bcs
The Chartered Institute for IT

Making IT good for society

Guidelines on course accreditation

Information for universities and colleges

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Contents

A copy of these Guidelines is available on the BCS website at www.bcs.org/accreditation

1 Overview of accreditation

1.1 Introduction

These Guidelines describe the approach and content BCS, The Chartered Institute for IT, would expect to find in programmes put forward for accreditation.

BCS, under its Royal Charter, is required to establish and maintain standards of competence, conduct and ethical practice for information systems professionals. This duty includes the responsibility to develop and maintain standards for the educational foundation appropriate to people wishing to follow a career in information systems.

BCS initially established the BCS Professional Examinations to provide an educational foundation for people wishing to become members of the professional body. As the number and range of programmes at HND and degree level increased, a system of exemptions for appropriate programmes was put in place to provide alternative routes to membership. BCS became a licensed body of the Engineering Council in 1990 and is able to accredit for Chartered Engineer or Incorporated Engineer status. BCS became a licensed body of the Science Council in 2004 and is able to accredit for Chartered Scientist. In 2004, BCS introduced Chartered IT Professional and the requirements for programmes wishing to be accredited are also detailed in this document.

BCS undertakes a programme of visits to Higher Education Institutions (HEIs) and other higher education providers to consider their programmes for accreditation leading to CITP and/or CEng or IEng and/or CSci status.

BCS believes that preparation for a role as an information systems professional requires a sound theoretical understanding and practical experience. It also believes that students must gain a full appreciation of the wider issues of ethical standards, legislative compliance and the social and economic implications of information systems practice. Therefore, in considering programmes for accreditation, BCS looks for programme content which specifically aims to assist students in gaining a sound academic grounding in the discipline and an understanding of the professional issues relevant to their future working lives.

Where there are small numbers of students on a programme, BCS will not normally consider it for accreditation but suggests that students apply for membership/registration individually (see Section 5). If a named award with few students enrolled forms a pathway through a more general programme of study then BCS may well deal with such programmes as part of the overall accreditation of that group of awards.

The BCS criteria for CITP registration can be found at http://www.bcs.org/citp

The Engineering Council publishes the learning outcomes and criteria for registration in its document UK Standards for Professional Engineering Competence (UKSPEC) at www.engc.org.uk/

The Science Council publishes criteria for registration on its website at http://www.charteredscientist.org

These Guidelines are informed by these three documents.

1.2 Scope

The variety and range of ways in which computer systems and related computer communications are deployed grows daily. It is now commonplace to read about systems which:

- underpin all aspects of business, administration and frequently areas such as management, education, health, forensics and security
- feature as embedded systems or information systems in engineering devices and applications, often involving some element of criticality e.g. involving safety or security
- are used in furthering discovery in science, e.g. through biologically inspired computing, e-science or grid computing

In many of these situations the presence of computing is vital to the extent that the enterprise is dependent on the computing provision and could not function without it. Through these various contributions and through developments in technology itself, many of the recent advances in engineering, science and other areas are attributed to computing. In the future these trends are likely to proceed with even greater speed and subsequently greater impact.

To properly underpin all of these endeavours, it is important to have personnel who truly understand the principles associated with building and maintaining high quality systems – the key characteristic attributes being usable, reliable, secure, safe, dependable as well as being easy to test, maintain, manage, and so on. For those wishing to build systems that are truly useful, it is often vital to have an understanding of aspects of the domain of use. Acquiring that insight may involve a deep understanding of the application domain and this may involve considerable study; as applications become more sophisticated, this will be even more important.

To design, construct, deploy, manage and maintain such systems effectively and efficiently demands a deep understanding of the relevant principles in the specific context of computer-based systems. The inherent nature of such systems normally calls for an approach to design that is based on the application of engineering principles, founded on appropriate scientific and technological insights. It also implies an appreciation of the concept of risk, knowledge of how to manage risk, and an understanding of how people interact with computer systems, often in the presence of human frailty. Further, it includes the use of standards and attention to a range of issues incorporated in the BCS Code of Conduct and its Code of Good Practice that are periodically reviewed in the light of experience. The current versions of these are available at www.bcs.org/codes

1.3 Scope of the curriculum

BCS supports the Computing Benchmark statements established by the Quality Assurance Agency for Higher Education (QAA) in that they are broad statements about standards for the award of honours and masters degrees in the computing area and embrace the BCS definitions above.

The undergraduate subject benchmark defines a conceptual framework that gives computing its coherence and identity; it is about the intellectual capability and understanding that should be developed through the study of computing to honours degree level, the techniques and skills which are associated with developing an understanding of computing, and the level and intellectual demand and challenge which are appropriate to honours degree study of computing. As such it forms an excellent framework which BCS and higher education can use to support the accreditation process. Benchmarking information can be found at http://www.qaa.ac.uk.

Programmes being put forward for accreditation should ensure that there is significant study and learning outcomes as defined by the cognate area of computing as set out in Section 2.1 of the QAA Computing Benchmark. Evidence will be required showing that the principles of programme design set out in Section 3 of the QAA Computing Benchmark have been followed. As informed by the BCS Codes of Conduct and Good Practice, it is expected that students are exposed to, and developed in, both professional and ethical outlook and practice.

1.4 Programme structures

Within higher education, each course or module that contributes to a degree/diploma programme carries a number of credit points and its learning outcomes are assigned to a level. The QAA publishes a qualification framework for England, Wales and Northern Ireland; in Scotland the corresponding framework is the Scottish Credit and Qualifications Framework (SCQF). Both define 120 credit points as equivalent to one full-time academic year of undergraduate study and 180 credit points as equivalent to a year long full-time masters programme. In the QAA framework, each of an HND and a foundation degree is seen as containing 240 credit points, an ordinary degree as containing 300 credit points, an honours degree as containing 360 credit points, an integrated masters as containing 480 credit points and an MSc as containing 180 credit points. The QAA frameworks assign levels 4, 5 and 6 to years 1, 2 and 3 of study in an undergraduate programme and level 7 to postgraduate study.

In Scotland, where entry to tertiary education can be after only five years of secondary education, undergraduate degree programmes typically require an additional 120 credit points over and above the credit point requirements for elsewhere in the UK. In addition, the SCQF credit levels differ from those used in England, Wales and Northern Ireland. Levels 7 and 8 in Scotland correspond to levels 4 and 5 in the rest of the UK. The junior honours are at SCQF level 9 or 10 and final year honours courses are at SCQF level 10. Masters degrees are at SCQF level 11. Thus, normally, an honours degree in Scotland requires 480 points (with a minimum of 120 at level 10 and a further 120 at level 9 or 10) and an integrated masters 600 credit points (with a minimum of 120 at level 11), whilst an ordinary/pass degree requires 360 points (with a minimum of 60 at level 9).

1.5 Accreditation

BCS is able to consider accreditation of programmes of study for the following:

- Chartered IT Professional (CITP)
- Chartered Engineer (CEng)
- Chartered Scientist (CSci)
- Incorporated Engineer (IEng)

BCS, through its Academic Accreditation Committee (AAC), considers each programme in relation to one or more of:

- the criteria described by BCS for routes to Chartered IT Professional
- the criteria described in UK-SPEC, which defines the routes to Chartered and Incorporated Engineer registration of the Engineering Council
- the criteria described by the Science Council for routes to Chartered Scientist

The exemplifying academic qualification for CITP is an accredited honours degree in the computing field together with further learning beyond graduation.

The exemplifying academic qualification for IEng is an accredited bachelors or honours degree in the computing field, or a higher national certificate or diploma or a foundation degree in computing, plus appropriate further learning to degree level.

The exemplifying academic qualification for both CEng and CSci is an accredited honours degree followed by an accredited specialist masters programme or appropriate further learning to masters level; or through an integrated masters programme.

The term accredited as partially meeting the educational requirement for CITP/CEng/IEng/CSci registration indicates that a programme is accredited as contributing to the academic requirement for the relevant registration.

Thus an accredited programme is one which meets some or all of the educational requirements for registration with BCS as a Chartered IT Professional, with the Engineering Council as a Chartered or Incorporated Engineer or with the Science Council as a Chartered Scientist. Some programmes may meet the requirements for more than one of the above. Individual registration details are explored further in section 5.2 of these Guidelines.

Table 1.5

Programme type	Minimum computing credit points (including project)	Notes	Accreditation
Foundation degree, HND	160 of which a minimum of 80 are at level 5*	The programme should provide breadth in computing	Accredited as partially meeting the requirements for IEng
Joint honours degree	160 of which a minimum of 80 are at level 5*†	The programme should provide breadth in computing	Accredited as partially meeting the requirements for CITP
Ordinary degree	200 of which a minimum of 40 are at level 6*	The programme should provide breadth in computing	Accredited as meeting the requirements for IEng
Honours degree	240 of which a minimum of 80 are at level 6*	The programme should provide breadth and depth in the area of computing and should be influenced by relevant research and industry trends, with adequate theoretical underpinning	Accredited as meeting the requirements for CITP and/or partially meeting the requirements for CEng and/or CSci
Specialist masters degree	120 at level 7*	The programme should provide in-depth study of at least one specialist area of computing and build on the equivalent of an honours degree	Accredited as meeting the requirements for CITP Further Learning and/or partially meeting the requirements for CEng and/or CSci
Generalist masters degree	180 credits at level 6* or above†	The programme should provide breadth in computing	Accredited as partially meeting the requirements for CITP

Integrated masters degree	320 of which a minimum of 60 are at level 7*	The programme should provide breadth and depth in the area of computing and should be influenced by relevant research and industry trends, with adequate theoretical underpinning. In addition, it should provide in-depth study of at least one specialist area of computing	Accredited as meeting the requirements for CITP and CITP Further Learning and/or fully meeting the requirements for CEng and/or CSci

*NOTE: The differences in the minimum computing points between the England, Wales and Northern Ireland requirements and the Scottish requirements are detailed in Section 1.4 on page 5.

† Accreditation as partially meeting the requirements for CITP and must include a suitable project at least at undergraduate honours level together with the teaching and assessment of legal, social, ethical and professional issues.

A programme will not normally be considered for an alternative level of accreditation than that outlined in the table.

Any programme which is put forward for accreditation must meet the relevant programme criteria as detailed in sections 2.2 to 2.5, as well as being developed and delivered in an environment which meets the criteria as detailed in section 2.1. In addition to meeting the criteria outlined in section 2, not more than one-third of the material in an accredited undergraduate programme may normally lie outside the scope of the undergraduate QAA Computing Benchmark as summarised in table 1.5. Programmes that do include more than one third of their material from other disciplines may nevertheless be accreditable, provided that this material is integrated into the programme in support of the computing outcomes and that this is demonstrated by the mapping of the core modules to the BCS criteria.

2 Criteria for accreditation

In carrying out the accreditation process for programmes, BCS looks at a range of issues which relate to the department in which the programmes are delivered as well as a range of programme-specific issues. Appendix IV of the Guidelines identifies these requirements.

Programmes may be at bachelors level, with or without honours, at integrated masters level, specialist or generalist masters level: distinct accreditation advice applies to each of these. Programmes (usually described by a programme specification as accepted by the QAA) accredited for CITP, CEng and CSci are expected to meet the requirements set out in the relevant benchmark statement, namely the QAA Computing Benchmark for honours degrees and the QAA Subject Benchmark Statement, Master's Degrees in Computing. The Engineering Council's outcomes for IEng apply for ordinary degrees seeking accreditation for IEng along with foundation degrees which will be reviewed in partial fulfilment.

In this section, items in *italics* are taken from the QAA Computing Benchmark.

When considering accreditation, BCS seeks evidence that:

- the programme is up to date and conveys a sense of excitement about the subject
- programme design and review are based on the appropriate computing benchmark document
- departmental reviews undertaken by the HEI base their findings on the relevant benchmark and involve external experts in the field
- external examiners are using the benchmark in making their judgement
- the programme learning outcomes suitably reflect the abilities and skills defined in the appropriate benchmark

All programmes must contain sufficient computing content as set out in table 1.5 of these Guidelines.

Cognitive, practical and transferable skills need to be placed in the context of the programme of study. The implicit interplay between these identified skills both within and across these three categories is recognised.

The extent to which students acquire these abilities will depend on the emphasis of individual programmes.

In examining programme design, HEI regulations and student achievement BCS seeks to ensure that the benchmark outcomes are not compromised, e.g. where compensation is permitted under HEI regulations, BCS may require that certain modules cannot be compensated.

Within this document, the following terms are used with the meaning stated:

Understanding is the capacity to use concepts creatively, for example in problem solving, in design, in explanations and in diagnosis.

Knowledge is information that can be recalled.

