

Welcome to the Alberta Government's International Education Guides

The International Qualifications Assessment Service (IQAS) developed the International Education Guides for educational institutions, employers and professional licensing bodies to help facilitate and streamline their decisions regarding the recognition of international credentials.

These guides compare educational systems from around the world to educational standards in Canada. The assessment recommendations contained in the guides are based on extensive research and well documented standards and criteria. This research project, a first in Canada, is based on a broad range of international resources and considerable expertise within the IQAS program.

Organizations can use these guides to make accurate and efficient decisions regarding the recognition of international credentials. The International Education Guides serve as a resource comparing Alberta standards with those of other countries, and will assist all those who need to make informed decisions, including:

- employers who need to know whether an applicant with international credentials meets the
 educational requirements for a job, and how to obtain information comparing the applicant's
 credentials to educational standards in Alberta and Canada
- educational institutions that need to make a decision about whether a prospective student
 meets the education requirements for admission, and who need to find accurate and reliable
 information about the educational system of another country
- professional licensing bodies that need to know whether an applicant meets the educational standards for licensing bodies

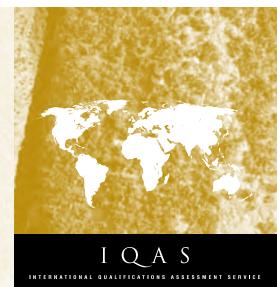
The guides include a country overview, historical educational overview, description of school education, higher education, professional/technical/vocational education, teacher education, grading scales, documentation for educational credentials and a bibliography.

The guides also include credential placement recommendations on how credentials compare to educational standards in Alberta, Canada.

Prepared by
International Qualifications Assessment Service
Government of Alberta
9th Floor, 108 Street Building, 9942–108 Street NW
Edmonton, AB, Canada T5K 2J5
Phone: (780) 427-2655 / Fax: (780) 422-9734
www.immigration.alberta.ca/iqas



FOR THE ASSESSMENT OF EDUCATION FROM THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND



CONTENTS

Country Overview	1
Land	1
People	2
History	2 2 5
Administration	5
Government	5
Economy	6
Historical Education Overview	7
Early Education	7
Toward a Modern System of Education	3
Higher Education Post-1944	S
Higher Education, Late 1960s to 1992 (Polytechnics)	10
Technical and Vocational Education	10
Education in the Four Constituent Nations	10
England	10
Wales	11
Scotland	11
Northern Ireland	12
School Education	13
School Education in England, Wales and Northern Ireland	13
School year	14
Administration	14
Funding	15
Curriculum	15
Pre-primary/preschool education (Foundation Stage)	17
Elementary education (Key Stages 1 and 2)	17
Secondary education (Key Stages 3 and 4)	17
Further education (Sixth Form)	19
Assessment	21
Awarding bodies	21
National Qualifications Framework Reforms in 14–19 education	22
School Education In Scotland	22
School year	23 23
Administration	23
Funding	23
Curriculum	23
Structure of school education	24
Pre-primary/preschool education	24
Elementary education (P1 to P7)	24
Lower secondary education (S1 to S4)	24
Upper secondary education (ST to S4)	26
Historical background of Scottish qualifications/examinations	27
Awarding body	27
Scottish Credit and Qualifications Framework	27
Reforms in 14–19 education	28

Higher Education	28
Funding	28
Administration	29
Higher Education Institutions	29
Royal Charters and the Privy Council	30
Council for National Academic Awards	30
British Accreditation Council	30
Quality assurance	30
Universities and Colleges Admissions Service	30
Admission requirements	31
Academic year	32
Grading scales	32
Types of study	32
Bologna Process	32
Higher Education Qualifications	33
Qualifications Frameworks	33
Undergraduate Qualifications	33
Graduate Qualifications	37
Professional Qualifications	39
Teacher Education	40
England And Wales	40
Northern Ireland	40
Scotland	41
Technical And Vocational Education	41
Regulatory authorities	41
Sector Skills Councils and Sector Skills Development Agency	42
Funding	42
Validating, examining and awarding bodies	42
Qualifications Frameworks	44
Vocational Qualifications	44
General Certificate of Secondary Education in applied subjects	44
Advanced General Certificate of Education in applied subjects	46
National Qualifications (Scotland)	46
General National Vocational Qualifications	46
National Vocational Qualifications	47
Scottish Vocational Qualifications	47
Key Skills/Core Skills	48
Business and Technician Education Council qualifications	48
Oxford, Cambridge and RSA (OCR) Nationals	50
Apprenticeships and Modern Apprenticeships	50
Grading Scales	51
Secondary education grading	51
General Certificate of Secondary Education	51
Advanced General Certificate of Education	51
Advanced Extension Awards	52
Secondary education, Scotland	52
Higher Education Grading	52
Technical And Vocational Education Grading	53
GCSEs in applied subjects and GCE A Levels in applied subjects	53
BTEC qualifications and OCR Nationals	53

Documentation	54
Secondary Education Documentation	54
England, Wales and Northern Ireland	54
Scottish Qualifications Certificate	54
Higher Education Documentation	54
Technical, Vocational And Professional Education Documentation	55
References	56
Print Resources	56
Internet Resources	56
International Websites	56
UK Websites	57
Appendix A — Placement Recommendations	59
Appendix B — Sample Documents	63

