide students with:</p> <p>1.1 Knowledge and understanding of the essential facts, concepts, principles and theories relating to computer information systems.</p> <p>1.2 A good knowledge of how 1.1 can be used to model and design computer information systems.</p> <p>1.3 A good understanding of how to recognise and critically analyse criteria and specifications appropriate to problems to be solved by computer, and plan innovative strategies for their solution.</p> <p>1.4 A sound knowledge of the criteria and mechanisms whereby computer systems can be critically evaluated and analysed to determine the extent to which they meet the criteria defined for their current and future development.</p> <p>1.5 An in depth understanding of the appropriate theory, practices, languages and tools that may be deployed for the specification, design, implementation and evaluation of software systems.</p> <p>1.6 Knowledge of how to present succinctly (orally, electronically or in writing) rational and reasoned arguments that address a given problem to be solved by computer.</p> <p>1.7 A good understanding of the professional, moral and ethical issues involved in the exploitation of computer technology, and the associated professional, ethical and legal practices.</p> <p>1.8 An appreciation for some subsidiary discipline where computing technology may be used, or which has some influence on the nature of computer information systems (for example: Economics, Geography, Philosophy, Psychology, Sociology, etc.).</p>	<p>Teaching/Learning Strategies</p> <p>Cognitive abilities are taught through a mixture of formal lectures, guided reading and tutorial groups; supported by practical work. The grid presented in Part C details where each cognitive ability is learnt.</p> <p>Assessment</p> <p>Cognitive abilities are assessed by a combination of traditional written examinations and continuous assessment, including marked essays, class tests and computer programming problems.</p> <p>Cognitive abilities 1.1 to 1.6 are promoted in the majority of modules contained in the programme and are assessed routinely in conjunction with other material contained in these modules. The second year group project and the final year solo project modules include an element of assessment by oral, poster and demonstration presentation of project work; ability 1.7 is assessed predominantly in these projects and in COMP110 and COMP112. 1.8 is assessed in the year 2 subsidiaries.</p>

Aims and Objectives	Teaching, Learning and Assessment Strategies
<p>Practical Abilities. To provide students with the ability to:</p> <p>2.1 Specify, design and construct computer information systems in a manner that is both innovative and creative.</p> <p>2.2 Critically evaluate and analyse computer information systems (including any risks or safety aspects that may be involved in their operation).</p> <p>2.3 Deploy effectively the tools used for the construction and documentation of computer applications, with practical emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.</p> <p>2.4 Work as a member of a development team, recognising the different roles within a team and different ways of organising teams.</p> <p>2.5 Operate computing equipment effectively, taking into account its logical and physical properties.</p>	<p>Teaching/Learning Strategies</p> <p>Practical abilities are developed mostly through the software project modules which commence in the first year of study with small individual exercises (COMP101), continue into the second year with the group project (COMP208), and are completed in the final year with a 30 credit individual project (COMP390). The further development of the programme practical skills also forms part of the other modules making up the programme.</p> <p>Assessment</p> <p>Practical abilities are assessed mostly by continuous assessment.</p> <p>Abilities 2.1, 2.2, 2.3 and 2.5 are assessed in a number of modules throughout the programme. Ability 2.4 is assessed as part of the group project module (COMP208).</p>
<p>Key Skills (Transferable Skills). To provide students with:</p> <p>3.1 Information retrieval skills (including use of the WWW).</p> <p>3.2 A good foundation in basic numeracy.</p> <p>3.3 The ability to use general IT facilities.</p> <p>3.4 The ability to manage their own learning and development, and time management and organisational skills.</p> <p>3.5 An appreciation of the need for continuing professional development in recognition for the need for lifelong learning.</p>	<p>Teaching/Learning Strategies</p> <p>The teaching and learning of key (transferable) skills is advanced in the Year 1 Key Skills module COMP110, and is integrated with modules throughout the programme.</p> <p>Assessment</p> <p>Key skills are mostly assessed in conjunction with the group and final year project elements of the programme, and the practical work included in most modules.</p> <p>Key skills 3.1 and 3.3 are assessed in a number of modules throughout the programme. 3.2 is assessed in the first year of study in the foundations module COMP109, and in the experimental methods module COMP114. Key skill 3.4 is assessed predominantly in the project modules COMP208 and COMP390. 3.5 is developed throughout the programme but not specifically assessed.</p>

2. Career Opportunities

The programme is directed at all career opportunities within the general domain of computer information systems.