Skills are acquired and learned attributes which can be applied almost automatically.

Awareness is general familiarity, albeit bounded by the needs of the specific discipline.

2.1 Quality assurance and enhancement

The quality of a programme depends not only on its content, syllabuses and assessment, but also on the environment in which it is developed, implemented and improved.

BCS requires evidence of a clear quality assurance framework at departmental and institutional level, and where appropriate, at inter-institutional level. Evidence is also required that this framework is in active use and that it involves the participation of students; such evidence could take the form of output from externally conducted institutional reviews and internal reviews of the department.

BCS requires evidence that the students on the programme are adequately supported by appropriate learning resources which include academic, administrative and technical staff, computing and communication facilities which include appropriate software tools, and specific and general learning facilities including access to appropriate digital and print-based information and effective academic advice and guidance.

HEIs are required to specify in the application form the maximum length of time permitted for completion of their programme(s). The maximum period for completion is normally 6 years to ensure currency; however HEIs wishing to request accreditation of a programme with a duration of more than 6 years can provide a rationale to BCS which will be considered on a case by case basis. Where programmes do not meet this requirement, or the HEI has decided not to make a case for it to be waived, the accreditation may be granted with a condition on the length of study.

As mentioned above, where compensation is permitted under HEI regulations, BCS must be assured that the overall learning outcomes of the programme are not undermined. As a general rule, in the final year of the programme normally only 20 out of 120 credits may be compensated; however this is a guideline and will be considered in the context of the delivery of the programme learning outcomes.

HEIs are required to notify BCS if, during the course of an accreditation period, there are significant changes to the learning environment in which a course is delivered. Changes to the Quality Assurance system, the compensation requirements and/or the Learning Support must be communicated to the BCS Education Team.

2.2 Undergraduate programmes

Undergraduate programmes at honours level can be considered for accreditation for CITP and/or CEng, and/or CSci. For CEng and CSci accreditation at honours degree level this will be accredited as partially meeting the educational requirement for CEng and/or CSci. Section 2.2.1 sets out the core requirements expected for accreditation. Section 2.2.2 provides specific requirements for CITP and Section 2.2.3 provides specific criteria for partially meeting the educational requirements for CEng/CSci.

2.2.1 Core requirements for accreditation of honours programmes

The general requirements for accreditation are based on the QAA Subject Benchmark for Computing. Those taken directly from the QAA Benchmark for Computing are provided in italics.

Graduates should have been assessed on the following abilities.

Computing-related cognitive abilities

- *Knowledge and understanding of essential facts, concepts, principles and theories relating to computing and computer applications as appropriate to the programme of study*
- *The use of such knowledge and understanding in the modelling and design of computer-based systems for the purposes of comprehension, communication, prediction and the understanding of trade-offs*
- *The ability to recognise and analyse criteria and specifications appropriate to specific problems, and plan strategies for their solution*
- *The ability to analyse the extent to which a computer-based system meets the criteria defined for its current use and future development*
- *The ability to deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems*
- *The ability to recognise the legal, social, ethical and professional issues involved in the exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices*
- *Knowledge and understanding of the commercial and economic context of the development, use and maintenance of information systems*
- *Knowledge and understanding of the management techniques which may be used to achieve objectives within a computing context*
- *Knowledge and understanding of information security issues in relation to the design, development and use of information systems*

Computing-related practical abilities

- *The ability to specify, design or construct computer-based systems*
- *The ability to evaluate systems in terms of general quality attributes and possible trade-offs presented within the given problem*
- *The ability to recognise any risks or safety aspects that may be involved in the operation of computing and information systems within a given context*
- *The ability to deploy effectively the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems*

Transferable skills

- *An ability to work as a member of a development team recognising the different roles within a team and different ways of organising teams*
- *The development of transferable skills that will be of value in a wide range of situations. These include problem solving, working with others, effective information management and information retrieval skills, numeracy in both understanding and presenting cases involving a quantitative dimension, communication skills in electronic as well as*

written and oral form to a range of audiences and planning self-learning and improving performance as the foundation for on-going professional development

N.B. This core set of transferable skills meets the requirements for CITP, CEng and CSci. Therefore no additional transferable skills are presented in 2.2.2 and 2.2.3.

2.2.2 Additional requirements for CITP

In addition to the core requirements outlined in section 2.2.1 graduates from all accredited CITP programmes should have been assessed on the following abilities:

Computing-related cognitive abilities

- Knowledge and understanding of the methods and issues involved in deploying systems to meet business goals
- Knowledge and understanding of methods, techniques and tools for information modelling, management and security
- Knowledge and understanding of systems architecture and related technologies for developing information systems
- Knowledge and understanding of mathematical and/or statistical principles appropriate to the nature of the programme

Computing-related practical abilities

- Use appropriate theoretical and practical processes to specify, design, deploy, verify and maintain information systems, including working with technical uncertainty
- Define a problem, research its background, understand the social context, identify constraints, understand customer and user needs, identify and manage cost drivers, ensure fitness for purpose and manage the design process and evaluate outcomes
- Apply the principles, methods and tools of systems design to develop information systems that meet business needs

2.2.3 Additional requirements for CEng/CSci

Accreditation in partial fulfilment for CEng and CSci will normally be considered together. If a programme places particular stress on an engineering ethos and compensatingly light stress on a scientific ethos, Panels may approve CEng and not CSci, and the converse would apply in the event of a high scientific stress. HEIs are at liberty to only request one of these. Should a programme be accredited in partial fulfilment of CEng, graduates will automatically be eligible for full IEng accreditation.

In addition to the core requirements outlined in section 2.2.1 graduates from all accredited CEng and/or CSci programmes should have been assessed on the following abilities:

Computing-related cognitive abilities

- Knowledge and understanding of the use of scientific and engineering principles in the creation, use, support and decommissioning of information systems for the solution of practical problems, founded on appropriate scientific and technological disciplines
- Knowledge and understanding of mathematical and statistical principles necessary to underpin their programme of study and the ability to apply mathematical and statistical methods, tools and notations proficiently in the analysis and solution to problems
- Knowledge and understanding of the principles of computational modelling used for the comprehension of scientific and engineering phenomena

Computing-related practical abilities

- Use appropriate theoretical and practical processes to specify, design, implement, verify and maintain computer-based systems, including working with technical uncertainty
- Define a problem, research its background, understand the social context, identify constraints, understand customer and user needs, identify and manage cost drivers, ensure fitness for purpose and manage the design process and evaluate outcomes
- Apply the principles of appropriate supporting engineering and scientific disciplines

2.2.4 Requirements for IEng

Ordinary BEng or BSc programmes in the computing field will normally be accredited as meeting the educational requirement for IEng. Such awards should have programme intended learning outcomes separate to any honours version of the programme. Similarly, ordinary degrees being considered for accreditation must also have their own programme intended learning outcomes, and not simply be ‘exit awards’ from an honours programme.

Foundation degrees in the computing field will normally be accredited as partially meeting the educational requirement for IEng.

Graduates should have been assessed on the following abilities:

Computing-related cognitive abilities

- Knowledge and understanding of essential facts, concepts, principles and theories relating to computing and computer applications as appropriate to the programme of study
- A knowledge of the scientific principles underpinning relevant current technologies and their evolution
- A knowledge of the mathematics and statistics necessary to support the application of key engineering principles
- Understanding of the principles of managing computing processes
- A knowledge of the commercial and economic context of the development, use and maintenance of computer-based systems
- A knowledge of the management techniques which may be used to achieve objectives within a computing context

Computing-related practical abilities

- The ability to deploy appropriate theory, practices and tools for the specification, design and implementation of computer-based systems according to customer and user needs and use innovation and creativity in a practical and social context
- The ability to evaluate systems in terms of general quality attributes and possible trade-offs presented within the given problem
- The ability to recognise and analyse criteria and specifications appropriate to specific problems, and plan strategies for their solution
- The ability to model and analyse the extent to which a computer-based system meets the criteria defined for its current use and future development
- The ability to recognise the legal, social, ethical and professional issues involved in the exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices
- The ability to recognise any risks or safety aspects that may be involved in the operation of computing and information systems within a given context
- The ability to deploy effectively the tools used for the construction and documentation of computer applications and to use and apply information from technical literature

2.3 Integrated masters programme criteria

Integrated masters programmes may be considered for CITP accreditation and CITP Further Learning and/or full CEng and/or full CSci accreditation.

Programmes seeking CEng accreditation must include a substantial emphasis on developing knowledge and understanding of the processes for development of innovative systems at masters level.

Programmes seeking CSci accreditation must include a substantial emphasis on the scientific basis of computing at masters level.

Programmes seeking CITP must include an emphasis on the deployment of IT solutions to address business issues. Programmes seeking CITP Further Learning must include an emphasis on the foundations of computing and/or current professional issues and techniques.

For CITP, the requirements are identical to those for undergraduate programmes and are given in sections 2.2.1 and 2.2.2.

For CITP Further Learning, CEng and CSci, the requirements given in sections 2.4.1, 2.4.2, 2.4.3 and 2.4.4 for specialist masters programmes must be met and also allow students to demonstrate the following in the final and penultimate years:

- Their ability to apply the practical and analytical skills present in the programme as a whole
- Innovation and/or creativity
- Synthesis of information, ideas and practices to provide a quality solution together with an evaluation of that solution
- Awareness of wider customer contexts and the identification of problems that such contexts might deliver
- The ability to work co-operatively (for example, as a team) to deliver a significant piece of work
- Critical self evaluation of the process

It is common for these criteria to be met by a piece of team-based, major (30 credit) project work at level 6 or above; if this is the case it should be passed without compensation.

2.4 Postgraduate programmes

BCS recognises that there is a variety of postgraduate programmes in computing, ranging from specialist MSc programmes that build on the knowledge and understanding developed in undergraduate programmes in computing to generalist MSc programmes that offer an opportunity for graduates from other disciplines. The rich range of MSc programmes is described in the *QAA Subject Benchmark Statement, Master's Degrees in Computing, 2011* that can be viewed at www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/QAA386_Computing.pdf.

Specialist masters programmes are characterised by the fact that they involve deep study of computing by building on:

- prior study of some aspect of computing itself, or
- another discipline which provides important underpinning for, or insight into, the discipline of IT/computing, or
- an application domain where there are important benefits that flow from a close marriage with computing

Specialist masters programmes may be considered for accreditation for CITP Further Learning and/or accreditation as partially meeting the educational requirement for CEng and/or CSci. The nature of a specialist masters in most cases will bias it toward either engineering or a science ethos, which will then determine its acceptability for CEng/CSci respectively. Where the programme places substantial emphasis on processes for the development of innovative systems but does not significantly extend the underlying scientific foundations consideration for accreditation as partially meeting the educational requirement for CEng is appropriate; correspondingly where the specialist year substantially extends the scientific basis of computing consideration for accreditation as partially meeting the educational requirements of CSci is appropriate.

Programmes seeking CITP Further Learning must include an emphasis on the foundations of computing and/or current professional issues and techniques.

Generalist masters programmes are typically designed to allow graduates from non-computing related subject areas to transfer to computing. The majority of the content of these programmes should be at masters level but may contain a proportion of material that provides sufficient bridging for students from non-computing backgrounds to undertake study at level 7. Beyond these requirements, programmes may be designed to address the needs of local employers and/or attract the imagination of possible students – which should be reflected in the masters level learning outcomes for the programme as well as providing coverage of legal, social, ethical and professional issues.

Generalist masters programmes will only be considered for partial CITP accreditation and the requirements of section 2.4.5 must be met.

2.4.1 Core requirements for accreditation of specialist masters programmes

Transferable skills

- carry out a critical review of the literature, current developments and available software as well as the associated software processes
- support the development of the self-directed learner who can set goals and select appropriate knowledge, skills, etc. as well as supporting tools for a particular purpose
- recognise and be able to respond in an appropriate way to opportunities for innovation
- participate effectively in the peer review process
- undertake risk management associated with a range of activities
- Use appropriate processes to specify, design, deploy, verify and maintain computer-based systems, including working with technical uncertainty
- Investigate and define a problem, identify constraints, understand customer and user needs, identify and manage cost drivers, ensure fitness for purpose and manage the design process and evaluate outcomes
- Apply the principles of appropriate supporting disciplines
- An ability to work as a member of a development team recognising the different roles within a team and different ways of organising teams

N.B. This core set of transferable skills meets the requirements for CITP Further Learning, CEng and CSci. Therefore no additional transferable skills are presented in 2.4.2 and 2.4.3.