LIST OF TABLES

Table 1. British Overseas Territories	5
Table 2. Structure of School Education in England, Wales and Northern Ireland	13
Table 3. Recommended Minimum Number of Teaching Hours for Each Key Stage	14
Table 4. Compulsory National Curriculum for England	15
Table 5. Northern Ireland Curriculum	16
Table 6. GCSE Grading Scale	18
Table 7. Structure of A Levels	20
Table 8. Grading Scale for A Levels	20
Table 9. GCEs in Applied Subjects	21
Table 10. National Qualifications Framework for England, Wales and Northern Ireland	22
Table 11. Structure of School Education in Scotland	24
Table 12. Standard Grades Grading Scale	25
Table 13. Comparison Between Standard Grades Levels and National Courses Levels	25
Table 14. National Course Grading Scale	26
Table 15. Core Skills in the Scottish Curriculum	26
Table 16. Scottish Credit and Qualifications Framework (SCQF)	28
Table 17. Grading Scale for Bachelor's Degrees (Honours)	32
Table 18. National Qualifications Framework for England, Wales and Northern Ireland	33
Table 19. Scottish Credit and Qualifications Framework	34
Table 20. Sample Curriculum of a 3-Year Electronic Engineering BEng	36
Table 21. Sample Curriculum for MSc in Public Policy	38
Table 22. Examples of Titles of Professional Qualifications	39
Table 23. Examples of Professional Associations	40
Table 24. National Qualifications Framework for England, Wales and Northern Ireland	45
Table 25. Scottish Credit and Qualifications Framework	45
Table 26. GCE A Levels in Applied Subjects	46
Table 27. Number of Units in Old And New BTEC Nationals	49
Table 28. GCSE Grading Scale	51
Table 29. Grading Scale For GCE A Levels	51
Table 30. Standard Grades Grading Scale	52
Table 31. National Course Grading Scale	52
Table 32. Comparison Between UK Grades, Degree Classifications and IQAS Grades (Example)	
Table 33. Summary of Grading Scale from the University of Glamorgan (Scotland)	53
Table 34. ECTS Grading Scale	53
Table 35. BTFC and OCR Nationals Grading Scale	53

COUNTRY OVERVIEW

LAND

The United Kingdom of Great Britain and Northern Ireland consists of England, Wales, Scotland and Northern Ireland. The four parts are referred to as home nations, constituent countries or simply as countries. Northern Ireland is also sometimes called a province of the United Kingdom. Most of the smaller islands in the archipelago belong to one of the four nations and thus are part of the United Kingdom. Exceptions are the Isle of Man and the Channel Islands. These are not part of the United Kingdom, but are direct dependencies of the British crown, which assumes responsibility for their defence and international affairs.

The capital of the United Kingdom, London, is located in southeast England. Other major cities include: Birmingham, Liverpool, Sheffield and Leeds in England; Glasgow and Edinburgh in Scotland; Belfast in Northern Ireland; Cardiff in Wales.

MAP OF THE UNITED KINGDOM



The United Kingdom is a group of islands located in western Europe. The largest island, Great Britain, includes England, Scotland and Wales. Northern Ireland is part of the island of Ireland, the second largest of the British Isles. The 360-kilometre border between Northern Ireland and the independent Republic of Ireland is the United Kingdom's only land border. It is otherwise surrounded by water—the Atlantic Ocean to the north and southwest, the North Sea to the east, the English Channel to the south, the Celtic Sea to the southwest and the Irish Sea to the east. Since 1994 the southwest tip of the United Kingdom has been connected to northern France by the Channel Tunnel, a 50-kilometre underwater rail tunnel.

The total area of the United Kingdom is 244,044 square kilometres, which is less than half the size of Alberta or almost exactly the size of the Great Lakes.

The United Kingdom has one time zone, which is the initial time zone in Coordinated Universal Time (UTC), formerly known as Greenwich Mean Time (GMT).

Alberta is seven hours behind UTC and therefore seven hours behind the United Kingdom. Both the UK and the province of Alberta observe daylight savings time.

The irregular coastline of the United Kingdom measures 12,429 kilometres. No part of the country is more than 120 kilometres away from the shore. The landscape is diverse, made up of highlands and lowlands. It includes mountainous regions (such as the Pennine chain, Cambrian Mountains and Grampian range) and many rugged hills, especially in Scotland, Wales and Northern Ireland. There are also fertile valleys and plains, some forested areas, several navigable rivers (such as the Severn, Thames and Trent) and many lakes.

The country's climate is temperate, warmer than is typical for the latitude, and quite variable. Main influences are continental winds from Europe and the Atlantic Ocean's Gulf Stream. Both can bring either polar or tropical air, depending on the direction of their flow. The average winter temperature of 4 C is fairly uniform across the country. Temperatures vary more in the summer, warming from

north to south and from the coast inland. Occasional but rare heat waves can bring temperatures of above 30 C. Rainfall is distributed relatively evenly throughout the year, but the rainiest months tend to be August, October and December, while the driest are April, May and June.