B. ENTRANCE REQUIREMENTS

1. Academic Requirements

Foundation degree programmes have flexible entry requirements which are determined by Carmel College.

2. Work Experience

It is University Policy to encourage mature entry. Each case is considered on merit, but in such cases work experience is taken into account.

3. Other Requirements

None

C. PROGRAMME STRUCTURE

1. Programme Structure

Year 0 specification to be supplied by Faculty.

Students are expected to pursue the following programme of study

(• indicates a required module, `+' indicates a mandatory module):

Year 1 (all CATS Level 1)	
First Semester (total CATS Value 60)	Second Semester (total CATS Value 60)
COMP101 Introduction to Programming in Java(•) COMP103 Computer Systems (•) COMP109 Foundations of Computer Science(•) COMP110 Key Skills in Computer Science (+)	COMP102 Introduction to Databases(•) COMP106 Human-Centric Computing(•) COMP114 Experimental Methods in Computing(•) Plus: COMP112 Work Based Learning for Science or MKIB154 Marketing for Non-Specialists or COMP108 Algorithmic Foundations (requires approval from Director of Studies)

Year 2 (all COMP modules CATS Level 2)	
First Semester (total CATS Value 60)	Second Semester (total CATS Value 60)
COMP201 Software Engineering I (•) COMP207 Database Development & Design (•) COMP213 Advanced OO Programming (•) Subsidiary or COMP211 Internet Principles	COMP204 Computer Systems & Implementation(•) COMP208 Group Project (•) COMP210 Artificial Intelligence (•) Subsidiary or COMP212 Distributed Systems

Year 3 (all CATS Level 3)	
COMP390 Final Year Computer Science project (CATS Value 30) (+)	
First Semester (3 out of the following, with a total CATS Value of 45)	Second Semester (3 out of the following, with a total CATS Value of 45)
COMP304 Knowledge Representation & Reasoning COMP305 Biocomputation COMP307 Image proc., Comp. Vision & Graphics COMP311 Semistructured or Web-like Databases COMP319 Software Engineering II	COMP310 Multi-Agent Systems COMP313 Formal Methods COMP315 Technologies for E-Commerce COMP317 Semantics of Programming Languages COMP318 Advanced Web Technologies COMP320 Software Development Tools

A mapping of individual modules to programme aims and objectives, presented in Part A, is given below:

Module	Cognitive Abilities								Practical Abilities					Key Skills				
	1	2	3	4	5	6	7	8	1	2	3	4	5	1	2	3	4	5
COMP101	•	•	•	•	•	•			•	•	•		•	•		•	•	•
COMP102	•	•			•	•			•		•		•	•			•	
COMP103	•										•		•					
COMP106	•	•	•		•	•				•		•	•	•			•	•
COMP109	•	•			•	•			•						•			
COMP110	•		•			•	•		•	•	•		•	•		•	•	•
COMP112	•					•	•					•			•		•	
COMP114	•	•		•		•				•		•			•		•	
COMP201	•	•	•	•	•				•	•	•				•			
COMP204	•	•	•		•	•	•		•	•	•		•		•	•	•	
COMP207	•	•	•	•	•	•	•		•	•	•		•	•	•	•	•	•
COMP210	•	•	•	•	•				•	•	•		•		•	•	•	
COMP213	•	•		•	•	•			•				•					
COMP208	•	•	•	•	•	•	•		•	•	•	•	•			•	•	
COMP211	•	•			•	•			•	•		•	•	•	•		•	
COMP212	•	•		•	•	•			•	•	•		•	•	•	•		•
Subsid.								•										
COMP304									•		•			•	•			
COMP305	•	•		•	•													
COMP307	•	•	•	•	•	•			•	•	•		•	•	•	•		
COMP310	•	•		•	•						•		•		•			•
COMP311	•			•	•										•			•
COMP313	•	•	•	•	•				•		•		•	•	•		•	•
COMP315	•	•	•	•	•		•		•	•								
COMP317	•	•		•	•										•		•	
COMP318	•	•	•						•					•				
COMP319	•	•	•	•	•				•	•	•					•		
COMP320					•						•		•		•			
COMP390	•	•	•	•	•	•	•	•	•	•	•			•		•	•	

