



BBSI Certificate Course in Science, Technology, Computers & IT

The BBSI Certificate Course in Science, Technology, Computers & IT is aimed at young professionals and students who are seeking to prepare themselves for a career or further study in technical and IT fields, and who require proficiency in technical English. The course can be studied for periods of between 4 and 12 weeks, and is carefully designed to enable students at an Intermediate level in English or above to gain English, technical and business qualifications. The course is conducted around a busy social and activity programme, and the maximum class size is 12, which can be extended to 15 during peak periods.

Designed for those students with a sound Intermediate level in English or above, this course provides a general overview in science and technology and enables participants to develop their skills and knowledge across a broader spectrum in the combined fields of science, technology and IT.

Additional English and Business English Qualifications. Students will develop competent technical English and professional communication skills. Moreover, in the supplementary English-language elements of the course, students have the option to study for one of 3 different University of Cambridge ESOL[‡] examinations: the First Certificate in English (FCE), the Certificate in Advanced English (CAE), or the Business English Certificate (BEC). Alternatively, participants can opt to join our ongoing weekly English Language Workshop⁺ (ELW) at a language level to suit their needs.

Course Outline

Minimum English Entry Level: IELTS 5.0 (*Intermediate*)

Course Duration: 4-12 weeks

Course Designation: CST

Lessons Weekly: 30 (*each of 45 minutes' duration*)

Entry Dates: The course is conducted year-round, and can be joined on most Mondays throughout the year. The main entry dates, however, coincide with the commencement of the 4 BBSI academic terms annually, in September, January, March or June.

Minimum Age: 17 years

Course Structure & Content:

20 lessons weekly in Science, Technology, Computers & IT
10 lessons weekly in English Language
(*selected from one of the following*)

* *preparation for the University of Cambridge FCE*

* *preparation for the University of Cambridge CAE*

* *preparation for the University of Cambridge BEC*

* *English Language Workshop (ELW)*



Award:

BBSI Certificate in Science, Technology, Computers & IT
(continuous assessment)

Optional External Examinations* :

University of Cambridge FCE
University of Cambridge CAE
University of Cambridge BEC

Course Objectives. The course objectives are to:

- * develop an understanding of current theory and practice in science, technology and engineering
- * acquire a sound, professional understanding and knowledge of science, technology, computers, computer software, IT and engineering concepts
- * develop effective technical English and professional communication skills
- * build appropriate technical vocabulary related to science, technology and engineering
- * acquire the necessary communication skills for a career related to science, technology or engineering
- * develop confidence and fluency in the English language to Upper-Intermediate Level
- * provide participants with the opportunity to acquire additional English and business English qualifications

Course Elements. In addition to providing international students with a thorough and comprehensive grounding in professional communication skills for science and technology, the Certificate syllabus incorporates specialised elements selected from the following:

Applied Mathematics

- * *statistics*
- * *scale & ratio*
- * *algebra & equations*
- * *number*
- * *probability theory*
- * *space & trigonometry*

Applied Physics & Engineering

- * *materials & stresses*
- * *light & radio waves*
- * *engineering*
- * *force & effect*
- * *nuclear physics*
- * *electrics, electromagnetism & electronics*

Technology

- * *materials & systems*
- * *security*
- * *applications*
- * *human factor/needs/values/aesthetics*

General Science

- * *research methods*
- * *writing scientific reports*
- * *reading & interpreting scientific information*
- * *problem solving*

Computers & IT

- * *database systems*
- * *spreadsheets*



- * *binary system*
- * *viruses*
- * *word processing*
- * *types of computer*
- * *Microsoft Office™*
- * *business modelling*
- * *SQL*
- * *computer configuration*
- * *electronic communications*
- * *presentation software*
- * *operating systems*
- * *object-oriented programming with Java*
- * *publishing in HTML*
- * *Website-design theory*
- * *information & effective communication*
- * *using a computer effectively & managing files*
- * *concepts of information & computing technology*

A week-by-week syllabus of the BBSI study programme in Science, Technology, Computers & IT is included below. The course content for those wishing to study the Certificate option for 12 weeks or less, would therefore depend on the precise time of year that students elect to study. For example, those seeking to commence the full 12-week course in January or June would follow the syllabus outlined in weeks 1-12, whilst those commencing the same course in March or September would study alternative weeks 1-12. Those wishing to study shorter versions of this course at other times of the year and who require precise details of their course content, should contact BBSI for further clarification.

Higher-Certificate, Diploma, University Foundation and Pre-Masters versions of the above course are also available.