Official name of the country

The official name of the country, United Kingdom of Great Britain and Northern Ireland, has been in use since 1927, after the Irish Free State (Republic of Ireland) gained independence and left the union. The names *United Kingdom* (abbreviated as UK) and *Britain* (informal) are also commonly used. However, the use of *Great Britain* as a synonym for the United Kingdom is incorrect since that term refers only to the island of Great Britain, the largest of the British Isles, which includes England, Scotland and Wales.

PEOPLE

People who live in the United Kingdom are commonly referred to as British, although some prefer to define themselves as natives of their particular nation (that is, English, Irish, Scottish or Welsh). The majority (80 per cent) of the population is of English descent, with another 10 per cent Scottish, and smaller percentages of Welsh and Irish people. Over 90 per cent of people are Caucasians of European origin. Immigrant populations—most notably from the West Indies, India, Pakistan, Bangladesh, Africa and China—are increasing. These populations are not evenly distributed throughout the country; the majority live in inner city areas, with more than half residing in London.

According to July 2005 estimates, the total population of the United Kingdom is over 60 million people (CIA, *The World Factbook*, 2005). It is the 21st most populous country in the world and fourth in Europe. More than 80 per cent of the population lives in England, with over 11 million in the greater London area alone. A bit less than 10 per cent live in Scotland, five per cent in Wales and around three per cent in Northern Ireland (National Statistics Online, 2005). The United Kingdom is highly urbanized, with 90 per cent of people living in towns or cities.

The *de facto* official language of the United Kingdom is English (there is no constitutionally defined official language). Other spoken languages include Welsh, Scottish Gaelic and Ulster Scots (Celtic languages), as well as the native languages of immigrants. In all, over 300 different

languages are spoken throughout the country. The British English spoken today developed over many generations. It was shaped mostly by Germanic and Danish (Viking) tribes that lived in the country early on, and later by the Norman French spoken by the ruling classes. French is still used on some official symbols, such as the royal motto, *Dieu et mon droit* ("God and my right"), that appears on the coat of arms.

Free universal public education, mandatory for children between the ages of 5 and 16, has contributed to a very high literacy rate of 99 per cent (2000 estimate). Literacy is defined as the percentage of the population 15 years or older that has completed at least five years of schooling.

Freedom of religion combined with a growing immigrant population ensures that almost every world religion is represented in the United Kingdom. However, much of the religiously affiliated population is Christian. The Church of England (Anglican) and the Church of Scotland (Presbyterian) are established Protestant denominations in their respective countries. Other practised religions include:

- Buddhism
- Hinduism
- Islam
- Judaism
- Sikhism
- other denominations of Christianity (such as Roman Catholicism, Protestantism)

HISTORY

Early Years

Since prehistoric times, people have inhabited the various regions of what is today the United Kingdom. Indeed, archaeologists have found gravesites, tools and signs of agriculture, hunting and commerce dating as far back as the 8th millennium BC. The famous stone circles found at Stonehenge and Avebury were built in the 2nd millennium BC.

Early inhabitants, who were joined by migrating Celts and Gauls in the 8th and 2nd centuries BC, were called Britons, though no formal political, cultural or geographical entity existed until much later. Those first people belonged to many different tribes, who merged and split over generations, some becoming extinct and others surviving. Not much is known about them other than that they were of Caucasoid origin, primarily from mainland Europe.

Roman Occupation

Julius Caesar was the first to write about Britain, after his initial contact in 55 BC. He staged two attacks there, one in 55 and another in 54 BC. He was successful in his second attack, but left to attend to uprisings in Gaul and never returned. Emperor Claudius led the Romans in a new invasion of Britain in 43 AD and began colonization. The ruling Romans established trade routes and built roads and towns. At the beginning of the 5th century, with barbarian threats demanding their attention elsewhere in their empire, the Romans left Britain.

Anglo-Saxon Period

As Roman troops withdrew from Britain, northern European tribes invaded: Angles (from whose name England comes), Saxons and Jutes. The Anglo-Saxons established themselves as the new rulers of several large kingdoms (Kent, Sussex, Essex, Wessex, East Anglia, Mercia and Northumbria) that had emerged, pushing the native Britons into Wales and Scotland where the Celtic people had mostly settled. The Christian church also made its way to the area around this time, sending missionaries to convert the various kingdoms and playing a unifying role.

Viking Invasions

During the 9th and 10th centuries, the Danes (Vikings) conducted many raids. Some of their warriors settled down in the newly conquered land, especially in the north and east. However, they did not have lasting success in controlling the country. Alfred the Great, king of Wessex, managed to confine them to the Danelaw, where Danish law predominated over Anglo-Saxon. The Danes invaded again in the 11th century and ruled England briefly until the expiration of the Scandinavian line, at which time the Wessex dynasty returned to power.

Medieval Period

In 1066 William the Conqueror, duke of Normandy (France), defeated the Saxon king, Harold II, and became King William I of England. The descendants of the Normans who had settled in England became known as Anglo-Normans. After years of living together, the Anglo-Normans and Anglo-Saxons became known as the English, developing at the same time a distinct language called Middle English.