2.4.2 Additional requirements for CITP Further Learning

In addition to the core requirements outlined in section 2.4.1 graduates should have been assessed on the following

abilities:

Computing-related cognitive abilities

- demonstrate a systematic understanding of the knowledge of the domain of their programme of study, with depth being achieved in particular areas. This should include the foundations of the discipline and/or issues at the forefront of professional practice in the discipline; it should also include an understanding of the role of these in contributing to the effective design, implementation and usability of relevant computer-based systems
- demonstrate a comprehensive understanding of the essential principles and practices of the domain of the programme of study including current standards, processes, principles of quality and the most appropriate software support; the reasons for their relevance to the discipline and/or professional practice in the discipline; and an ability to apply these
- understand and be able to participate within the legal, social, ethical and professional framework within which they would have to operate as professionals in their area of study

Computing-related practical abilities

- consistently produce work which applies and is informed by research at the forefront of the developments in the domain of the programme of study; this should demonstrate critical evaluation of aspects of the domain
- demonstrate the ability to apply the principles and practices of the discipline in tackling a significant technical problem; the solution should demonstrate a sound justification for the approach adopted as well as a self-critical evaluation of effectiveness but also a sense of vision about the direction of developments in aspects of the discipline

2.4.3 Additional requirements for CEng

In addition to the core requirements outlined in section 2.4.1 graduates should have been assessed on the following abilities:

Computing-related cognitive abilities

- A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights in the development and implementation of systems, much of which is at, or informed by, the forefront of their field of study
- A comprehensive understanding of the state-of-the-art techniques and methodologies for developing systems
- Understand and be able to participate within the legal, social, ethical and professional framework as professionals in systems, software or information engineering

Computing-related practical abilities

- Develop and apply new technologies
- Show originality and innovation in the application of knowledge and techniques for developing systems
- Make general evaluations of commercial risk through some understanding of the basis of such risks

2.4.4 Additional requirements for CSci

In addition to the core requirements outlined in section 2.4.1 graduates should have been assessed on the following abilities:

Computing-related cognitive abilities

- A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights in the area of computing science research, much of which is at, or informed by, the forefront of their field of study
- A comprehensive understanding of the scientific techniques applicable to their own research or advanced scholarship
- Understand and be able to participate within the legal, social, ethical and professional framework in computing science

Computing-related practical abilities

- Show critical awareness of current research issues, problems and/or insights
- Show an ability to apply appropriate quantitative and qualitative research methods and tools for creating and interpreting knowledge in the field
- Make general evaluations of scientific risk through some understanding of the basis of such risks

2.4.5 Requirements for generalist masters programmes

Generalist masters programmes will be considered only for partial CITP accreditation, to ensure parity with joint honours programmes. They will need to include coverage of legal, social, ethical and professional issues as well as

including an acceptable project worth at least 30 credits at undergraduate honours level or higher.

It is accepted that in practice the generalist masters project is almost invariably worth at least 60 credits, leaving 120 credits of taught material. The parity with joint honours programmes (160 credits in total, at least 30 for the project) is well established, with a typical generalist masters programme having a total of 180 credits, 60 credits of which are associated with the project.

Given the level of accreditation considered, graduates abilities for generalist masters programmes are assessed against those listed for undergraduate honours degree requirements under section 2.2.1 and 2.2.2.

2.5 Projects

2.5.1 General project requirements

An individual project is an expectation within undergraduate, integrated masters, and postgraduate masters programmes. Students must be provided with written guidance on all aspects of the project, including selection, conduct, supervision, milestones, format of the report and the criteria for assessment.

All projects should reflect the aims and learning outcomes which characterise the programme to which they contribute as set out in the programme specification.

Project reports

Projects must involve the production of a report which should include:

- elucidation of the problem and the objectives of the project
- an in-depth investigation of the context and literature, and where appropriate, other similar products (this section is likely to be emphasised less for an IEng project)
- where appropriate, a clear description of the stages of the life cycle undertaken
- where appropriate, a description of how verification and validation were applied at these stages
- where appropriate, a description of the use of tools to support the development process
- a critical appraisal of the project, indicating the rationale for any design/implementation decisions, lessons learnt during the course of the project, and evaluation (with hindsight) of the project outcome and the process of its production (including a review of the plan and any deviations from it)
- a description of any research hypothesis
- in the event that the individual work is part of a group enterprise, a clear indication of the part played by the author in achieving the goals of the project and its effectiveness
- references

2.5.2 Undergraduate individual project requirements

It is expected that within an undergraduate programme, students will undertake a major computing project, normally in their final year and normally as an individual activity, giving them the opportunity to demonstrate:

- their ability to apply practical and analytical skills present in the programme as a whole
- innovation and/or creativity
- synthesis of information, ideas and practices to provide a quality solution together with an evaluation of that solution
- that their project meets a real need in a wider context
- the ability to self-manage a significant piece of work
- critical self-evaluation of the process

In the event of this major activity being undertaken as part of a group enterprise, there is a requirement that the assessment is such that the individual contribution of each student is measured against all the above learning outcomes.

For accreditation for CITP, CEng or CSci, the individual project should be worth at least 30 credit points at level 6 or above. The project must be passed without compensation.

For accreditation for IEng the individual project should be worth at least 20 credit points at level 5 or above. The project must be passed without compensation.

2.5.3 Postgraduate project requirements

Projects at postgraduate level may be similar in scope to undergraduate projects but should reflect the ethos of

advanced study and scholarship appropriate to a masters degree (whether generalist or specialist).

Postgraduate projects must give students the opportunity to demonstrate:

- a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of the specialist academic discipline
- a comprehensive understanding of techniques applicable to their own research or advanced scholarship
- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline
- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences
- demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level
- critical self-evaluation of the process

Generalist masters programme projects should be worth at least 30 credit points and be at least at undergraduate honours level. It is recognised that in practice a project on a masters programme is usually worth at least 60 credits at Level 7. The project must be passed without compensation.

3 The Process

3.1 Overview

These regulations and processes are overseen by the BCS Academic Accreditation Committee (AAC). This Committee is drawn from BCS membership who have experience of higher education and/or the computing industry. The Committee is served by a permanent secretariat, located within the Education Team at BCS. Its work is also supported through a Register of Assessors, who are Chartered IT Professionals of BCS.

The accreditation process involves departmental visits and documentary submissions. For each visit, BCS constitutes an appropriate Panel which explores in detail the programmes being put forward, along with the context in which they are delivered. On this basis a report, with recommendations, is presented to the Committee. The Committee makes the final decision on such recommendations.

Chartered IT Professionals who would like to support the work of the Committee are encouraged to make themselves known to the Education Team.

3.2 Applying for accreditation

BCS has a rolling programme of visits to HEIs to consider programmes for accreditation. HEIs included in the programme are normally visited at least every five years and are contacted by BCS when a visit is due. Visits usually consider the entire range of relevant programmes offered at the HEI. Typically, a visit should be scheduled to take place in the year following the final year of the existing accreditation, so that a continuous approved status may be achieved. Where, for whatever reason, a visit cannot take place within this timeframe, minimal backdating of accreditation will be considered. It is helpful if departments keep the BCS Education Team well informed of changes they foresee with regard to any scheduled visit.

For HEIs seeking accreditation for the first time, the following steps will be taken:

- the HEI discusses the process and the programmes to be considered with the Education Team at BCS
- the Education Team arranges an advisory visit by an assessor and a report is produced for use by BCS and the HEI. The report will contain information about any issues which would need to be addressed before a full visit could take place
- if the Education Team is satisfied that it is appropriate, a full visit is arranged when it can be fitted into the programme

It is recognised that changes to programmes will be introduced between the visits to an HEI. If major changes are made to programme learning outcomes, a number of different arrangements may be made and the advice of the Education Team should be sought in such situations.

Once the need and timing for a visit is established, the Education Team will request that supporting documentation (see Appendix III) is provided in an appropriate timescale.

Documentation requirements

BCS requires one of two types of documentation in support of the application for accreditation depending on previous accreditation outcomes.

Normally, HEIs are required to submit a full set of documentation (Type One documentation), as set out in Appendix III i. However, for selected HEIs that achieved a full five years accreditation without any significant obstacle (such as a 90-day requirement), the Type Two process is more appropriate and documentation should be submitted as detailed in Appendix III ii.

The Type Two process recognises an institution's previous record of demonstrating an understanding of the BCS accreditation criteria, as a basis for reducing the amount of documentation that an HEI needs to prepare specifically for BCS accreditation. BCS will continue to demand that accredited programmes meet all the expectations laid down in its accreditation criteria. It will verify this by inviting HEIs to outline and evidence as appropriate the changes and challenges it has experienced or is planning. The visiting Panel will be interested then to learn how the HEI assures itself that it meets and will continue to meet the requirements of BCS for each of its accredited courses.

Where there have been significant changes since the previous visit, such as major restructuring, many changes to personnel or changes to quality assurance processes, HEIs are advised to utilise the Type One process. HEIs that are unsure about whether to utilise a Type Two process must seek guidance from BCS.

The broad aims, scope, process, outcomes and criteria adopted are the same irrespective of the type of visit and are in described in Sections 1 to 4 of these Guidelines.

3.3 Visits to Higher Education Institutions

For each visit, a visiting Panel is established.

Type One visit Panels will have between three and five members depending on the number of programmes being submitted for accreditation. At least one member of each Panel will have experience of industry and all members will be Chartered IT Professionals. Two members of the Panel will be drawn from the AAC and the remaining from the Register of Assessors. The Panel will meet privately at a local hotel the evening before the visit and the visit will typically begin with a meeting with the students. This will be followed by a meeting with the Head of Department and senior staff to discuss quality management and enhancement issues and then a meeting to discuss the programme related issues. The visit will conclude with informal feedback on the recommendations that the Panel will make to the AAC.

Type Two visits will normally be conducted by a Panel of two assessors; one of these will be selected to have experience or credentials to judge industrial/commercial involvement and influence. The visit will typically begin with a private Panel meeting followed by a meeting with the students, a meeting with the Head of Department and senior staff to discuss quality management and enhancement issues and then a meeting to discuss the programme related issues. The visit will conclude with informal feedback on the recommendations that the Panel will make to the AAC.

All visiting Panels will be supported by a member of the Education Team's secretariat who will brief the Panel on the current accreditation status of programmes within the department being visited. This will be accompanied by a statement of what is being requested by the department, the previous visit report or the advisory visit report in the case of a first visit and a copy of the documentation submitted by the department.

The Panel will use the Assessor Criteria as shown in Appendix IV to guide discussion on the day of the visit.

The Panel will expect to meet with a cross-section of appropriate staff as well as students during the visit. Thus HEIs are advised to select their attendees so that full and productive discussions ensue, guided by the previously communicated agenda.

3.4 Arrangements for the visit

Departments are required to provide details of the room and the building to which the visiting Panel should report on arrival and supply maps of the campus indicating where parking is available. If parking permits are required, the department must contact the Education Team in good time to arrange the permits.

The Panel should be based in the same room (with boardroom style layout) for all of the day, except during the tour of facilities. A second meeting room should also be made available for the morning of the visit should the Panel decide to run parallel discussion sessions. If the room chosen is too small to accommodate a meeting with students from all programmes, further accommodation will be required for this meeting. It is essential that the base room can be locked and it should include a telephone with an outside line. It is also helpful if the base room can be sited within easy reach of conveniences. A tour of laboratory facilities may be required and departments should adapt any tour to concentrate on 2-3 innovative aspects of the physical resources for the programmes under review.

3.5 Joint visits with other Engineering or Science Institutions

Some programmes may be appropriate for accreditation by both BCS and another institution or a group of institutions (e.g. through the Engineering Accreditation Board (EAB)). Joint accreditation visits can be arranged with the lead being taken by one of the institutions selected by the department(s) being visited.

If the visit is being undertaken jointly with another institution, the arrangements may be different and more than one room may be required for all or part of the day. HEIs will be notified if this is the case.

Departments interested in a joint visit should contact both bodies. Because of the difficulty in reconciling visit schedules, it is advisable to discuss joint visit plans well in advance of the proposed date of the event. It should be noted that Type Two visits are not compatible with joint visits with other bodies.

3.6 The visit report

A detailed draft report will be written following the visit, summarising the discussions that took place and the views put forward by the visiting Panel and the HEI. The report serves the dual purpose of informing the AAC about the programme, and informing the HEI of the views of the visiting Panel. Thus formally, the Panel makes recommendations to the AAC via the report, and it is the AAC which decides upon the outcomes.

Before the report goes to the AAC, the draft report is sent to the department for comment on factual content only. The response of the HEI to these recommendations will be taken into account by the AAC in considering the future status of the programme.