‡ **University of Cambridge ESOL Examinations**

FCE (First Certificate in English)

FCE is an Upper-Intermediate level examination that indicates sufficient proficiency in English to be of practical use in clerical, secretarial and managerial jobs for example, or in the tourist industry, where contact with English speakers is required. FCE is also useful preparation for students working towards higher-level examinations, such as the CAE.

CAE (Certificate in Advanced English)

CAE is the second-highest level of Cambridge ESOL examination and is ideal for those who want to work or study abroad. A CAE certificate demonstrates language skills in a wide range of contexts. The examination is based on realistic tasks, and indicates the ability to use the language in practical situations, such as meetings and discussions.

BEC (Business English Certificate)

There are 3 levels of BEC examination: the BEC Preliminary, BEC Vantage and BEC Higher. All 3 examinations are ideal for students preparing for careers in the fields of international business and commerce, where a good knowledge of English is required to function effectively. BEC certificates are internationally recognised and demonstrate that the holder has acquired an appropriate standard of English in a professional context.



+ English Language Workshop

The English Language Workshop is designed to provide general language support for those students who are studying a specialised course and who do not intend to prepare for a specific English language examination. The content of the Workshop includes extensive skills practice in professional areas of the language, which is useful for those who need to improve their ability to communicate effectively with others in a professional international environment, or who later decide to acquire a professional qualification.

** Examination fees for those seeking to undertake external examinations are not included in the BBSI course fees.*

The following Certificate courses are also available at BBSI:

- * General English
- * Academic English & IELTS Examination Preparation
- * General English, Computing & IT Skills
- * Communication & Business Skills
- * International Business English
- * Management & Business Administration
- * Marketing, Advertising & Public Relations
- * Finance & Financial Services
- * Hospitality Management & Tourism
- * Legal Studies, International & Commercial Law

BBSI courses are carefully designed and structured at different language levels to enable international students to develop all 4 English language skills simultaneously, while developing their professional communication skills and professional knowledge in academic, vocational or professional context, in the specialised subject of their choice. Students therefore have the flexibility to focus on either academic or vocational progression, depending on their personal training needs and particular learning objectives.

Courses can be booked on-Line @ www.bbsi.co.uk

Alternatively, contact BBSI by e-mail at info@bbsi.co.uk

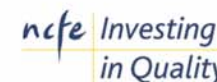


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Typical Weekly Syllabus

	Computing and Information Technology <i>(10 lessons)</i>	English Language Content <i>(20 lessons)</i>
Week 1	<i>Using Computers - managing files; adjusting setting; manipulating files; computer security; the world wide web; email</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 2	<i>Word Processing - formatting</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 3	<i>Word Processing - mail merge</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 4	<i>Presentation - working with charts; slideshows & transitions</i>	<i>grammar, vocabulary reading, listening & speaking</i>



Bournemouth Business School International reserves the right to modify and update the course content



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	Computing and Information Technology <i>(10 lessons)</i>	English Language Content <i>(20 lessons)</i>
Week 5	<i>Spreadsheets - elements & principles; editing; formatting</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 6	<i>Spreadsheets - multiple sheets; charts</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 7	<i>Spreadsheets - review Database - tables</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 8	<i>Databases - editing; queries</i>	<i>grammar, vocabulary reading, listening & speaking</i>



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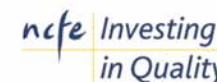


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	Computing and Information Technology <i>(10 lessons)</i>	English Language Content <i>(20 lessons)</i>
Week 9	<i>Databases - reports; forms</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 10	<i>Concepts - hardware & software</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 11	<i>Concepts – networks and the internet; computers in everyday life; safety & security</i>	<i>grammar, vocabulary reading, listening & speaking</i>
Week 12	<i>Course review</i>	<i>grammar, vocabulary reading, listening & speaking</i>



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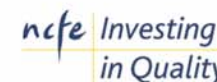


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	Science (10 lessons)	Computing and Information Technology (10 lessons)	English Language Options (10 lessons)
Alternative Week 1	<p style="text-align: center;"><i>general introduction</i></p> <p>Chemistry – introduction to Science, Technology, Computers & IT Physics – atomic structure/bonding Mathematics – laws of motion General Science – equations of motion Skills – the water cycle; DVD comprehension; issue assignment one</p>	<p>Computing Theory - the user; language focus Database - RDMS introduction Mathematics - introduction & binary addition</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Alternative Week 2	<p>Chemistry – the periodic table Physics – electricity & current Mathematics – fractions & percentages General Science – Apollo 13 Skills – ‘We’ve come a long way’ reading & writing practice</p>	<p>Computing Theory - computer architecture; language focus Database - E/R diagrams Mathematics - binary subtraction</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Alternative Week 3	<p>Chemistry – states of matter Physics – static electricity Mathematics – approximation General Science – solar system Skills – black holes; white holes & wormholes; listening & taking notes; issue assignment two</p>	<p>Computing Theory - computer applications; language focus Database - normalisation Mathematics - binary multiplication</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Alternative Week 4	<p>Chemistry – types of reactions Physics – types of energy Mathematics – angles, bearings & maps General Science – structure of the earth Skills – microbes & pathogens</p>	<p>Computing Theory - peripherals; language focus Database - intro to MySQL Mathematics - binary division</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>