Henry II increased the centralization of power in the royalty during the 12th century. Unhappy barons forced his successor, King John, to sign the Magna Carta in 1215; this charter reduced the king's power and gave some rights to the people (nobles). It was the beginning of constitutional law. Edward I continued to expand the territory, bringing Wales under English rule during the 13th century.

The 14th century was marked by continued conflicts between kings and nobles, the beginning of the Hundred Years War (1338–1453) with France, and the Black Death (1348), a plague that reduced the British population by almost a third. Toward the end of the 15th century, wars between dynasties (War of the Roses, 1455–1485) led to the Tudor family's ascension to the throne.

Religious Reformation and Restoration Period

During the reign of Henry VIII (1509–1547), England broke its ties with the Roman Catholic Church and established the Church of England. The Acts of Union of 1536 and 1542 officially united Wales and England, and Henry VIII became the first king of Ireland in 1542. Elizabeth I (1558–1603) reigned during the beginning of New World colonization and saw her country become a world power. William Shakespeare, Francis Bacon, Francis Drake and Sir Walter Raleigh are among the famous people who lived during the Elizabethan era.

In 1603 King James VI of Scotland acceded to the English throne and became James I of England. Parliament beheaded his successor, Charles I, in 1649 for treason. The country was without a monarch until 1660, when a new Parliament invited Charles II to become king in what became known as the Restoration period. However, it was now clear that the monarch could not act without the support of Parliament. In 1689 Parliament asked William of Orange (William III) to become king. The same year, the Bill of Rights confirmed the sovereignty of Parliament.

Acts of Union and Industrial Revolution

The Act of Union of 1707 marked the official unification of England and Scotland into the (United) Kingdom of Great Britain. The two kingdoms were now united under the same monarch and the British Parliament.

Ireland joined the Kingdom of Great Britain with the Act of Union of 1800, which took effect on 01 January 1801. The newly expanded territory was named the United Kingdom of Great Britain and Ireland.

The Industrial Revolution that took place toward the end of the 18th and early 19th century was a time of major growth. The invention of the steam engine and machine tools combined with the availability of natural resources such as coal, iron and tin allowed for more efficient production. Population also grew during this time, from an estimated 7.5 million in 1750 to over 23 million in 1861. The increase in population led to rapid urbanization and allowed industrial expansion.

British Empire

The British Empire continued to grow and, despite losing 13 American colonies in the American Revolution (1775–1783), it had established colonies on every continent by the late 19th century. It was a period of great political and cultural influence during which British ideas and the English language spread throughout the world.

The British North America Act of 1867 was the first step toward self-governance for British colonies. Canada was the first to gain the status of dominion, followed by Australia and New Zealand.

World War I

In 1914 Britain declared war on Germany after the Germans invaded Belgium. Britain played a leading role in World War I and emerged victorious when the armistice was called on 11 November 1918. However, the country had lost many men and resources in the war and faced difficult economic times in the years that followed. Trade declined and new industries, such as automobile manufacturing, industrial chemistry and electrical engineering, emerged to fill the gap.

Irish independence

In response to Ireland's demands for independence, the Irish Free State was created with the 1921 Anglo-Irish Treaty. The six northern counties of Ireland remained a part of the United Kingdom, so, as of 1927, the country took the new name that remains today: the United Kingdom of Great Britain and Northern Ireland.

World War II

On 01 September 1939, Germany attacked Poland. On 03 September, the United Kingdom, Australia, New Zealand and France declared war on Germany in what became World War II. Within days, Canada (on 10 September) and other countries joined the allied forces in the war against Germany. After France fell in 1940 the United Kingdom (under the leadership of Prime Minister Winston S. Churchill) and its allies continued the battle. In 1941, following the invasion of the USSR by Germany and the Japanese attack on Pearl Harbor, the USSR and the United States became new allies in the war and helped win victory in 1945. The Declaration by United Nations, signed in 1942 by the 26 countries that had been allies during the war, initiated the creation of the United Nations.

The period following the war was a time of economic difficulty and continued loss of international power. The country received financial aid (in the form of loans) from the United States and, to a lesser extent, from Canada, and the British pound was devalued. The government also worked to nationalize industries and extend social services. The United States began to take the leadership role on the world stage.

Mid-20th Century to the Present

Some of the major events that took place in British history since the middle of the 20th century include:

- the independence of many former colonies, starting with India in 1947, leading to the decline of the British Empire and growth of the Commonwealth of Nations
- membership in the North Atlantic Treaty Organization (NATO) in 1949
- participation, with the United Nations, in the Korean conflict (1950–53)
- the ascension to the throne in 1952 and the coronation in 1953 of Queen Elizabeth II
- violent confrontations between Catholics and Protestants in Northern Ireland, especially during the late 1960s and early 1970s
- membership in the European Economic Community (later the European Union) in 1973
- major labour unrest and strikes in the 1970s
- the building of the Channel Tunnel (1986–94), linking the United Kingdom with France
- outbreaks of "mad cow disease" (1996) and "foot and mouth disease" (2001) in British livestock, leading to crippling bans on British meat exports
- alliance with the United States in its "war on terrorism," with attacks in Afghanistan (2001) and Iraq (2003)