Once the report and its recommendations have been discussed by the AAC and the outcomes agreed, a full copy of the final report, together with a letter stating the main terms of the decision, is sent to the Vice-Chancellor or Principal of the HEI and also to the school or department. As the decision is not given until the AAC has approved and finalised the report, there may be a delay between the visit and the decision; in most cases this should not exceed six months.

The department can seek clarification of the outcomes of any visit from the Education Team once the decision has been communicated to the HEI. Where a department seeks support in addressing any particular matter, the Education Team may be able to offer advice or engage a member of the AAC to be of direct assistance to the department.

Items agreed by the AAC to be dealt with under a 90-day response will permit the department to make an appropriate documentary submission to the BCS within a 90-day period from the publication of the final report. Upon receiving the department's response within the 90-day period, the visiting Panel will consider this and make recommendations to the AAC, thus allowing the AAC to discuss and take cognisance of all outcomes. Such outcomes will be communicated to the HEI and department in the same manner as above.

If there are no 90-day response outcomes but there are minor areas of concern which a Panel decides can be satisfactorily addressed by the department prior to the report being considered by the Academic Accreditation Committee, an action plan response may be recommended.

Where the agreed outcome was to allow the department to progress matters in its own time, these matters will remain on file. Thus should a department take up such an invitation, the Education Team will proceed with the submission accordingly. However should the department choose not to progress a particular matter, then the item will be noted at any subsequent visit.

3.7 Documentary submissions between visits

Documentary submissions may be made between visits in the following circumstances:

Changes made to previously accredited programmes: while it is expected that programmes will change over time, if major changes are made to a programme or its delivery during the BCS accreditation period, HEIs must notify BCS. This will also apply to programme title changes, which must be communicated to BCS in order to minimise the risk of inconvenience to Membership applicants. BCS would also appreciate notification if the HEI decides to withdraw programme(s).

Confirmation of initial recommendations: The Education Team will contact HEIs one year in advance of the deadline for receipt of documentary submissions to confirm an initial recommendation (i.e. for a programme which at the time of the visit had not produced at least 3 graduates). The deadline is usually one year after graduation of the first cohort and may need to be delayed if the programme has not produced the required 3 graduates by this time. The initial recommendation will then be considered to confirm the accreditation for the maximum 5 year period.

In your own time submissions: At an accreditation visit a Panel may invite an HEI to make a documentary submission to BCS in its own time in order for programmes to be considered for accreditation. It is the responsibility of the HEI to submit any evidence requested by the Panel should it wish to do so and no deadline is set by BCS; however the HEI is asked to contact the Education Team in advance of making the submission for planning purposes.

The HEI should provide the additional information requested by any of the above types of submission in the form of documentary evidence which is reviewed by the visiting Panel and / or AAC members as appropriate.

BCS does not consider new titles for accreditation between visits unless:

a) the title has been included in the course list at the last visit (but is not ready for full consideration due to lack of documentation;
b) the new title is a re-naming of an existing accredited programme for which the content is unchanged;
c) the department is introducing a new pathway (eg new variant) for which the core modules are identical to an already accredited programme;
d) the department is introducing a new programme which has significant overlap (at least 70%) with an already accredited programme.

3.8 Fees and charges

Visits will only be made to HEIs which are Educational Affiliates of BCS and which are up to date with their subscription payments. The annual affiliate fee for educational HEIs contributes to the cost of a quinquennial visit to institutions in the UK. Nominated staff at Educational Affiliate HEIs may enjoy the benefits of BCS Affiliate grade membership and the HEI may also use dedicated BCS logos for publicising accredited programmes. Overseas institutions should contact the Education Team for more information.

3.9 Confidentiality

BCS treats the work of the Academic Accreditation Committee as confidential. No reports or minutes of meetings will be shown to anyone with the exception of members of the Committee or of the Accreditation Panel, a representative of BCS secretariat, the Engineering Council, the Science Council or designated members of BCS in the case of an appeal. However, BCS has a Memorandum of Understanding with the QAA which encourages HEIs to share their BCS accreditation reports and outcomes with all stakeholders and as such, no restrictions are placed on the use of the report by the HEI to which it is sent. The Memorandum of Understanding can be viewed at http://www.bcs.org/accreditation.

4 Outcomes

4.1 Possible outcomes

Regardless of the type of documentation supplied (Type One or Type Two), the accreditation criteria is used to help in determining the outcome of accreditation (see Appendix IV). The outcome for each programme will be drawn from the table in Section 1.5 of these Guidelines. There are a number of types of outcome for a programme, following a visit:

1. 90-day response: Prior to any decision being taken on the outcomes, the HEI is requested to respond to identified issues within 90 days of the receipt of the final report. BCS will indicate what is required by way of a response and the outcome will be one of the outcomes numbered 2, 3 or 4 below.
2. Action Plan: This is recommended when a Panel believes that areas of concern can be satisfactorily addressed prior to the report being considered by the Academic Accreditation Committee. The Panel should indicate the recommended outcome if the response is satisfactory.
3. Maximum period: The accreditation is for the maximum period of five intakes.
4. Reduced period: Normally, issues are identified with the programmes or the learning environment which BCS believes can/will be corrected. Thus accreditation is for a period of less than five years. There is a range of reasons why a reduced term may be given, e.g. to align with existing accreditations, or because of issues identified within the programme(s). The HEI may be asked to submit a report at the end of the specified period or receive a further accreditation visit before consideration can be given to extending the accreditation to a maximum of five intakes.
5. Not accredited: The programme fails to meet the requirements for accreditation. The reasons for failing to meet the requirements will be identified and the HEI is able to apply again at some future date.

Conditions may also be applied to programmes, for example that a specific module should be undertaken. Graduates applying for BCS Membership/Registration will be expected to inform the Membership Department that they satisfied any applicable conditions.

Programmes may be accredited for no more than five years, except that accreditation may be backdated to allow cohorts on the programme at the time it is accredited to benefit from the decision.

4.2 Programmes from which no students have yet graduated

New programmes are normally accredited only when at least one cohort of students has graduated, since it is the final standard achieved which determines whether the programme is appropriate for accreditation. Initial accreditation may be granted for new programmes which seem likely to meet the appropriate criteria but which have not yet produced graduates. It is not a guarantee of future accreditation but is given where BCS is confident that the programme is likely to meet its objectives and to merit future consideration. In such cases, accreditation will only be granted for one period to cover a specific output of graduates. However, should a programme, other than those of one year duration, be in its first year BCS will not normally review it.

When the first cohort of at least three students graduates, HEIs should provide BCS with a documentary submission normally containing external examiners' reports and responses, examination papers and samples of projects together with the marking sheets. Confirmation of the full period of accreditation will be based on this evidence and backdating to the first intake will be considered.

4.3 Programme title differentiation

Programmes delivered at different campuses must be clearly distinguished on the award transcript and/or certificate. Thus, programmes that are delivered at multiple sites or by distance learning, either in the UK or abroad that have the same title and cannot be distinguished from either the transcript or certificate will not be accredited.

5 Individual Route to Membership and Registration

Institutions are urged to encourage their students to become student members of BCS and their graduates to seek the appropriate grade of membership.

Having an accredited degree facilitates membership and/or registration for Chartered/Incorporated status. In addition, having a degree accredited for CITP would not preclude becoming CEng/CSci if the post graduation career includes appropriate further learning and experience.

5.1 Membership

The full academic requirement for Professional Membership of BCS is an accredited honours degree. However, a range of other academic qualifications can provide a route to BCS Membership; full details can be found on the BCS website at www.bcs.org/membership

There are also routes to BCS Professional Membership for applicants who have not gained an accredited award. One such route is via the Individual Exemption procedure, which is available to applicants whose programmes have not been considered by BCS. Cases are assessed on an individual basis and details can be found on the BCS website at www.bcs.org/individual-exemptions

5.2 CEng/IEng/CSci Registration

The full academic requirement for Chartered Scientist or Chartered Engineer is an accredited honours degree together with an accredited masters degree, or an integrated masters degree. The full academic requirement for Incorporated Engineer is an accredited Bachelors or honours degree in the computing field, or a Higher National Certificate or Diploma or a Foundation Degree in computing, plus appropriate further learning to degree level.

Just as there are routes to Professional Membership for an applicant who does not already hold an accredited award, so there are routes to Chartered and Incorporated Engineer and Chartered Scientist status for an applicant whose awards are not accredited. Such an application is considered via the Individual Case Procedure. The candidate's educational profile is assessed, resulting in a recommendation as to how any deficiencies may be addressed.

Dual Accreditation: All Honours degrees accredited for CEng registration from intake year 1999 meet the requirements for standard route IEng registration and Sydney Accord recognition.

5.3 Chartered IT Professional application criteria

Applicants, who have worked in IT for less than eight to ten years but not less than five years, must hold relevant higher education qualifications to be considered for Chartered IT Professional (CITP) status. BCS accredited degrees provide the maximum educational contribution to CITP applications.

Applicants will need to demonstrate they have worked in a challenging, complex position, in which they have had significant influence and responsibility for three out of the last five years (SFIAplus Level 5). They are also required to demonstrate a significant degree of knowledge not just within their own specialism, but across IT as a whole. Therefore the second stage of application consists of a formal Breadth of Knowledge test covering a broad range of sectors and topics, which candidates are required to pass. Stage three comprises of a formal assessment of their specialist knowledge and competence via an interview during which the applicant makes a short presentation.

Appendix I

Further guidance on specific criteria

Legal, social, ethical and professional issues *(criteria 2.1.6, 6.2.5, 8.1.3, 9.1.3 and 10.1.3)*

Programmes seeking accreditation must cover and assess the ***legal, social, ethical and professional issues*** relating to computing. These matters should include the function of professional bodies, including the role of the BCS Codes of Conduct and Good Practice.

Students should understand the implications of the relevant statute laws which impact on the work of the information systems engineering professional. It should be noted that as new laws are introduced at national and European level and acts are updated, such changes should be reflected in the curriculum.

The programme should give students an awareness of external factors which may affect the work of the computer professional. These may vary according to the orientation of the programme and the likely destination of students, but examples could include:

- acceptance of responsibility for work which affects the public well-being
- computer security
- principles of management including change and project management
- industrial relations
- environmental and sustainability aspects
- economic and commercial factors
- globalisation
- accessibility
- Intellectual Property and related issues
- design, implementation and maintenance of trustworthy software

Students should not perceive legal, social, ethical and professional issues as peripheral to, or less significant than, technical skills detailed in the syllabus. Topics which are not assessed may be seen by students as unnecessary. BCS considers that adequate coverage of legal, social, ethical and professional issues is important in the assessment and examination of accredited programmes and accepts that the requirements may be met in many ways.

Awareness of professional standards, codes of conduct and relevant legislation must not be separated from the practice of designing and implementing systems. Whilst it is appropriate for some of these issues to be addressed in separate modules, it is essential that these topics are integrated into the programme and should be referred to in the project.

The relevant legal, social, ethical and professional issues should be specifically detailed in the syllabus, mentioned in directions to students on practical assignments and sandwich placements, and not left solely to the discretion of individual lecturers. Whilst legal, social, ethical and professional issues should pervade the programme, the central issues of codes of conduct and practice, legislation and ethical standards are important to all information systems engineering practitioners. Therefore they should be addressed within core areas of the programme rather than in options alone.

In gaining accreditation it is expected that all staff should demonstrate and maintain high professional standards in their own use and practice of information systems. Membership of a professional body would be one sign of such a commitment. The production and promulgation of codes of conduct for students and the displaying of notices relating to such things as copying software and virus protection are also signs of such a commitment. Encouragement of student membership is also regarded by BCS as a sign of a commitment to professional standards by the teaching unit.

The BCS Code of Conduct and Code of Good Practice are available on its website.

Trustworthy software

Trustworthy Software is defined as the enhancement of the overall software and systems culture, with the objective that software should be designed, implemented and maintained in a trustworthy manner. This specifically refers to the British Standards Institution PAS 754 Software trustworthiness.

Risk and safety *(criteria 2.2.3, 6.2.6)*

Risk is inherent in most information systems. Where appropriate, graduates should be exposed to the concepts of risk as they relate to (for example):

- Unauthorized (malicious or accidental) disclosure, modification, or destruction of information
- Unintentional errors and omissions
- IT disruptions due to natural or man-made disasters
- Failure to exercise due care and diligence in the implementation and operation of the IT system and how such risks can be managed.

The safe operation of IT systems beyond individual health and safety should also be addressed, for example the role of fault tolerance, high availability systems and testing regimes that include out-of-specification cases.