2. Industrial/Work Placement/Year Abroad

With respect to COMP390 (the final year project), this may be either an ‘in house’ or a ‘Work Based Learning’ (WBL) project. In the case of the later the students carry out their projects in consultation with local companies. Such projects are administered jointly by the CLL (Centre for Lifelong Learning) and the Department of Computer Science. Similar assessment procedures apply to both in-house and WBL final year projects.

D. TEACHING, LEARNING AND ASSESSMENT STRATEGIES

1. Teaching, Learning and Assessment Strategies:

The programme is delivered through a mixture of formal lectures, guided reading and tutorial groups supported by practical work. The programme operates under the approved teaching and learning strategy of the Department of Computer Science.

The programme is assessed by a combination of traditional written examinations and continuous assessment, including marked essays and computer programming problems. The second year group project and the final year solo project modules include an element of assessment by oral, poster and demonstration representation of project work. All modules are assessed at the end of the semester at which they are taught. The mark produced for a module is subject to scrutiny at the meetings of Departmental Examiners, by the External Examiner and also by Faculty Examiners meeting. Decisions on progress are also controlled by the university's published regulations.

Modules in the Computer Information Systems programme are assessed as follows (according to the nature of the module):

- i. Examination only where the assessment is based entirely on examination, which is held at the end of the semester in which the module is taught.
- ii. Continuous Assessment.
- iii. Examination and continuous assessment.

Details of the assessment method for each module can be obtained from the Department of Computer Science Student Handbook.

2. Ordinance and Regulations

This programme operates under the General Ordinance for Undergraduate Degrees and the Regulations under that Ordinance relating to programmes in the Faculty of Science

3. Assessment Information for Students

Assessment of Modules

Full details of assessment methods for each module can be obtained from the module specification and module description on the Departmental web pages.

Pass marks

The pass mark for each module on this programme is 40%. The criteria for completing each year of study, other than the final year, and for progression to the next year/level of study, require a student to:

- i. pass all mandatory modules; and
- ii. pass in modules amounting to 90 credits; and

- iii. achieve at least 40% averaged across all modules and a minimum mark of 35% in all modules.

These criteria are compulsory for study years 1 and 2 and for levels 1 and 2.

This means that students will be permitted to progress from year one to year two and from year two to year three having failed modules worth up to 30 credits in each year, provided that:

- i. the failing marks are in the range 35-39%;
- ii. marks of 40% or more are achieved in the remaining modules totalling 90 credits; and
- iii. the overall average mark for the modules totalling 120 credits is 40% or more.

Marks in the range 35-39% which are compensated for by higher marks in other modules will be recorded as 40%.

Full details of the University's progression requirements can be found in Ordinance 35 and the Faculty of Science regulations, published in the Programme Ordinances and Regulations Handbook.

Re-sits

The actual marks achieved following a re-sit examination will be recorded, but such marks will be recorded as having been achieved at the second attempt. Where the mark achieved at the second attempt falls between 35-39% and meets the criteria for compensation, the mark will be recorded as 40% and will be flagged as having been achieved at the second attempt.