- the election of Tony Blair of the Labour Party in May 2005 for a third term as prime minister
- suicide bombings in the London transit system in July 2005

ADMINISTRATION

GOVERNMENT

The United Kingdom is a constitutional monarchy and a parliamentary democracy. Parliament is composed of two legislative houses, the House of Commons and the House of Lords, and the sovereign. In theory, the sovereign (Queen Elizabeth II since 1952) has supreme authority as the head of state, but in practice she has a very limited role in governing the country (much like the Governor General in Canada, who represents the Queen in this country). Power lies in the House of Commons, which is made up of elected Members of Parliament (MPs) from the four constituent countries of the United Kingdom. The House of Lords is composed of appointed life peers and hereditary peers. In 1999 most of the hereditary peers were expelled from the House of Lords in an effort to make it more democratic. The role of the House of Lords is restricted to reviewing and/or delaying proposed legislature. The elected Prime Minister (Tony Blair of the Labour Party in 2006) is the head of government and, with his or her Cabinet, holds the executive power. Since the 1920s the two main political parties in the United Kingdom have been the Labour Party and the Conservative Party.

Since 1999, Scotland, Wales and Northern Ireland have had separate national assemblies that control certain matters such as health, education, housing, transport, the environment, social services and agriculture. The Scottish Parliament has some additional taxation and legislative powers. The central Parliament retains responsibility for foreign affairs, defence, social security and overall economic policy. The central Parliament can also suspend regional assemblies, as it has in recent years with the Parliament of Northern Ireland.

The different levels of local governments, which vary by region and include boroughs, counties, cities, districts and council areas, have the next degree of power. In England local governments are responsible for matters such as education, highways and traffic, social services and elections. In Northern Ireland, Scotland and Wales, where regional governments administer most local issues, local governments have slightly less responsibility.

The United Kingdom also has several dependent areas throughout the world. These include the crown dependencies, which are the Isle of Man and the Channel Islands (Guernsey and Jersey), as well as the 14 overseas territories listed in Table 1.

TABLE 1. BRITISH OVERSEAS TERRITORIES

Anguilla
British Antarctic Territory
Bermuda
British Indian Ocean Territory
British Virgin Islands
Cayman Islands
Falkland Islands
Gibraltar
Montserrat
Pitcairn Island
South Georgia and South Sandwich Islands
Sovereign Base Areas on Cyprus
St. Helena and Dependencies (Ascension Island and Tristan da Cunha)

UK Overseas Territories, Foreign & Commonwealth Office. (Retrieved February 2006 from www.fco.gov.uk)

Turks and Caicos Islands

The dependent territories choose to remain a part of the United Kingdom for various reasons. They elect their own governments and administer their own affairs to a large degree. The British Overseas Territories Act of 2002 granted British citizenship to most British territories' citizens.

Although the United Kingdom joined the European Economic Community (which later became the European Union) in 1973, it has opted not to join the Economic and Monetary Union for the moment, and to retain its own currency, the pound sterling (£ or GBP). One pound consists of 100 pence (p), the singular of which is the penny.

The United Kingdom is a member of the Commonwealth of Nations, a free association of 53 countries—mostly former British colonies—including Canada. As of 2006, Queen Elizabeth II is Head of the Commonwealth.

Symbols of the United Kingdom

UNION FLAG



The flag of the United Kingdom, called the Union Flag or Union Jack, dates back to 1801, when Ireland joined the United Kingdom of Great Britain (and Ireland). It combines the crosses of Saint George, Saint Andrew and Saint Patrick, which are the symbols of England, Scotland and Ireland, respectively. Wales is not specifically represented on the flag because it was considered part of the Kingdom of England when the original Union Flag was adopted.

The Union Flag is represented on the flags of the United Kingdom's crown dependencies (the Isle of Man and the Channel Islands) and is also part of the national flag of four former British colonies: Australia, New Zealand, Tuvalu and Fiji.

Before the introduction of its distinctive maple leaf flag in 1965, Canada's national flag incorporated the Union Jack. Today, British Columbia, Manitoba and Ontario still have a representation of the Union Jack on their provincial flags.

The Royal Coat of Arms of the United Kingdom, pictured to the right, also reflects the country's history and regions. The lion of England and the unicorn of Scotland support the central shield. The first and fourth quadrants, three lions on a red background, represent England; the second quadrant with the single lion represents Scotland; the third quadrant with the harp on a blue background represents Northern Ireland. As on the flag, Wales is not specifically represented on the coat of arms.

ROYAL COAT OF ARMS



The blue garter surrounding the shield bears the motto *Honi soit qui mal y pense* (French for "Shame on him who thinks this evil") and symbolizes the Order of the Garter, an ancient order of knighthood founded by Edward III in 1348. The royal motto inscribed below the shield, *Dieu et mon droit* (French for "God and my right"), was chosen by Henry V in the 15th century. When used in Scotland, the Royal Coat of Arms of the United Kingdom differs slightly in appearance. Each region (England, Scotland, Wales and Northern Ireland) also has its own flag and coat of arms.