Cybersecurity *(criteria 2.1.6 and 2.1.9)*

For a given computer technology development or information system – such as an individual service, application, server, network device, laptop, smartphone or network or combinations thereof – students will be expected to show knowledge and understanding of the core concepts and principles within the following themes where this is relevant to the Programme Learning Outcomes under consideration:

1. **Information and risk**: models including confidentiality, integrity and availability (CIA); concepts such as probability, consequence, harm, risk identification, assessment and mitigation; and the relationship between information and system risk

2. **Threats and attacks:** threats, how they materialise, typical attacks and how those attacks exploit vulnerabilities

3. **Cybersecurity architecture and operations:** physical and process controls that can be implemented across an organisation to reduce information and systems risk, identify and mitigate vulnerability, and ensure organisational compliance

4. **Secure systems and products**: the concepts of design, defensive programming and testing and their application to build robust, resilient systems that are fit for purpose

5. **Cybersecurity management:** understanding the personal, organisational and legal/regulatory context in which information systems could be used, the risks of such use and the constraints (such as time, finance and people) that may affect how cybersecurity is implemented.

It is commonly recognised that information security concerns are most appropriately addressed as integral rather than as an add-on to the design of information systems. As a consequence, the teaching of security issues is ideally embedded across computing and IT-related subject areas.

Approaches using specific application, for example the specifying of requirements for CIA of personally identifiable information being stored and/or processed by a system or the use and analysis of threat data in the selection of security arrangements, are recommended.

Further resources on Cybersecurity principles and learning outcomes for computer science and IT-related degrees are available at http://cert.isc2.org/isc2-cphc-whitepaper/

Appendix II

Multiple site delivery, franchised study, validated study, study and work placements and distance learning

Introduction

There is a set of varying arrangements where students achieving an award of an HEI do so in ways that reach beyond the traditional residential delivery and assessment of a curriculum. These include:

Multiple site delivery – where a programme of study of an HEI is delivered and assessed independently at different campuses of the HEI.

Franchised study – where a programme of study of an HEI's designed and approved curriculum is delivered and potentially assessed by an organisation other than the awarding HEI. Such students may complete the study entirely at the franchisee organisation (total franchising) or transfer to the franchisor at some stage beyond the entry level of the curriculum (partial franchising).

Validated study – where the programme of study is designed and delivered by an organisation other than the awarding HEI but is validated and overseen by that HEI as one of its awards.

Study placements – where students undertake part of their studies at locations other than the awarding HEI. These might be in a different HEI or organisation within the UK or overseas.

Work placements – where students undertake some form of intercalated internship in support of their studies, which is assessed and features as a part of their achievement of the overall award: e.g. a sandwich degree.

Distance Learning – where students are supported in whole or in part in their learning and assessment remotely located from the delivering HEI. The method of delivery of the teaching and assessment may be by posted textual material or by electronic means. Programmes where delivery is delegated to another institution will normally be viewed as franchised programmes.

In each of the above arrangements, the processes of accreditation undertaken by BCS will be founded upon the basis that the study is suitable, well supported, and is undertaken within a sound framework of quality assurance and enhancement, thus ensuring that student achievement can be reliably assured. The detailed accreditation processes employed in any one instance will reflect this. Where any of these activities is outside the UK then permission will need to be sought from the local government and any indigenous professional computing society for such an accreditation visit to proceed.

Multiple site delivery

A statement on the HEI's organisation and the relationships between the various centres will be required.

The review of the programme and its set of intended learning outcomes will be undertaken once. Interest will focus upon the delivery and fulfilment of the programme at each centre. Matters of quality assurance and enhancement including resourcing, student support and achievement as positioned against the foregoing intended learning outcomes will be undertaken through a visit by a subset of the full Panel at each of the other centres. Documentation and related evidence in support of these interests will be required.

Any major variation of programme intended learning outcomes between centres will require a full separate visit to each centre.

Franchised programmes

In all cases the submission should include statements on:

- the motivation and the nature of the franchise
- the format and content of the certificates and transcripts

The review of partially franchised programmes will be similar to that for multiple site delivery as above. Particular emphasis will be placed upon the synergy of the quality assurance and enhancement arrangements across the two organisations involved. Documentation and related evidence in support of these interests will be required.

It should be noted that for students to be eligible for accreditation they must spend at least the final taught year (full time equivalent) of study of the accredited award at the awarding HEI.

The review of totally franchised programmes will require a full visit to the franchisee organisation. It is assumed that the approved programme and its intended learning outcomes will have been reviewed at the franchising centre. Interest will focus upon the delivery of the programme at the franchisee organisation in terms of quality assurance and

enhancement including resources, student support and achievement as positioned against the HEI's approved intended learning outcomes for the programme. Documentation and related evidence in support of these interests will be required.

Validated programmes

The review of validated programmes will require a full visit to the validated centre offering the curriculum and this will need to include representatives of the awarding HEI. A full set of documentation and supporting evidence will be required. Particular emphasis will be placed upon the synergy of the quality assurance and enhancement arrangements across the two organisations involved.

Study and work placements

Study and work placements that support the achievement of intended learning outcomes are of interest in the accreditation of programmes. BCS will not review these activities where they are supplementary to such achievement. Interest will focus upon the quality assurance and enhancement activities that underpin the validity of the study/work and assessment. Thus the preparation of students for such activity along with the equity of learning opportunities, supervision and assessed achievement will be of concern. Documentation and related evidence in support of these interests will be required.

Distance learning

It is acknowledged that there is a spectrum of activities that underpin distance learning programmes; from those that are supplementary to on-campus students through to complete off-site/remote teaching, learning and assessment. The Institute has an expectation that such supplementary activities and the corresponding student support will be employed in the delivery of most programmes. However, if an HEI is engaged in delivering a curriculum that relies upon the latter methods of student engagement and assessment, then it would be useful for the HEI to discuss the detail of their delivery and assessment mechanisms with the Education Team so that an agreed process of accreditation can be put in place. A copy of the contract with the remote campus will be required as part of the accreditation process.

A. Overview

The home institution is responsible for ensuring that distance learning programmes are designed, delivered and assessed so that the achievement of the intended learning outcomes can be assured. It is understood that distance learning programmes may be delivered to the student by a variety of media and that, in some cases, HEIs may use local partners to support the delivery of a distance learning programme.

In considering distance learning programmes BCS will pay particular attention to areas which are directly affected by the distance learning aspect, i.e. the methods of delivery, the provision of tutorial support, the extent and nature of practical activities (including group work), the supervision of projects, the methods of assessment, access to library and computing facilities, student involvement with programme monitoring and review, and the involvement of external examiners.

B. HEI submission

Full details of the programme content and structure will be required as specified in this document. The home institution should also supply information highlighting the differences in provision between programmes delivered directly at the host site and those delivered by distance learning, where appropriate, although it is recognised that some programmes may only be offered in distance mode.

Any programmes which are delivered via the distance learning method should complete an additional application form. This can be found in Appendix III, iii.

Appendix III.i

Type 1 – HEI application for BCS accreditation

Submission document
In order to reduce the amount of paper involved in a submission, BCS requires much of the documentation on USB/CD; preferably in HTML format. The submission document consists of: • one **Section A** for each department involved in the accreditation, submitted in hard copy with appropriate hyperlinks to files on USB/CD. • a **Section B** for each programme, or each set of programmes that form an integrated scheme, submitted in hard copy with appropriate hyperlinks to files on USB/CD. • A hyperlinked and indexed USB/CD containing all of the above. The preferred format is HTML with a detailed table of contents linked to the sections. If it is not possible to provide the information in HTML, the other acceptable formats are, in order of preference pdf, Word or rtf. Please include a table of contents referencing names of the files if the format is not HTML. Please ensure that all formats are readable on a range of platforms. Please visit the BCS website at www.bcs.org/accreditation for the current HEI Application Form (s) and other required templates. Copies of the submission document (USB/CD and hard copy) should be provided at least **eight weeks** before the visit. Hard copy documents should be **copied double-sided and bound** in slide, heat or comb binder format, and not presented loose in ring binders or box files. Please ensure that campus details are included in the submission. Please **number the pages** of the hard copy submission and any documents submitted in non-HTML format. Failure to number pages makes the Panel's task significantly more difficult. If you would like an accessible version of this form (or any of the templates referred to in this form), please contact the Education Team educ@hq.bcs.org.uk.

Section A: Overview	
HEI details	
Name and address of institution	
Web address	
Department(s) to be visited and department head(s)	
Contact name (for visit)	
Telephone number	
E-mail address	

Programmes presented for review						
For each programme, or each set of programmes that form an integrated scheme, you should include a **Section B**.			Please tick the relevant boxes for the accreditation sought and note that many programmes will only partially meet the requirement. Please refer to Table 1.5 of the guidelines.			
Programme title:	**Mode of study**	CITP	CITP FL	CEng/ IEng	CSci	Euro-Inf Bachelor/ Master
For Euro-Inf Label applications, EQANIE is able to reverse the VAT charge procedure where the VAT number is provided (optional).					VAT No	

Departmental information
In no more than two pages, give an overview of the department's particular strengths, ethos, and direction. This section might draw attention to recent changes, local innovations, outreach, or anything else of relevance that the accreditation exercise does not ask for explicitly.

A.1	**Quality assurance**	Refer to BCS Guidelines Section 2.1
A.1.1	Provide a hyperlink to a file on USB/CD containing the most recent **external institutional review** following the last BCS visit (e.g. from the QAA), and response. If none, please state. No hard copy required.	
A.1.2	Provide a hyperlink to a file on USB/CD containing the most recent **internal/periodic review** of the department(s) following the last BCS visit, and response. If none, please state. No hard copy required.	
A.1.3	Explain how the syllabus and teaching materials are kept up to date and how research and industry influence this process. As part of this, please provide brief details of: • the key research areas • links the department has with industry • any formal mechanisms for industrial input to the programmes	
A.1.4	Describe the role of the external examiner in the QA process and provide details of the follow up and feedback processes.	
A.1.5	Describe the mechanisms for student feedback.	
A.1.6	If relevant, describe the arrangements for programme franchising and the controls over areas such as transcripts.	
A.1.7	Describe how employability skills are developed within the students.	

A.2	Learning resources							
A.2.1	**Provide a brief description of the structure of the relevant departmental/faculty/school submitting programmes for accreditation**							
A.2.2	**Academic staff: numbers in post** ***Note:*** FTE to include all staff involved in the programmes under review							
		Number		FTE	Comments			
	Professors/HoD							
	SL / PL / Readers							
	Lecturers							
	Other staff with custody of modules							
	Other staff engaged in teaching support							
	Total FTEs							
	Student numbers							
		Number		FTE	Comments			
	Undergraduates (main degrees)							
	Undergraduates (service courses)							
	Taught postgraduates							
	Staff/student ratio (at date)							
	State how this ratio is determined.							
	Academic staff: membership of professional bodies							
	Number of staff CITP/MBCS/FBCS	CITP		MBCS		FBCS		
	Number of CEng/IEng/CSci	CEng		IEng		CSci		
	Membership of other professional bodies: *Please state which Institution(s) and number of staff members.*							
	Number of BCS student members (if known)							
A.2.3	**Academic staff: career details**							
	Provide a hyperlink to a file on USB/CD containing brief career details of department academic staff. Please indicate qualifications, academic experience, professional membership, industrial and commercial experience, research interests, and recent major publications. (two A4 pages maximum per person) No hard copy required.							

A.2.4	**Support staff (numbers of)**	
	Secretarial	
	Administrative	
	Hardware support	
	Software support	
	Other	
	Total	

A.2.5 Computing facilities

Provide details of the departmental facilities available for the students on the programmes under review.

State the student/computer ratio.

A.2.6 Software provision

Provide policy statement of the software provided to support the programmes.

A.2.7 Replacement policy

State the policy for updating and replacing hardware and software for both staff and students, and details of the annual funding available for each.

A.2.8 Personal Computers

Describe the facilities, if any, for supporting personal (non-institutional) machines

- in student procurement
- in OS and software installation and troubleshooting
- in providing access to academic (course related) software
- in providing access to administrative and infrastructural software (for example, VLEs)
- in the delivery of teaching

A.2.9 Library

Provide the following information:

- access hours in term time and vacation
- relevant journals available in print and on-line
- annual departmental spend on books, journals and conference proceedings
- mechanisms for managing books in high demand

A.2.10 Student support

Provide brief details of the pastoral and welfare support available to students.

A.2.11 Provide brief details of staff and student involvement in the activities of professional societies.

