



BBSI Diploma Course in Science, Technology, Computers & IT

The BBSI Diploma 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 fields, and who require proficiency in technical English. The course is of 36 weeks duration and is carefully designed to enable students at an Intermediate level in English or above to gain English, technical and business qualifications, including a technical diploma award from BBSI and a certificate award from the NCFE national awarding body. The study programme comprises 30 lessons weekly and includes the syllabus for the International Computer Driving License® (ICDL[†]). Students can elect to obtain this additional qualification.

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 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. 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.

Course Outline

Minimum English Entry Level: IELTS 4.5 (Intermediate)

Course Duration: 36 weeks (3 terms)

Course Designation: DST

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

Course Entry Dates: September, January, March or June.

Minimum Age: 17 years

Course Structure & Content:

Term 1

10 lessons weekly in Computers, Computing & IT Skills

(includes the complete ICDL syllabus)

20 lessons weekly in General English

Terms 2 & 3

20 lessons weekly in Science, Technology, Computers & IT

10 lessons weekly in English Language

(selected each term from one of the following study options):



- * 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)

Awards:

BBSI Diploma in Science, Technology, Computers & IT

(continuous assessment)

NCFE Certificate in Science, Technology, Computers & IT

(continuous assessment)

Optional External Examinations* :

International Computer Driving License®

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 a sound Upper-Intermediate Level
- * prepare participants for the International Computer Driving License® award *(optional)*
- * provide participants with the opportunity to acquire additional English and business English qualifications

Course Elements. In addition to providing students with a thorough and comprehensive grounding in technical English and professional communication skills, the Study Option 2 syllabus incorporates all the following specialised elements:

Applied Mathematics

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

Applied Physics & Engineering

- | | |
|------------------------|---|
| * materials & stresses | * force & effect |
| * light & radio waves | * nuclear physics |
| * engineering | * 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
- * binary system
- * viruses
- * word processing
- * types of computer
- * Microsoft Office™
- * business modelling
- * SQL
- * computer configuration
- * electronic communications

- * spreadsheets
- * 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

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

† International Computer Driving Licence®

The International Computer Driving Licence® (ICDL) is an internationally-recognised qualification that verifies practical competence in computer skills in either a professional or personal capacity and is the fastest growing international IT user-qualification. It is designed specifically for those who wish to gain a benchmark qualification in computing to enable them to develop their IT skills and enhance their career prospects. No prior knowledge of IT or computer skills is needed. The ICDL raises an individual's level of competency in IT & computing skills; improves personal productivity, both at home & at work; requires no prior knowledge of IT or computer skills; and provides individual's with an internationally-recognised qualification.



‡ 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 diploma courses are also available at BBSI:

- * 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>(First week of Term)</i>	<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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	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>

*Please note that presentation subject order may vary in weeks 7 to 12



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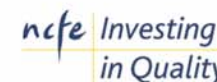


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	Science (10 lessons)	Computing and Information Technology (10 lessons)	English Language Options (10 lessons)
Week 13 (First week of Second Term)	<i>general introduction</i> Chemistry – introduction to Science, Technology, Computers & IT Physics – atomic structure/bonding Mathematics – laws of motion General Science – equations of motion Skills – the water cycle; DVD comprehension; issue assignment one	Computing Theory - the user; language focus Database - RDMS introduction Mathematics - introduction & binary addition	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)
Week 14	Chemistry – the periodic table Physics – electricity & current Mathematics – fractions & percentages General Science – Apollo 13 Skills – ‘We’ve come a long way’ reading & writing practice	Computing Theory - computer architecture; language focus Database - E/R diagrams Mathematics - binary subtraction	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)
Week 15	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	Computing Theory - computer applications; language focus Database - normalisation Mathematics - binary multiplication	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)
Week 16	Chemistry – types of reactions Physics – types of energy Mathematics – angles, bearings & maps General Science – structure of the earth Skills – microbes & pathogens	Computing Theory - peripherals; language focus Database - intro to MySQL Mathematics - binary division	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)