ECONOMY

The United Kingdom has one of the world's largest economies. The country enjoys a low unemployment rate (five per cent in the fall of 2005). Service-based industries such as banking, insurance and business services represent the largest segment of the economy, employing about 70 per cent of the workforce and accounting for two-thirds of the country's Gross Domestic Product (GDP). Other industries include manufacturing, agriculture and fishing. Tourism is also a significant contributor to the UK economy. The country ranks sixth in the world as a tourist destination.

The United Kingdom's main trading partners for both exports and imports are the United States, Germany and France. Invisible trade in the form of services—particularly financial services—is a major export. The total value of foreign trade represents about half of the country's GDP.

The United Kingdom is Canada's third largest trading partner (after the United States and Japan).

Historical Education Overview

The history of education in the United Kingdom is as complex as the country itself. The four nations that make up the United Kingdom each have educational traditions that evolved both separately and together, depending on the different levels of union and independence that existed at the time. The close political, cultural and geographical ties that exist between the four nations cannot but translate into mutual influence in education matters as well.

EARLY EDUCATION

Throughout the United Kingdom, organized education was introduced at the same time as religion. Catholic missionaries spreading the faith in the 5th and 6th centuries founded the first known schools. St. Patrick is probably responsible for establishing the very first one in 457: the School of Armagh, in Ireland.

In England St. Augustine founded a school that later became known as The King's School Canterbury in 597. Other early schools include the Warwick School (914) and the King's School Ely (970), where King Edward was educated.

Run by the Roman Catholic Church, usually in churches or priests' homes, these ancient schools offered very basic education, teaching students religious doctrine and how to read Latin, which was the language of the Bible and other religious texts. Education was reserved for young men studying to become priests or monks, and children of the aristocracy.

There were two main types of schools in those early days: grammar schools, where Latin was taught using the English vernacular, and song schools, where boys were taught to sing for the cathedral choirs.

In the 9th century, the Danish invasions disrupted the development of education. King Alfred, who eventually defeated the Danes, was responsible for the revival of education toward the end of that century. He was the first to try to broaden education to all free men, wanting them to have the opportunity to learn to read not only Latin, but also English. He acquired some of the few English-language books and even translated some himself so they would be available to students who wanted to learn.

The First Universities

The end of the 9th century also saw the birth of institutions of higher learning. The first British university, which was also the first university in the English-speaking world, was the University of Oxford. Its exact founding date is uncertain, but some form of teaching took place there as early as 1096. The university grew rapidly, especially after Henry II banned English students from attending the University of Paris in 1167. The first colleges of Oxford University—Balliol and Merton—were converted from residence halls between 1249 and 1264.

Other early universities include the University of Cambridge (England, 1209), the University of St. Andrews (Scotland, 1413), the University of Glasgow (Scotland, 1451) and the University of Aberdeen (Scotland, 1495).

The education given in those early universities was mostly religious in nature, though a more liberal education, preparing students for further studies in law or medicine, for example, was beginning to take shape. During the 14th century universities started to become more independent from the Church.

Growth of Independent Schools

During the Middle Ages, both church-run schools and independent schools (affiliated with craft and merchant guilds, or some with hospitals) grew, numbering about 400 in England and Wales alone by the 16th century. The schools admitted boys of the ruling classes, who could afford the fees, and lower class boys of "good character" who showed scholarly promise. Some early independent schools include the King's College of Our Lady of Eton (1440) and the King's College Cambridge (1441), both founded by Henry VI.

Private foundations established the first modern grammar schools in the 15th century. A member of the Goldsmiths' Company of London, jeweller of the royal family, founded one of the first, Stockport Grammar School, in 1487. Schools for younger children, including "writing schools" where the teaching of English and accounting took place, also started to open around that time.

During the 16th century Henry VIII brought education under state control, allocating the first state funding for schools. His son, Edward VI, strengthened state control by passing an act confiscating church buildings used solely

for education. School programs began to change, reflecting societal changes and placing more emphasis on English, science, modern languages (French and Italian) and sports. The 16th century also saw growing access to education for girls, standardization in the training and salary of teachers and an increasing focus on pedagogy.

Toward the end of the 18th century educational societies such as the Society for Bettering the Conditions of the Poor (founded in 1796) worked to bring education to underprivileged children. Sunday schools also made their appearance during that period, bringing elementary education—though mainly religious—to more children.

The first act of Parliament on education was the Health and Morals of Apprentices Act of 1802. This act required employers to teach basic mathematics, writing and reading to their apprentices.

Kindergartens, called infant schools in the United Kingdom, developed in the latter part of the 19th century. Replacing daycare centres, infant schools took an interest in the educational development of small children.

TOWARD A MODERN SYSTEM OF EDUCATION

The Elementary Education Act of 1870, also known as the Forster Act, was the first step toward a modern system of education in the United Kingdom. The Act divided the country into school districts and allowed school boards to raise taxes to build needed elementary schools. The "board schools" thus established were nondenominational, administered by the boards themselves, and addressed local educational needs.

Although the Forster Act led to increased accessibility to education, schools could still charge fees, so not all parents could afford to send their children. Taking steps toward broadening access, in 1880 Parliament made education compulsory for all children between the ages of 5 and 10 throughout England and Wales. In 1891 elementary education became free for all children.