Section B: Programme issues
Programme title(s):

Note: if there is significant duplication between Section B for different programmes for review, please include cross-references as appropriate

B.1	Programme data	
B.1.1	Programme title	
B.1.2	Date programme first offered	
	Date of last revision	
B.1.3	Mode(s) of study and programme duration	
B.1.4	Student intake to programme for current academic year	
B.1.5	Names, positions and dates of appointments of external examiners	
B.1.6	Accreditation sought	
B.1.7	Accreditation period sought ***Note:*** include any backdating that you wish BCS to consider for current cohorts	
B.1.8	Programme also accredited by	
B.1.9	Responsible department	

B.2	Programme specifications, structures and requirements, levels, courses, credits and awards
B.2.1	For each programme listed in section A, provide a hard copy (QAA) **programme specification** in a separate appendix. Also provide a hyperlink to a file on USB/CD containing this information.
B.2.2	Provide a hyperlink to a file on USB/CD containing a **syllabus** for each of the modules, showing prerequisites and mode of assessment. No hard copy required.
B.2.3	Provide a hard copy table indicating which modules are mandatory and which are optional (including credit value), thereby showing commonality across all programmes. Also provide a hyperlink to a file on USB/CD containing this information. Please use template provided.
B.2.4	For each programme, provide a hard copy table mapping the core modules to the criteria for the accreditation sought. Also provide a hyperlink to a file on USB/CD containing this information. Please use template provided.

B.3	Additional programme arrangements	Refer to BCS Guidelines Appendix II
B.3.1	**Sandwich placements – *if applicable***	
	Provide details of the nature and extent of this component, the steps taken to integrate the placement with the programme, the supervisory arrangements and the assessment details	
B.3.2	**Franchise arrangements – *if applicable***	
	Indicate the Institution where franchised, and the proportion of the programme studied at that Institution and whether accreditation is being sought for the franchised programme.	
B.3.3	**Distance learning – *if applicable***	
	Provide details of the distance learning component including the quality assurance procedures, the supervisory arrangements and the assessment methods in place. Where distance learning is adopted, additional information must be provided as described in Appendix II and a supplementary application form should be completed. Please contact the Education Team for details.	

B.4	Legal, social, ethical and professional issues	Refer to BCS Guidelines Appendix I
B.4.1	Explicitly detail where legal, social, ethical and professional issues are **taught** in the core material of the programme and specifically identify where these areas are **assessed**. Where assessment is not included in modules which contribute to the final award, provide evidence of the assessment of these issues.	

B.5	Professional projects	Refer to BCS Guidelines Section 2.5
B.5.1	Provide a hyperlink to a file on USB/CD containing your **project guidance notes** to staff/students and project marking scheme. No hard copy required.	
B.5.2	Explain how projects are allocated, organised and supervised. If this is covered in the project guidance notes, please provide a reference here	
B.5.3	Indicate the approximate time students are expected to devote to the project. If this is covered in the project guidance notes, please provide a reference here.	
B.5.4	Explain how the project is assessed. If the project is team based indicate whether assessment is on an individual or team basis. If the latter, state how the individual contribution is assessed. If this is covered in the project guidance notes, please provide a reference here.	
B.5.5	Detail any formal mechanisms in place to ensure that the final project meets BCS requirements. If this is covered in the project guidance notes, please provide a reference here.	
B.5.6	Please supply **samples of final year project reports** for each programme. These should be sent with the documentation and offer a range of abilities including some bare passes. Include the individual marking sheets with each project and also details of the marking scheme. A **maximum** of 16 project reports (across all programmes) should be sent with the submission. Electronic format is preferred. Also provide a list of the degree programmes, project titles/author and final mark.	

B.6	Admission of students	
B.6.1	**Cohort support**	
	If this programme admits students with a wide range of evidenced ability levels and/or admits students directly into later years of the programme, give details of how these students are supported. Give details of the percentage of direct entry students.	
B.6.2	**Study at non-UK universities – if applicable**	Refer to BCS Guidelines Appendix II
	If students are permitted to study at non-UK universities during part of the programme please state: • % of students following this route • timing of the study in the context of their programme • permitted duration • assessment arrangements by non-UK universities • arrangements for monitoring student progress and the impact of such arrangements on the coverage of core material	
B.6.3	**Published entry requirements**	
	Provide details of published entry requirements.	

B.7	Regulation of assessment
B.7.1	Detail the conditions governing progression from one year to the next within the programme.
B.7.2	Detail the conditions governing the final award.
B.7.3	Indicate how much of the programme as a whole is assessed by: • written examinations • end of unit tests • programme assignments and practical work • major project • other (e.g. sandwich placements)
B.7.4	State whether a pass in a major final-year project is required to achieve the award and whether the project can be passed with compensation.
B.7.5	Provide a hyperlink to a file on USB/CD containing **examination papers** for each unit that contributes to the award. No hard copy required.
B.7.6	Provide a hyperlink to a file on USB/CD containing copies of **current practical assignments** for units that contribute to the award. No hard copy required.
B.7.7	Provide a hyperlink to a file on USB/CD containing copies of recent 2-3 years of **external examiners' reports and the responses** to them. No hard copy required.

B.8	Graduation	
B.8.1	**Supply the following data, showing progression from year of entry to graduation, for the two most recent cohorts.**	
Entry routes	**Year:**	**Year:**
Initial entry		
Transfer into programme		
Fail during programme		
Withdrawal during programme		
Other – please specify		
Total sitting finals		
Awards	**Year:**	**Year:**
Honours degree		
I		
IIi		
IIii		
III		
Ordinary/pass (exit award)		
DipHE (exit award)		
Fail		
Other – please specify		
MSc		
MSc		
PgD		
PgC		
Fail		
Other – please specify		
% employed in related profession 6 months after graduating (if known)		

Appendix III.ii

Type 2 – HEI application for BCS accreditation

Submission document
In order to reduce the amount of paper involved in a submission, BCS requires much of the documentation on USB/CD, preferably in HTML format. The submission document consists of: • one **Section A** for each department involved in the accreditation, submitted in hard copy with appropriate hyperlinks to files on USB/CD. • a **Section B** for each programme, or each set of programmes that form an integrated scheme, submitted in hard copy with appropriate hyperlinks to files on USB/CD. • A hyperlinked and indexed USB/CD containing all of the above. The preferred format is HTML with a detailed table of contents linked to the sections. If it is not possible to provide the information in HTML, the other acceptable formats are, in order of preference pdf, Word or rtf. Please include a table of contents referencing names of the files if the format is not HTML. Please ensure that all formats are readable on a range of platforms. Please visit the BCS website at www.bcs.org/accreditation for the current HEI Application Form (s) and other required templates. Copies of the submission document (USB/CD and hard copy) should be provided at least **eight weeks** before the visit. Hard copy documents should be **copied double-sided and bound** in slide, heat or comb binder format, and not presented loose in ring binders or box files. Please ensure that campus details are included in the submission. Please **number the pages** of the hard copy submission and any documents submitted in non-HTML format. Failure to number pages makes the Panel's task significantly more difficult. If you would like an accessible version of this form (or any of the templates referred to in this form), please contact the Education Team educ@hq.bcs.org.uk.

Section A: Overview	
HEI details	
Name and address of institution	
Web address	
Department(s) to be visited and department head(s)	
Contact name (for visit)	
Telephone number	
E-mail address	

Programmes presented for review						
For each programme, or each set of programmes that form an integrated scheme, you should include a **Section B**.		Please tick the relevant boxes for the accreditation sought and note that many programmes will only partially meet the requirement. Please refer to Table 1.5 of the guidelines.				
Programme title:	**Mode of study**	CITP	CITP FL	CEng/ IEng	CSci	Euro-Inf Bachelor/ Master
For Euro-Inf Label applications, EQANIE is able to reverse the VAT charge procedure where the VAT number is provided.					VAT No	

A.1 Overview of changes since last visit

For further guidance on this section, please contact the BCS Education Team

A.1.1 Briefly explain the substantive changes in the departmental structures and resources pertinent to the BCS since the last visit, and known plans for development (1 side A4 max.)

As part of this section, please provide a reflective overview of the substantive changes in areas including staffing and organisational structures, learning and teaching strategy, research strategy, industrial links, and physical and technical resources. You should highlight any other changes that the panel should be aware of and supply additional supporting documents, as necessary. Please indicate how these changes ensure that BCS Guidelines and requirements are being met.

A.1.2 Briefly explain the substantive changes in the courses and related activities of the department pertinent to the BCS since the last visit, and known plans for development (1 side A4 max.)

As part of this section, please provide a reflective overview of the substantive changes in areas including QA processes, programmes and curriculum design, student projects, and franchise arrangements. You should highlight other changes that the Panel should be aware of and supply additional supporting documents, as necessary. Please indicate how these changes ensure that BCS Guidelines and requirements are being met.

A.1.3 Briefly explain any specific changes made in response to points highlighted in the previous report, including items judged as not being "above threshold", or suggestions for change that a future Panel would wish to address. (1 side A4 max.)

A.2	Quality assurance	Refer to BCS Guidelines Section 2.1
A.2.1	Provide a hyperlink to a file on USB/CD containing the most recent **external institutional review** following the last BCS visit (e.g. from the QAA), and response. If none, please state. No hard copy required.	
A.2.2	Provide a hyperlink to a file on USB/CD containing the most recent **internal review** of the department(s) following the last BCS visit, and response. If none, please state. No hard copy required.	
A.2.3	Provide a hyperlink to a file on USB/CD containing copies of the recent 2-3 years of **external examiners' reports and the responses** to them for each of the degree programmes put forward.	

A.2.4 Academic Staff: Numbers in post

Note: FTE to include all staff involved in the programmes under review

	Number	FTE	Comments
Professors/HoD			
SL / PL / Readers			
Lecturers			
Other staff with custody of modules			
Other staff engaged in teaching support			
Total FTEs			
Students numbers			
	Number	FTE	Comments
Undergraduates (main degrees)			
Undergraduates (service courses)			
Taught postgraduates			
Staff/student ratio (at date)			
State how this ratio is determined.			

Section B: Programme issues

Programme title(s):

Note: if there is significant duplication between Section B for different programmes for review, please include cross-references as appropriate

B.1	Programme data	
B.1.1	Programme title	
B.1.2	Date programme first offered	
	Date of last revision	
B.1.3	Mode(s) of study and programme duration	
B.1.4	Student intake to programme for current academic year	
B.1.5	Names, positions and dates of appointments of external examiners	
B.1.6	Accreditation sought	
B.1.7	Accreditation period sought ***Note***: include any backdating that you wish BCS to consider for current cohorts	
B.1.8	Programme also accredited by	
B.1.9	Responsible department	

B.2	Programme structures and assessment requirements
B.2.1	For each programme listed in section A, provide a hard copy (QAA) **programme specification** in a separate appendix. Also provide a hyperlink to a file on USB/CD containing this information.
B.2.2	Provide a hyperlink to a file on USB/CD containing a **syllabus** for each of the modules, showing prerequisites and mode of assessment. No hard copy required.
B.2.3	Provide a hard copy table indicating which modules are mandatory and which are optional (including credit value), thereby showing commonality across all programmes. Also provide a hyperlink to a file on USB/CD containing this information. Please use template provided.
B.2.4	For each programme, provide a hard copy table mapping the core modules to the criteria for the accreditation sought. Also provide a hyperlink to a file on USB/CD containing this information. Please use template provided.
B.2.5	Please supply **examination papers** for each unit that contributes to the award. No hard copy required.
B.2.6	Please supply copies of **current practical assignments** for units that contribute to the award. No hard copy required.
B.2.7	**Study at non-UK universities – if applicable** *Refer to BCS Guidelines Appendix II*
If students are permitted to study at non-UK universities during part of the programme please state: • % of students following this route • timing of the study in the context of their programme • permitted duration • assessment arrangements by non-UK universities • arrangements for monitoring student progress and the impact of such arrangements on the coverage of core material	
B.2.8	**Franchise arrangements – if applicable** Refer to BCS Guidelines Appendix II
	Indicate the Institution where franchised, and the proportion of the programme studied at that Institution.
B.2.9	**Distance learning – if applicable** Refer to BCS Guidelines Appendix II
	Provide details of the distance learning component including the quality assurance procedures, the supervisory arrangements and the assessment methods in place. Where distance learning is adopted, additional information must be provided as described in Appendix II. Also provide the required details by completing the form in Appendix III iii.