For the purposes of determining progression from years one to two and years two to three, the actual marks achieved following re-sits will be used to calculate the average mark.

For the purposes of arriving at the average mark for degree classification, marks achieved following re-sits in year two will be capped at 40%.

Rules relating to the re-sitting of assessments can be found in the Departmental Student Handbook and module information pages from the Department's web pages.

Marking descriptors

The marking descriptors for the Department of Computer Science will be used in marking all work on this programme. These are:

90 – 100%:

For practical exercises and projects:

Displays an *exceptional* degree of originality and creativity and / or *exceptional* analytical and problem solving skills. Solution must have novel aspects. The methodology employed is well-developed and correct.

For exercises, presentations, projects, and written examinations:

Shows *critical* understanding of current knowledge. For level 3 this should include relevant recent research papers. Perceptive, focused treatment of all issues/questions presented in a critical and scholarly way.

80-89%

For practical exercises and projects:

Displays a level of originality and creativity and / or the ability to suggest realistic solutions to novel problems. The methodology employed is well-developed and correct.

For exercises, presentations, projects, and written examinations:

Evidence of wide reading. For level 3 this should include relevant research papers and books. Perceptive, focused treatment of all issues/questions presented in a critical and scholarly way.

70-79%

For practical exercises and projects:

Demonstrates ability to analyse, interpret and organise information to produce coherent accounts or solve complex problems. All aspects of a suitable methodology evident and used correctly.

For exercises, presentations, projects, and written examinations:

Comprehensive knowledge and understanding of the subject together with the ability to put the work into context and to critically evaluate selected aspects of the work. Arguments/answers will be clear, competently structured, and accurate.

60-69%

For practical exercises and projects:

Demonstrates ability to analyse, interpret and organise information to produce coherent accounts or solve relatively complex problems. Use of a suitable methodology evident and used correctly, with minor omissions.

For exercises, presentations, projects, and written examinations:

Good knowledge and understanding of the subject, with no major gaps or omissions, but minor gaps or omissions may occur. Arguments/answers will be clear, competently structured, and largely accurate.

50-59%

For practical exercises and projects:

Displays ability to analyse, interpret and organise information to produce coherent accounts or solve well-defined problems of some scope. Most aspects of a suitable methodology evident and used correctly, some omissions occur but without negative impact on the result of the work.

For exercises, presentations, projects, and written examinations:

Satisfactory knowledge and understanding of the essentials of the subject, with an ability to integrate information into a clear, well-structured account, but lacking in breadth or depth, or with some significant aspects omitted. Arguments/answers must be clear, although they may not be well-developed or reflect a wider appreciation of the subject. Some errors and omissions are likely to be present.

40-49%

For practical exercises and projects:

Demonstrates an ability to solve limited, well-defined, problems of a familiar type. Most aspects of a suitable methodology evident, but minor flaws in its use or omissions with some negative impact on the result of the work.

For exercises, presentations, projects, and written examinations:

General knowledge and understanding of the subject but very limited in depth or breadth. Arguments/answers are likely to be somewhat lacking in structure. There are likely to be errors and omissions and the evidence provided to support arguments will be very limited.

35-39%

For practical exercises and projects:

Fails to demonstrate an ability to solve limited, well-defined, problems of a familiar type. Aspects of a suitable methodology evident, but flaws in its use or omissions which negatively impact on the result of the work.

For exercises, presentations, projects, and written examinations:

Knowledge and understanding of the subject are fragmentary, some aspects showing a very basic level of understanding but other aspects displaying fundamental errors. Arguments/answers are lacking in structure. There are errors and omissions and the evidence provided to support arguments is very limited.

30-34%

For practical exercises and projects:

Fails to demonstrate an ability to solve simple, well-defined, problems of a familiar type. Lack of the use of a suitable methodology or flaws in its use which negatively impact on the result of the work.