During this time, the role of the voluntary and private sectors in education remained prominent. They were the sole providers of secondary education in independent, feecharging, "public" secondary schools—usually boarding schools to which only upper- and middle-class families could afford to send their children.

In the 19th century, new universities were founded (for example, in London, Manchester and Birmingham) and some high schools were opened to girls. Teacher education gained importance as voluntary agencies opened teacher training colleges and universities began training teachers in specialized education departments.

National System of Education

Toward the end of the 19th century and at the beginning of the 20th century the government raised the school leaving age to 12 and created a central Board of Education to administer both elementary and secondary education. In 1918 the Fisher Act established a national system of public education for all children up to age 14.

With the country emerging victorious from World War II, the Education Act of 1944 (Butler Act) brought several important educational changes in England and Wales. Similar acts, with some regional adaptations, were passed in Scotland (1945) and Northern Ireland (1947).

For the first time, a minister of education took on the responsibility of administering education. The school leaving age was raised to 15 and secondary education became mandatory and free in publicly funded schools. The result of these changes was much wider access to secondary education to people who, until then, had not been able to afford the fee-charging, privately run schools.

The Butler Act established the three-stage system of education still in place today: primary, secondary, and higher or further education. The act also set up a tripartite system of secondary education.

The tripartite system was composed of grammar schools, secondary technical schools and secondary modern schools. Grammar schools were very academically oriented and prepared students for higher education. Secondary technical and modern schools offered a more practical curriculum that prepared students for work.

At the end of elementary school—usually at age 11 students would take a written examination called Eleven Plus, which consisted of three parts: arithmetic, writing and general problem solving. Test results were used to place students in the type of school most suited to their abilities.

Grammar schools were the most highly regarded, but places were limited and varied by region and by sex. Socially

advantaged and academically gifted students secured a spot, while most others had to attend other secondary schools. Because of a lack of funding, there were very few technical schools, so around 70 per cent of students had no choice but to attend secondary modern schools.

Eventually the selective system was replaced by the comprehensive system in most areas of the United Kingdom. Comprehensive secondary schools, as opposed to selective schools, were open to students of all abilities. Scotland moved to a universal comprehensive system in 1965, while England and Wales introduced a mostly comprehensive system during the next decade. Northern Ireland has retained the selective system, but it is due to end there in 2008.

The Education Reform Act of 1988, considered by some to be the most significant education legislation since 1944, introduced a national curriculum for students aged 5 to 16, introducing four "key stages" of education. The Act also introduced national tests at the end of each of the first three key stages.

NATIONAL CURRICULUM: FOUR KEY STAGES OF EDUCATION

	16 15				Key Stage 4: From age 15 to age 16
	14			Key Stage 3:	
	13			From age 12	
	12			to age 14	
	11				
	10		Key Stage 2: From age 8 to		
AGE	9		age 11		
_	8				
	7				
	6				
	5	Key Stage 1: From the start			
	4	of school to			
	3	age 7			
	2				
	1				
KEYS STAGES OF EDUCATION					

During the late 1990s and early 2000s government encouraged the private sector to become more involved in education by contributing to the development of a new type of school in disadvantaged areas. These privately sponsored "specialist schools" and "city academies" adapted curriculum to focus on one or more areas such as the arts, science, computing, business, engineering or technology. During the same time, government allowed elementary schools to opt out of the national curriculum and develop their own, enabling them to better respond to local needs.

Education remains a priority for the British government, and changes continue in response to the perceived strengths and shortcomings of the system and to the evolving needs of the economy.

HIGHER EDUCATION, POST-1944

After the end of the war and the provision of free secondary education in the 1944 Act, the number of students prepared for higher education grew tremendously. At the same time, the needs of business and industry were changing and the United Kingdom needed to adapt to remain competitive in the international economy. British higher education, which had until then been very exclusive and highly selective academically, had to respond to those needs and accommodate the expanding pool of potential students.

Following recommendations from the Robbins Report (1963) and the *Plan for Polytechnics and Other Colleges* (1966), the government increased the number of places in higher education by creating a "binary system" of independent and public higher education institutions. First, existing Colleges of Advanced Technology were converted into universities, expanding the independent sector. Then, on the public side, the government created 30 polytechnics by merging colleges of technology, commerce, art and education.

The polytechnics were intended to address local educational needs and offer courses of a more vocational nature. They received funding for teaching only, and not for research. The growth strategy worked. By 1980 the number of students enrolled in higher education was more than triple the 1950 number.

The Open University, founded in 1969, also contributed to increased access to higher education by admitting students without specific entry requirements. It offered distance education in a wide range of subjects through

radio, television, video, course texts and local tutors. The OU was the first university in the United Kingdom to offer part-time education.

An important new phase in higher education started with the Further and Higher Education Act of 1992. Prior to this there were fewer than 50 universities in the United Kingdom. With the passing of the 1992 Act the distinction between polytechnics and universities was erased and over 40 polytechnics were upgraded to university status. These and other new universities focused mainly on teaching.