B.3	Evaluation of claim for accreditation
B.3.1	Explicitly detail where legal, social, ethical and professional issues are **taught** in the core material of the programme and specifically identify where these areas are **assessed**. Where assessment is not included in modules which contribute to the final award, provide evidence of the assessment of these issues *Refer to BCS Guidelines Appendix I*
B.3.2	**For programmes requesting CEng accreditation,** explain how the programme(s) meet the supplementary BCS requirements for CEng requirements, explicitly stating where they are **taught and assessed**. *Refer to BCS Guidelines Section 2.2.3 & 2.4.3*
B.3.3	**For programmes requesting CSci accreditation,** explain how the programme(s) meet the supplementary BCS requirements for CSci requirements, explicitly stating where they are **taught and assessed** *Refer to BCS Guidelines Section 2.2.3 & 2.4.4*
B.3.4	For programmes requesting CITP accreditation, explain how the programme(s) meet the supplementary BCS requirements for CITP requirements, explicitly stating where they are **taught and assessed** *Refer to BCS Guidelines Section 2.2.2 & 2.4.2*

B.4	**Professional projects**	Refer to BCS Guidelines Section 2.5
B.4.1	Provide a hyperlink to a file on USB/CD containing your **project guidance notes** to staff/students and project marking scheme. No hard copy required.	
B.4.2	Please confirm that:	
The time students are expected to devote to the project is at least 300 hours		
The project meets the needs of individual nature of projects as specified in the Guidelines		
The project meets the type of project required as specified in the Guidelines		
A pass in a major final-year project is required to achieve the award		
The project is passed without compensation		
B.4.3	Please supply a **sample of final year project reports** representing the full range of programmes and student ability. These should be sent with the documentation. Include the individual marking sheets with each project and also details of the marking scheme. **Electronic format is preferred. Also provide a list of the degree programmes, project titles/author and final mark.**	

Appendix III.iii

Section C – Distance learning/online provision

C.1 General Information		
C.1.1	Programme Title	
C.1.2	Date the distance learning provision commenced	
C.1.3	The location(s) where the programme is delivered, if targeted at specific geographical locations	
C.1.4	The number of students currently studying the programme and where they are studying	
C.1.5	Provide the contract(s) relating to the agreement between the off-site provider and the home institution	

C.2	Support Structure
C.2.1	Provide details of the procedure for approving and reviewing any local support centre employed in delivering the programme. As part of this, describe the: • quality control • assurance • enhancement systems which cover the regular monitoring and review of the performances of local agents, tutors and those conducting teaching at a distance.
C.2.2	Provide details of the learning resources and the support and guidance made available directly to students from the home institution; any assumed or required to be in place at the location of the student; and any to be obtained by the student. Identify the support provided on an individual basis and on the basis of a local or networked group.
C.2.3	Describe the lines of communication to be employed. The Institute may wish to see evidence of this interchange.
C.2.4	Provide details of the procedure for monitoring data on student progress, and evidence that students are provided with regular feedback on their performance in relation to the stated learning outcomes of their programme.
C.2.5	Detail the mechanism for appropriate and realistic student representation.

C.3	Staff
C.3.1	Provide brief details of the quality, level and number of staff involved with the delivery of these programmes. Where programmes are supported by staff at overseas HEIs, the qualifications and experience of the staff involved would need to be equivalent to staff with similar responsibilities on the home institution's programmes.

C.4	Study Materials
	Provide Information to show that:
C.4.1	Materials supplied are comprehensive and of good quality.
C.4.2	Quality assurance processes are in place to assure the quality of the materials, including adequate field testing.
C.4.3	Students have access to current research in the field.
C.4.4	Students have a familiarity with, and access to, a range of material beyond standard programme texts.
C.4.5	Where appropriate, access to the Internet is available.

C.5	Computing Resources
C.5.1	Provide information to show that the computing resources are sufficient to support student numbers, and that appropriate software is available.
C.5.2	Where students provide their own equipment, describe the measures in place to ensure that these students have appropriate systems available to them.

C.6	Assessment
C.6.1	Detail the quality assurance procedures in place to ensure that assessment in the distance learning programme is at the same level as any equivalent programme delivered by the home institution. If assessment differs from that provided at the home institution, this would need to be justified and assurance provided that assessment is at the same standard and is unbiased in favour of either group of students.
C.6.2	Provide details of the security/monitoring arrangements for any locally administered assessment, including coursework.
C.6.3	Provide assurance that appropriate processes are in place to guard against plagiarism.
C.6.4	Provide details of external examiner arrangements, including access to the assessed coursework and examination scripts of students.

C.7	Programme-Related Issues
	Provide details of the following:
C.7.1	Evidence that coursework is adequate and that there are sufficient resources to support it, for example, access to appropriate software and to library facilities.
C.7.2	Evidence of adequate supervision of project work.
C.7.3	Evidence that the application of a professional approach is demonstrated in practical work.
C.7.4	Identification of minimum academic prerequisites for the programme relevant to the country of delivery.
C.7.5	Information on the language of instruction and assessment (if delivered outside the UK).

Appendix IV

BCS accreditation criteria

Quality assurance and enhancement	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 1 **Note:** Individual programmes not meeting an aspect will be identified explicitly, with that aspect being rated "at threshold". Should the number of programmes so identified be significant then that aspect will be rated at "below threshold" overall. **1.1** **Programmes are influenced** by research, industry and market requirements **1.2** **Programmes are appropriately titled and specified** using intended learning outcomes which are accessible to all stakeholders **1.3** **Modules are mapped** to the BCS criteria for the specific accreditation sought **1.4** **Programmes are delivered and students supported**, employing appropriate resources in terms of staff, learning materials, equipment and accommodation **1.5** **Support of student engagement and development** takes cognisance of individual ability and evidenced prior achievement **1.6** **HEI regulations governing awards**, as gauged through student achievement, properly underpin the fulfilment of the requirements of the accreditation sought **1.7** **Programme assessment**, in terms of subject content and level, is appropriate and is overseen through relevant QAA processes which engage with external examiners **1.8** **Quality assurance and enhancement** processes are effective in supporting the delivery and evolution of programmes **1.9** **Any off-site learning and assessment activities of a programme** are handled appropriately including • study and work placements • franchised study • validated awards studied at another location	Above	At	Below		

Programme based issues

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 2 **Core requirements for accreditation of honours programmes (and generalist masters programmes).** **2.0 The programme contains sufficient computing content**, as set out in table 1.5 of the Guidelines **Graduates have been assessed on the following abilities:** **Computing-related cognitive abilities** **2.1.1 Knowledge and understanding of essential facts,** concepts, principles and theories relating to computing and computer applications as appropriate to the programme of study **2.1.2 The use of such knowledge and understanding** in the modelling and design of computer-based systems for the purposes of comprehension, communication, prediction and the understanding of trade-offs **2.1.3 Recognise and analyse criteria** and specifications appropriate to specific problems and plan strategies for their solution **2.1.4 Analyse the extent** to which a computer based-system meets the criteria defined for its current use and future development **2.1.5 Deploy appropriate theory,** practices and tools for the specification, design, implementation and evaluation of computer-based systems **2.1.6 Recognise the legal, social, ethical and professional issues** involved in the exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices **2.1.7 Knowledge and understanding of the commercial and economic context** of the development, use and maintenance of information systems **2.1.8 Knowledge and understanding of the management techniques** which may be used to achieve objectives within a computing context **2.1.9 Knowledge and understanding of information security** issues in relation to the design, development and the use of information systems	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Computing-related practical abilities **2.2.1 Specify, design or construct** computer-based systems **2.2.2 Evaluate systems** in terms of general quality attributes and possible trade-offs presented within the given problem **2.2.3 Recognise any risks** or safety aspects that may be involved in the operation of computing and information systems within a given context **2.2.4 Deploy effectively the tools** used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems **Transferable skills** **2.3.1 An ability to work as a member of a development team** recognising the different roles within a team and different ways of organising teams **2.3.2 Development of transferable skills** that will be of value in a wide range of situations; these include: problem solving, working with others, effective information management and information retrieval skills, numeracy in both understanding and presenting cases involving a quantitative dimension, communication skills in electronic as well as written and oral form to a range of audiences and planning self-learning and improving performance as the foundation for on-going professional development	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 3 **Additional requirements for CITP** Graduates from all accredited CITP undergraduate and generalist masters programmes should have been assessed on the following abilities: **Computing-related cognitive abilities** **3.1.1 Knowledge and understanding of the methods and issues** involved in deploying systems to meet business goals **3.1.2 Knowledge and understanding of methods, techniques and tools for** information modelling, management and security **3.1.3 Knowledge and understanding of systems architecture** and related technologies for developing information systems **3.1.4 Knowledge and understanding of mathematical and/or statistical principles** appropriate to the nature of the programme **Computing-related practical abilities** **3.2.1 Use appropriate theoretical and practical processes** to specify and deploy, verify and maintain information systems, including working with technical uncertainty **3.2.2 Define a problem,** research its background, understand the social context, identify constraints, understand customer and user needs, identify and manage cost drivers, ensure fitness for purpose and manage the design process and evaluate outcomes **3.2.3 Apply the principles, methods and tools of systems design** to develop information systems that meet business needs	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 4 **Additional requirements for CEng/CSci** Graduates from all accredited CEng and/or CSci undergraduate programmes should have been assessed on the following abilities: **Computing-related cognitive abilities** **4.1.1 Knowledge and/or understanding of the appropriate use of scientific and engineering principles** in the creation, use , support and decommissioning of information systems for the solution of practical problems, founded on appropriate scientific and technological disciplines **4.1.2 Knowledge and understanding of the mathematical and statistical principles necessary** to underpin their programme of study and the ability to apply mathematical and statistical methods, tools and notations proficiently in the analysis and solution to problems **4.1.3 Knowledge and understanding of the principles of computational modelling** used for the comprehension of scientific and engineering phenomena **Computing-related practical abilities** **4.2.1 Use appropriate theoretical and practical processes** to specify, design, implement, verify and maintain computer-based systems, including working with technical uncertainty **4.2.2 Define a problem,** research its background, understand the social context, identify constraints, understand customer and user needs, identify and manage cost drivers, ensure fitness for purpose and manage the design process and evaluate outcomes **4.2.3 Apply the principles** of appropriate supporting engineering and scientific disciplines	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 5 **Supplementary requirements at integrated masters level** **5.1 Graduates should have been assessed on their demonstration of the following criteria,** commonly met by a piece of team-based major (30 credit) project work at level 6 or above: • **Their ability in applying practical and analytical skills** present in the programme as a whole • **Innovation and/or creativity** • **Synthesis of information, ideas and practices** to provide a quality solution together with an evaluation of that solution • **Awareness of wider customer contexts** and the identification of problems that such contexts might deliver • **The ability to work co-operatively (for example, as a team)** to deliver a significant piece of work • **Critical self evaluation of the process**	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 6 **Requirements for IEng** Graduates from all accredited IEng programmes should have been assessed on the following abilities: **Computing-related cognitive abilities** **6.1.1 Knowledge and understanding of** essential facts, concepts, principles and theories relating to computing and computer applications as appropriate to the programme of study **6.1.2 Knowledge of the scientific principles** underpinning relevant current technologies and their evolution **6.1.3 Knowledge of the mathematics and statistics necessary** to support the application of key engineering principles **6.1.4 Understanding the principles** of managing computing processes **6.1.5 Knowledge of the commercial and economic** context of the development, use and maintenance of computer-based systems **6.1.6 Knowledge of the management techniques** which may be used to achieve objectives within a computing context **Computing-related practical abilities** **6.2.1 Deploy appropriate theory,** practices and tools for the specification, design and implementation of computer-based systems according to customer & user needs and use innovation and creativity in a practical and social context **6.2.2 Evaluate systems** in terms of general quality attributes and possible trade-offs presented within the given problem **6.2.3 Recognise and analyse** criteria and specifications appropriate to specific problems and plan strategies for their solution **6.2.4 Model and analyse the extent** to which a computer-based system meets the criteria defined for its current use and future development **6.2.5 Recognise the legal, social, ethical and professional issues** involved in the exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices **6.2.6 Recognise any risks or safety aspects** that may be involved in the operation of computing and information systems within a given context **6.2.7 Deploy effectively the tools** used for the construction and documentation of computer applications and to use and apply information from technical literature	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 7 **Core requirements for accreditation of specialist masters programmes** **Transferable skills** **7.1.1 Carry out a critical review** of the literature, current developments and available software as well as the associated software processes **7.1.2 Support the development** of the self-directed learner who can set goals and select appropriate knowledge, skills, etc. as well as supporting tools for a particular purpose **7.1.3 Recognise and be able to respond** in an appropriate way to opportunities for innovation **7.1.4 Participate effectively** in the peer review process **7.1.5 Undertake risk management** associated with a range of activities **7.1.6 Use appropriate processes** to specify, design, implement, verify and maintain computer-based systems, including working with technical uncertainty **7.1.7 Investigate and define a problem,** identify constraints, understand customer and user needs, identify and manage cost drivers, ensure fitness for purpose and manage the design process and evaluate outcomes **7.1.8 Apply the principles** of appropriate supporting disciplines **7.1.9 An ability to work as a member of a development team** recognising the different roles within a team and different ways of organising teams	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 8 **Masters level requirements for CITP Further Learning** **8.0 The programme contains sufficient computing content,** as set out in table 1.5 of the Guidelines **Graduates should have been assessed on the following abilities:** **Computing-related cognitive abilities** **8.1.1 Demonstrate a systematic understanding** of the knowledge of the domain of their programme of study, with depth being achieved in particular areas. This should include the foundations of the discipline and/or issues at the forefront of professional practice in the discipline; it should also include an understanding of the role of these in contributing to the effective design, implementation and usability of relevant computer-based systems **8.1.2 Demonstrate a comprehensive understanding** of the essential principles and practices of the domain of the programme of study including current standards, processes, principles of quality and the most appropriate software support; the reasons for their relevance to the discipline and / or professional practice in the discipline and an ability to apply these **8.1.3 Understand and be able to participate** within the legal, social, ethical and professional framework within which they would have to operate as professionals in their area of study **Computing-related practical abilities** **8.2.1 Consistently produce work which applies** and is informed by research at the forefront of the developments in the domain of the programme of study; this should demonstrate critical evaluation of aspects of the domain **8.2.2 Demonstrate the ability to apply** the principles and practices of the discipline in tackling a significant technical problem; the solution should demonstrate a sound justification for the approach adopted as well as a self-critical evaluation of effectiveness but also a sense of vision about the direction of developments in aspects of the discipline	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 9 **Masters level additional requirements for CEng** **Computing-related cognitive abilities** **9.1.1 Systematic understanding of knowledge** and a critical awareness of current problems and/or new insights in the development and implementation of systems, much of which is at, or informed by, the forefront of their field of study **9.1.2 Comprehensive understanding** of the state of the art techniques and methodologies for developing systems **9.1.3 Understand and be able to participate** within the legal, social, ethical and professional framework as professionals in systems, software or information engineering **Computing-related practical abilities** **9.2.1 Develop and apply new technologies** **9.2.2 Show originality and innovation** in the application of knowledge and techniques for developing systems **9.2.3 Make general evaluation of commercial risk** through some understanding of the basis of such risks	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 10 **Masters level additional requirements for CSci** **Computing-related cognitive abilities** **10.1.1 Systematic understanding of knowledge,** and a critical awareness of current problems and/or new insights in the area of computing science research, much of which is at, or informed by, the forefront of their field of study **10.1.2 Comprehensive understanding** of the scientific techniques applicable to their own research or advanced scholarship **10.1.3 Understand and be able to participate** within the legal, social, ethical and professional framework in computing science **Computing-related practical abilities** **10.2.1 Show a critical awareness** of current research issues, problems and/or insights **10.2.2 Show an ability to apply** appropriate quantitative and qualitative research methods and tools for creating and interpreting knowledge in the field **10.2.3 Make general evaluation of scientific risk** through some understanding of the basis of such risks	Above	At	Below		