For exercises, presentations, projects, and written examinations:

Knowledge and understanding of the subject are fragmentary, with an insufficient number of aspects showing a very basic level of understanding and too many aspects displaying fundamental errors and omissions. Arguments/answers are lacking in structure. There are errors and omissions and the evidence provided to support arguments is very limited.

20-29%

For practical exercises and projects:

Fails to demonstrate an ability to solve simple, well-defined, problems of a familiar type under guidance. Serious lack of the use of a suitable methodology or flaws in its use which negatively impact on the result of the work.

For exercises, presentations, projects, and written examinations:

Very limited range of knowledge with many important gaps and omissions. Shows incomplete understanding with numerous errors of interpretation. Arguments/answers have little structure, contain serious errors, and there is no support for arguments.

10-19%

For practical exercises and projects:

Little evidence of the use of a suitable methodology.

For exercises, presentations, projects, and written examinations:

Shows only the most limited and fragmentary knowledge of the subject with little or no understanding

of essential principles and concepts. Work is likely to be unstructured and ill-presented. Arguments/answers are only loosely related to issues/questions or only cover a seriously inadequate part of the issues/questions

0-9%

For practical exercises and projects:

No evidence of the use of a suitable methodology.

For exercises, presentations, projects, and written examinations:

Virtually devoid of any evidence of knowledge or understanding of the subject. No or almost no arguments/answers.

Final degree classification

The degree classification will be determined according to the University-wide formula for non-clinical undergraduate degrees. The system is based on the use of an overall average of the weighted marks for year two and year three as the first indicator of the degree classification, with a system of profiling being employed in cases of students whose averages are at the borderline between classifications.

Credit to be passed

If modules totalling 315 credits or more have been passed, i.e. the module has been awarded a mark of 40% or above (this includes compensated marks of 40% gained in years one and two) and all mandatory modules have been passed, the candidate will be **considered** for the award of a classified honours degree. If modules totalling **more than** 45 credits in year three have been failed, i.e. the module has been awarded a mark of less than 40%, the candidate will **not** be eligible for the award of an honours degree but may be eligible for the award of a pass (non-honours) degree.

Weighting

The marks for year two and year three are used to determine the degree classification, and an overall average determined using a 30:70 year two/year three weighting.

Averaging

The average marks for year two and year three are calculated and an overall average arrived at, weighted 30:70 between year two and year three. The overall average for years two and three is rounded to the nearest whole number (decimal places up to four are rounded down, decimal places of five or more are rounded up). The initial indication of degree classification is then reached as follows:

70%+	1 st
60-69%	2.1
50-59%	2.2
40-49%	3 rd
Less than 40%	Pass degree

Profiling

- i) If a candidate achieves 67-69%, 57-59%, 47-49% or 37-39% by averaging, i.e. missing automatic classification by no more than 3%, they will have their mark profile considered.
- ii) If a candidate is profiled, s/he will be awarded the higher class if *either* 120 credits of study in years two and three are in a higher class than the overall average mark and of these at least 60 credits have been achieved in year three *or* 135 credits across years two and three are in a higher class than the overall average mark.

Pass (Non-Honours) Degrees

Candidates who do not meet the criteria for a classified honours degree will be eligible for the award of a pass (non-honours) degree if they achieve the pass mark (40%) in modules totalling a minimum of 300 credits (irrespective of their overall average). This therefore includes:

- candidates who are not considered for a classified honours degree because they have not achieved the minimum 315 credits requirement;
- candidates who have achieved the minimum 315 credits requirement for an honours degree but whose average mark is less than 40% and who are *either* not eligible for profiling *or* are not eligible for a classified honours degree following profiling; and
- candidates with a failed module or modules in year three who have *prima facie* met the criteria for the award of a classified honours degree but to whom the Board of Examiners have declined to award a classified honours degree on the basis that they have failed to achieve the overall learning outcomes of the programme.