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	Science <i>(10 lessons)</i>	Computing and Information Technology <i>(10 lessons)</i>	English Language Options <i>(10 lessons)</i>
Week 17	<p><i>Chemistry – rates of reactions</i> <i>Physics – work & power</i> <i>Mathematics – satellites & GPS</i> <i>General Science – volcanoes & rocks</i> <i>Skills – micro-organisms in production & industry</i></p>	<p><i>Computing Theory - interview/ex-student; language focus</i> <i>Database - SQL</i> <i>Mathematics - hexadecimal arithmetic</i></p>	<p><i>ELW (English Language Workshop)</i> <i>or preparation for one of the following examinations:</i> <i>BEC (Business English Certificate)</i> <i>FCE (First Certificate in English)</i> <i>CAE (Cambridge Advanced English)</i></p>
Week 18	<p><i>Chemistry – isotopes & radioactivity</i> <i>Physics – waves</i> <i>Mathematics – the sound barrier & the speed of light</i> <i>General Science – structure of the ear & sound</i> <i>Skills – Marie Curie internet project; issue assignment three</i></p>	<p><i>Computing Theory - operating systems; language focus</i> <i>Database - SQL</i> <i>Assembly language - intro</i></p>	<p><i>ELW (English Language Workshop)</i> <i>or preparation for one of the following examinations:</i> <i>BEC (Business English Certificate)</i> <i>FCE (First Certificate in English)</i> <i>CAE (Cambridge Advanced English)</i></p>
Week 19	<p><i>Chemistry – the carbon/nitrogen cycle</i> <i>Physics – electromagnetic waves</i> <i>Mathematics – sequences</i> <i>General Science – sunshine; DVD comprehension</i> <i>Skills – sunshine DVD comprehension; issue assignment four</i></p>	<p><i>Computing Theory – graphic user interfaces; language focus</i> <i>Database - SQL</i> <i>Assembly language - practice</i></p>	<p><i>ELW (English Language Workshop)</i> <i>or preparation for one of the following examinations:</i> <i>BEC (Business English Certificate)</i> <i>FCE (First Certificate in English)</i> <i>CAE (Cambridge Advanced English)</i></p>
Week 20	<p><i>Chemistry – acids, bases & salts</i> <i>Physics – electromagnetism, motors & generators</i> <i>Mathematics – the metric vs. imperial system</i> <i>General Science – carbon emissions & renewable energy</i> <i>Skills – carbon emissions & renewable energy cont; DVD comprehension Planet Earth</i></p>	<p><i>Computing Theory - application programs; language focus</i> <i>Database - SQL</i></p>	<p><i>ELW (English Language Workshop)</i> <i>or preparation for one of the following examinations:</i> <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)
Week 21	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)
Week 22	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)
Week 23	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)
Week 24	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)





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	Science <i>(10 lessons)</i>	Computing and Information Technology <i>(10 lessons)</i>	English Language Options <i>(10 lessons)</i>
Week 25 <i>(First week of Third Term)</i>	<i>general introduction</i> Chemistry – allotropy Physics – electric currents & combining resistors Mathematics – massive numbers General Science - weather	Networks – WANs/LANs & wireless networks; language focus HTML – introduction & formatting	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)
Week 26	Chemistry – industrial chemistry Physics – plate tectonics Mathematics – direct & inverse proportion General Science – natural disasters Skills – writing a discursive essay	Networks – signal transmission; OSI model; language focus HTML – lists & tables	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)
Week 27	Chemistry – batteries & power sources Physics – electronic control Mathematics – inverse square laws General Science – recycling Skills - critical argument; attacking & defending a position	Networks – TCP/IP, language focus HTML – links and anchors; forms	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)
Week 28	Chemistry – electricity & electrolysis Physics – light Mathematics – geometry: angles & regular figures General Science – time travel & parallel universes Skills – reading & comprehension	Networks – ISPs; browsers; language focus HTML – CSS; XHTML & validation	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)





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	Science (10 lessons)	Computing and Information Technology (10 lessons)	English Language Options (10 lessons)
Week 29	<p>Chemistry – quantitative electrolysis & the uses of electrolysis</p> <p>Physics – lenses & the eye</p> <p>Mathematics – three dimensional figures</p> <p>General Science – perspective & optical illusion</p> <p>Skills - debating a topic</p>	<p>Networks – URLs; streaming; language focus</p> <p>HTML - JavaScript</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Week 30	<p>Chemistry – catalysts & their uses</p> <p>Physics – colour spectrum & colour blindness</p> <p>Mathematics – circles</p> <p>General Science – Murphy’s law</p> <p>Skills – analysing charts</p>	<p>Networks – search engines; email protocols; language focus</p> <p>HTML – JavaScript</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Week 31	<p>Chemistry – free radicals; the ozone layer; UV radiation</p> <p>Physics – pressure</p> <p>Mathematics – analysing graphs over time</p> <p>General Science – medical technology</p> <p>Skills - comparing & contrasting</p>	<p>Networks – website evaluations; language focus</p> <p>Java – introduction; performing operations</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Week 32	<p>revision & progress test</p>	<p>Networks – XML; language focus</p> <p>Java – making statements; directing values</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>



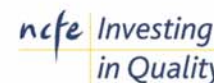


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	Science (10 lessons)	Computing and Information Technology (10 lessons)	English Language Options (10 lessons)
Week 33	<p>Chemistry – products from oil, hydrocarbons & polymers</p> <p>Physics – resonance</p> <p>Mathematics – arcs, circles & pi</p> <p>General Science – internet project</p> <p>Skills – analysing data</p>	<p>Networks – data security I; language focus</p> <p>Java – manipulating data; creating classes</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Week 34	<p>Chemistry – tests for ions & gases</p> <p>Physics – moments & equilibrium</p> <p>Mathematics – Pythagoras & other theorems</p> <p>General Science – types of memory</p> <p>Skills – describing graphs</p>	<p>Networks – data security II; language focus</p> <p>Java – importing functions; building interfaces</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Week 35	<p>Chemistry – a history</p> <p>Physics – gravity</p> <p>Mathematics – trigonometry</p> <p>General Science – ships & submarines</p> <p>Skills – problem solving</p>	<p>Networks – data security III; language focus</p> <p>Java – recognizing events</p>	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>
Week 36	<p>Chemistry – solutions & suspensions</p> <p>Physics – gravity (continued)</p> <p>Mathematics – trigonometry</p> <p>General Science – principles of flight</p> <p>Skills - assimilating & summarizing information</p>	Revision	<p>ELW (English Language Workshop) or preparation for one of the following examinations:</p> <p>BEC (Business English Certificate) FCE (First Certificate in English) CAE (Cambridge Advanced English)</p>



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