Programme title	Threshold			Commendable / shortcomings / general comments	Additional comments during visit
Section 11 **Project requirements** **11.1.1** **Students must be provided with** written guidance on all aspects of the project, including selection, conduct, supervision, milestones, format of the report and the criteria for assessment **11.1.2** **The project report** must meet the requirements set out in section 2.5 of the Guidelines **11.1.3** The individual project within an **undergraduate honours** or **integrated masters** degree should be a piece of work of at least 30 credit points at level 6 The individual project within an **ordinary or foundation degree** for IEng should be a piece of work of at least 20 credit points level 5 or above The individual project within a **specialist masters** degree should be a piece of work of at least 60 credit points at level 7 The individual project within a **generalist masters** programme should be a piece of work of at least 60 credit points at level 6 or above **11.1.4** **All projects should reflect** the title and the aims and learning outcomes which characterise the programme as set out in the programme specification **11.1.5** **A project undertaken at masters level** should reflect the ethos of advanced study and scholarship appropriate to a masters degree **11.1.6** **The project must be passed without compensation** **11.1.7** **In the event of this major activity being undertaken as a group enterprise,** there is a requirement that the assessment is such that the individual contribution of each student is measured against the learning outcomes	Above	At	Below		

Panel recommendations

The final Panel recommendations will be achieved by consensus and decided during the private BCS Panel meeting at the end of the accreditation visit.

A Panel would normally expect to see every aspect *at* or *above threshold* in all sections in order to gain accreditation.

- **Maximum accreditation period of 5 years:** All sections of the Accreditation Criteria must score an overall section score of 'At Threshold' to be recommended for accreditation for the full five years
- **Reduced period of accreditation:** A reduced period of accreditation (see section 4.1 of the Guidelines) will be recommended if any of the sections fail to meet the 'At Threshold' score. Any reduced period recommendation should indicate whether the Panel recommend a follow-up visit or a documentary submission
- **Programme conditions:** A 'below threshold' score can be negated by imposing a condition
- **Action Plan:** This is recommended when a Panel believes that areas of concern can be satisfactorily addressed prior to the report being considered by the Academic Accreditation Committee. The Panel should indicate the recommended outcome if the response is satisfactory
- **90 Day Response:** This is recommended when a Panel believes that areas of concern can be satisfactorily addressed within the 90 day time period. The Panel should indicate the recommended outcome if the response is satisfactory

The Chair of the Panel will complete a Good Practice proforma where appropriate.

The accreditation which can be achieved will be one of the following:

For undergraduate single honours degrees:

- CITP
- CEng (Partial Fulfilment)
- CSci (Partial Fulfilment)
- CEng and CSci (Partial Fulfilment)
- CITP and CEng (Partial Fulfilment)
- CITP and CSci (Partial Fulfilment)
- CITP and CEng and CSci (Partial Fulfilment)

For integrated masters degrees:

- CITP
- CITP and CITP Further Learning
- Full CEng
- Full CSci
- Full CEng and Full CSci
- CITP and CITP Further Learning and Full CEng
- CITP and CITP Further Learning and Full CSci
- CITP and CITP Further Learning and Full CEng and Full CSci

For undergraduate joint honours degrees:

- CITP (Partial Fulfilment)

For undergraduate ordinary degrees,:

- IEng

For HNDs and foundation degrees:

- IEng (Partial Fulfilment)

For specialist masters degrees:

- CITP Further Learning
- CEng (Partial Fulfilment)
- CSci (Partial Fulfilment)
- CEng and CSci (Partial Fulfilment)
- CITP Further Learning and CEng (Partial Fulfilment)
- CITP Further Learning and CSci (Partial Fulfilment)
- CITP Further Learning and CEng and CSci (Partial Fulfilment)

For generalist masters degrees:

- CITP (Partial Fulfilment)

Appendix V: Appeals procedure

Request for a review of a BCS Academic Accreditation Committee decision

1 Introduction

This document outlines the grounds and procedures for handling appeals from academic institutions that have been the subject of an accreditation assessment. The academic institution, represented by an authorised representative, is entitled to appeal for a review of the decisions contained in the final approved accreditation report or letter.

2. Grounds for an appeal

2.1 Evidence of administrative, procedural or other irregularity in the conduct of the accreditation visit.

2.2 Evidence of administrative, procedural or other irregularity in the conduct of the Board or Committee Meeting responsible for reaching an accreditation decision.

2.3 Evidence of new information available which could influence the accreditation decision, and which was not and could not have been available at the time of the visit.

3. Procedure for lodging an appeal

3.1 Written notice of intent to lodge an appeal should be sent to the BCS Registrar within 30 days of receipt of the final approved report and accreditation decisions.

3.2 A detailed written submission stating the grounds for seeking a review, together with a fee of £500, should be submitted to the BCS Registrar within 90 days of receipt of the final approved report and accreditation decisions. This fee will be returned if the appeal is successful, and may otherwise be returned at the discretion of the appeal panel.

3.3 Appeals submitted outside the timescales specified above will normally be ruled invalid.

4. Preparation for the appeal panel meeting

4.1 Receipt of the appeal submission will be acknowledged.

4.2 If the grounds for the appeal appear to fall within the criteria outlined in section 2, the BCS Registrar will convene a meeting of the appeal panel.

4.3 An appeal can be withdrawn at any stage. The fee (as detailed in section 3.2) may be returned at the discretion of the appeal panel.

5. Appeal panel membership

5.1 The membership of the appeal panel is as follows:

- four Corporate Institution Members, knowledgeable about the accreditation process, with one member nominated to act as Chair.
- an external representative from the academic community, e.g. a member of EPC (Engineering Professors' Council) or CPHC (Council of Professors and Heads of Computing).
- the BCS Registrar will act as Secretary to the appeal panel, but is not eligible to vote and does not count towards the quorum.

5.2 Members of the appeal panel must not have been involved in the original accreditation decision nor have any involvement with the appellant academic institution.

5.3 The appellant will be notified of the composition of the appeal panel. Any objection to the composition of the panel should be supported in writing.

5.4 The quorum shall be three appeal panel members, excluding the secretariat officer, and should normally include the external representative from the academic community, whose written comments could be considered in his/her absence.

5.5 The Chair of the appeal panel will have the casting vote.

6. Additional representation at the appeal panel meeting

6.1 Two representatives from the appellant academic institution will be invited to attend the meeting.

6.2 The Academic Accreditation Committee (AAC) will normally be represented by the Committee Chair (or nominee) and the Chair of the visit team.

7. Written evidence

7.1 Papers for the meeting of the appeal panel will be made available only to panel members, the BCS Registrar, the Chair of the Academic Accreditation Committee, the Chair of the accreditation visit team, and to the appellant.

The Papers will include:

- the Guidelines document on course accreditation
- the appellant's letter of appeal together with any supporting documentation
- the original request for accreditation
- the visit report and decision letter
- additional information supplied by the Chair of the Academic Accreditation Committee concerning the original decision of the Academic Accreditation Committee

7.2 Further evidence tabled at the meeting will not normally be considered.

8. Procedure for the appeal panel meeting

8.1 The appeal panel procedure will be as follows:

- private discussion by the appeal panel and consideration of the written evidence
- oral evidence from the appellant
- oral evidence from the Chair of the Academic Accreditation Committee
- joint question and answer session
- private discussion by the appeal panel on the evidence provided

8.2 All decisions of the appeal panel shall be by majority vote of the members.

9. Possible outcomes of the appeal

There shall be two possible outcomes from the appeal:

9.1 **Either**: the original accreditation visit decision is upheld and the appeal is dismissed.

9.2 **Or**: the appellant's appeal is upheld, in which case the reasons are advised to the Academic Accreditation Committee which will then reconsider its original decision.

Where the appeal is upheld, the Academic Accreditation Committee will establish the next course of action. This will result in either the endorsement or revision of the original decision. Further information may be requested and reconsidered. AAC will then:

Either: reaffirm its original decision and the case goes before the BCS Academy of Computing for decision **Or**: change its decision in favour of the appellant, and will invite the BCS Academy of Computing to note the outcome. The Academic Accreditation Committee will carefully document and enunciate its decision processes.

9.3 Once an upheld appeal has been considered by the Academic Accreditation Committee, the BCS Academy of Computing will need to assure itself that the issues identified by the appeal panel have been satisfactorily addressed.

In the unlikely event of an impasse between the BCS Academy of Computing and the Academic Accreditation Committee, the BCS Academy of Computing retains the authority to make the final decision.

9.4 Once the final decision has been made the BCS Registrar will notify the appellant. If the decision is to uphold the appeal an amended accreditation decision letter will be issued.

9.5 There is no further right of appeal against the decision of the appeal panel.

10. Action following appeal

10.1 The Registrar will produce a draft report.

10.2 The draft report will be submitted to the appeal panel for comment and correction.

10.3 The report is submitted to the AAC for consideration.

10.4 No action in terms of the appeal panel recommendation will be considered until the AAC has discussed the report.

10.5 Following consideration by the AAC, the report will be sent to the appellant.

11. Confidentiality of proceedings

It is a requirement that all those involved in the appeals process, including the Academic Accreditation Committee, and where necessary the BCS Academy of Computing, treat all the information as confidential and ensure that no formal announcement is made until the Academic Accreditation Committee has considered the report.

Note:

This booklet is intended to provide guidance to those who are considering whether to submit courses for accreditation by BCS. Please read the Guidelines carefully to ensure that any courses to be submitted are likely to meet the criteria. You can obtain advice from: The Education Team, BCS, The Chartered Institute for IT, First Floor, Block D, North Star House, North Star Avenue, Swindon, SN2 1FA, United Kingdom

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