Final Year Re-sit Examinations/Assessments

Candidates who fail modules, on the following basis, may retake final year examinations/assessments at the next ordinary sitting of the examinations/assessments for those modules:

- Candidates who achieve the minimum 315 credits threshold for the award of a classified honours degree but whose average mark/module profile does not entitle them to a classified honours degree;
- candidates who achieve 300 credits but fewer than 315 credits and are only therefore eligible for the award of a pass degree; and
- candidates who have failed a module or modules in year three and have *prima facie* met the criteria for the award of a classified honours degree but to whom the Board of Examiners have declined to award a classified honours degree on the basis that they have failed to achieve the overall learning outcomes of the programme.

Such candidates will be able to opt *either* to accept a pass degree *or* to retake the examinations/assessments for the failed modules. The marks for the modules in which examinations/assessments have been retaken will be capped at 40% for the purpose of calculating the average for the degree classification.

- Candidates who do not achieve enough credits for either an honours degree or a pass degree will be allowed to re-sit and, depending upon the results of the examinations/assessments which

are retaken, may be eligible for the award of either a classified honours degree or a pass degree. The marks for the modules in which examinations/assessments have been retaken will be capped at 40% for the purpose of calculating the average for the degree classification.

Normally candidates will repeat the failed modules without attendance, unless the Board of Examiners determines that there are special circumstances which suggest that they should be allowed to repeat with attendance.

Candidates may opt not to repeat *all* their failed final year modules but rather to repeat the requisite number which, if passed at an appropriate level, would result in the award of a degree. However, they would be well advised to repeat all final year failed modules, in view of the fact that re-sit marks are capped at 40% and also that no further opportunity for retaking examinations/assessments would be available.

In circumstances where there have been significant changes to a module or a module is not offered in every year, special examinations/assessments must be set for candidates retaking the module.

Candidates who fail up to 45 credits in the final year but who still achieve an average which results in a classified honours degree will not be allowed to retake modules to gain a higher classification.

Criteria for the award of an alternative qualification

If a student fails to meet the criteria for the award of a classified honours degree or a pass degree, or is unable to complete his or her degree programme, he or she may be awarded one of the following qualifications:

Certificate in Higher Education – this will be awarded provided that the student has achieved a minimum of 120 credits at a level equivalent to the first year of an honours degree programme.

Diploma in Higher Education – this will be awarded provided that the student has achieved a minimum of 240 credits, at least 120 of which must be at a level equivalent to the second year of an honours degree programme.

Students who withdraw from The University of Liverpool will be awarded either of the above qualifications provided that they meet the necessary criteria.

The Board of Examiners and the External Examiner

The Board of Examiners consists of all recognised teachers in the Department of Computer Science together with two external examiners. It is chaired by the Head of Department with the Departmental Examination Officer responsible for producing minutes of its meetings.

Full details of assessment procedures, including penalties governing late submission, rules relating to plagiarism and collusion, and mechanisms for consideration of assessments affected by ill-health or

other extenuating circumstances can be found in Chapter 5 of the Department of Computer Science Student handbook.

4. Student Representation and Feedback

Student representation and feedback are facilitated through:

1. The University Personal tutoring scheme.
2. The Department's Staff-Student Liaison Committee (which operates in accordance with the University's code of practice on student representation).
3. Module questionnaires passed out at the end of each taught module.
4. Course questionnaires passed out at the end of each year of study.

Full details can be found in the Department of Computer Science Student Handbook.

5. Status of Professional/Statutory Body Accreditation

The programme is accredited to 2008 by the British Computer Society (BCS) for those students seeking full BCS membership, and partial accreditation for those seeking Chartered Engineering / Chartered Scientist status. After its visit in October 2004, the BCS accreditation panel came to the conclusion that it 'was satisfied with all aspects of the undergraduate courses' and recommended 'full exemption and both CEng and CSci accreditation (partial fulfilment) for the full (five) intakes.'