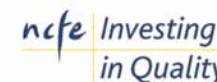


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	Science (10 lessons)	Computing and Information Technology (10 lessons)	English Language Options (10 lessons)
Alternative Week 5	<p><i>Chemistry</i> – rates of reactions <i>Physics</i> – work & power <i>Mathematics</i> – satellites & GPS <i>General Science</i> – volcanoes & rocks <i>Skills</i> – micro-organisms in production & industry</p>	<p><i>Computing Theory</i> - interview/ex-student; language focus <i>Database - SQL</i> <i>Mathematics</i> - hexadecimal arithmetic</p>	<p><i>ELW (English Language Workshop)</i> or preparation for one of the following examinations: <i>BEC (Business English Certificate)</i> <i>FCE (First Certificate in English)</i> <i>CAE (Cambridge Advanced English)</i></p>
Alternative Week 6	<p><i>Chemistry</i> – isotopes & radioactivity <i>Physics</i> – waves <i>Mathematics</i> – the sound barrier & the speed of light <i>General Science</i> – structure of the ear & sound <i>Skills</i> – Marie Curie internet project; issue assignment three</p>	<p><i>Computing Theory</i> - operating systems; language focus <i>Database - SQL</i> <i>Assembly language</i> - intro</p>	<p><i>ELW (English Language Workshop)</i> or preparation for one of the following examinations: <i>BEC (Business English Certificate)</i> <i>FCE (First Certificate in English)</i> <i>CAE (Cambridge Advanced English)</i></p>
Alternative Week 7	<p><i>Chemistry</i> – the carbon/nitrogen cycle <i>Physics</i> – electromagnetic waves <i>Mathematics</i> – sequences <i>General Science</i> – sunshine; DVD comprehension <i>Skills</i> – sunshine DVD comprehension; issue assignment four</p>	<p><i>Computing Theory</i> – graphic user interfaces; language focus <i>Database - SQL</i> <i>Assembly language</i> - practice</p>	<p><i>ELW (English Language Workshop)</i> or preparation for one of the following examinations: <i>BEC (Business English Certificate)</i> <i>FCE (First Certificate in English)</i> <i>CAE (Cambridge Advanced English)</i></p>
Alternative Week 8	<p><i>Chemistry</i> – acids, bases & salts <i>Physics</i> – electromagnetism, motors & generators <i>Mathematics</i> – the metric vs. imperial system <i>General Science</i> – carbon emissions & renewable energy <i>Skills</i> – carbon emissions & renewable energy cont; DVD comprehension Planet Earth</p>	<p><i>Computing Theory</i> - application programs; language focus <i>Database - SQL</i></p>	<p><i>ELW (English Language Workshop)</i> or preparation for one of the following examinations: <i>BEC (Business English Certificate)</i> <i>FCE (First Certificate in English)</i> <i>CAE (Cambridge Advanced English)</i></p>





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	Science (10 lessons)	Computing and Information Technology (10 lessons)	English Language Options (10 lessons)
Alternative Week 9	Chemistry – metals & REDOX reactions Physics – magnetism Mathematics – data General Science – inventions Skills – presentation assignment three issue assignment five	Computing Theory - multimedia; language focus Database - SQL	ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)
Alternative Week 10	Chemistry – industrial chemistry Physics – mechanics & materials Mathematics – temperature scales; celsius, fahrenheit & kelvin General Science – severe weather & weathering Skills - prediction	Computing Theory - interview/computing; support officer; computing support; language focus	ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)
Alternative Week 11	Chemistry – esters, flavours & tastes Physics – progress test part one Mathematics – progress test part two General Science – evolution of design Skills – evolution of design continued	Computing Theory - software engineering; people in computing; language focus	ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)
Alternative Week 12	Chemistry – metals; extraction & uses Physics – graphs of functions Mathematics – evolution; animals General Science – Darwins theory Skills – argument; debating a point pros & cons	Revision - the future of IT	ELW (English Language Workshop) or preparation for one of the following examinations: BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)