HIGHER EDUCATION, LATE 1960S TO 1992 (POLYTECHNICS)

Prior to the Further and Higher Education Act of 1992, higher education institutions included polytechnics. Created in the late 1960s to expand the higher education system and offer more opportunities for higher education, polytechnics were formed from the amalgamation of colleges and other higher education institutions. They offered higher and further education programs, often professionally oriented, to meet the needs of business and industry. These programs covered the full spectrum of higher education qualifications, including:

- certificates
- diplomas
- bachelor's degrees
- master's degrees
- doctorates

The polytechnics were converted into universities with the Further and Higher Education Act of 1992.

TECHNICAL AND VOCATIONAL EDUCATION

Formal vocational education can be traced back as early as the Middle Ages, when a formal system of apprenticeship was established in the trade guilds. Mechanics' institutes, providing basic skills in reading, writing and arithmetic to working people, were founded toward the end of the 18th century. By the mid-1850s more than 700 such institutes existed. The Royal Society of Arts and the City and Guilds of London Institute became the main examining bodies for technical and vocational education.

The Technical Instruction Act of 1889 allowed education authorities to raise taxes for technical schools, spurring more growth in this area. Government Training Centres for ex-military personnel, the disabled and the unemployed were set up in 1925. These centres provided upgrading and skills training for people who wanted to start working or change jobs.

Responding to the needs of industry after World War II, Parliament brought in measures to increase the number of skilled men and women. Local education authorities were given the responsibility to ensure there were a sufficient number of further education provisions in their area, and employers were required to pay taxes for the development of training opportunities and grants.

The next major advances in vocational training took place in the 1980s. To increase the skills and flexibility of the workforce to compete in a modern international economy, the government brought in a new training initiative that included the following main features:

- a Youth Training Scheme, to provide one year (later increased to two years) of full-time foundation training for unemployed 16-year-olds who had left school
- improved access to technical training by adding vocationally relevant courses to full-time education
- incentives for employers to provide better training for young employees
- recognized standards for all main craft, technical and professional skills

EDUCATION IN THE FOUR CONSTITUENT NATIONS

ENGLAND

From the introduction of organized education in the 5th and 6th centuries, through the establishment of the first universities in the 9th century, England, as the seat of the national government, led the way in education in the British Isles.

English universities

The first university in England—Oxford—dates back as early as 1096. Cambridge, founded by scholars who left Oxford, dates back to 1209. These two universities were much influenced by the Church and their teachings included religion and liberal arts. For several centuries

Oxford and Cambridge were England's only two universities. England's third university, Durham, was founded in 1832.

From the late 19th century to the period before World War II, and upon seeing the successful technological developments in Europe, British industrialists worked to promote scientific and technological research in local colleges and universities. That led to the foundation of "civic" universities such as the University of Birmingham, the University of Bristol, the University of Leeds, the University of Liverpool, the University of Manchester and the University of Sheffield. Older universities also began to give more importance to research around that time.

Several universities were founded in the 1960s following the Robbins Report calling for increased access to higher education. A few decades later, with the Further and Higher Education Act of 1992, several more polytechnics and colleges were granted university status by the government.

England also houses the Open University, established in the late 1960s. It is the only UK university that focuses solely on distance education.

WALES

The education history of Wales is the one that most closely follows that of England. However, the two education systems maintained a degree of independence, especially before the Education Act of 1944.

The first British education act concerning Wales alone was the Welsh Intermediate Act of 1889. This act was important in that it authorized public funding for intermediate (secondary) education through county schools, administered by the newly created county councils. Wales thus established a national system of secondary education before such a system was implemented in England.

The 1944 Act, by bringing control of Welsh and English education under one minister based in London, effectively erased most educational dissimilarities between the countries for the next few decades. Two characteristics, however, continued to distinguish the Welsh education system from the English one during that period: Welshlanguage schools (where Welsh was used as the medium of instruction) and a universal comprehensive system.

In the late 1980s and 1990s Welsh education policies began once again to move away from those of England. First, the Education Reform Act of 1988 recognized Wales' distinctiveness and autonomy. The trend toward increased regionalization in education policies was strengthened by the 1999 creation of the National Assembly for Wales, now responsible for education in that country (Gearon, 2002; Phillips, 2000).

Welsh universities

Wales' first university, the University of Wales, was created in 1893 from the union of three existing university colleges:

- the University College of Wales in Aberystwyth (1872)
- the University College of South Wales and Monmouthshire (1883, became the University College of Cardiff in 1972)
- the University College of North Wales in Bangor (1884)

Until that time, students graduating from one of the university colleges received their diplomas from the University of London. Other institutes joined the University of Wales over the years.

The Polytechnic of Wales, founded in 1913, became the University of Glamorgan in 1992. A merger between the University College of Cardiff and the University of Wales College of Medicine led to the creation of Cardiff University in 2004.

SCOTLAND

Scotland has a long history of organized education. As in the rest of the United Kingdom, churches established the first schools. In the 15th century the Protestant reformer John Knox promoted the idea of having a school in every parish. And by the 16th century, towns as well as churches were founding schools throughout the country.

Scottish Parliament took an active role in education in the 17th century, passing several acts encouraging the building of schools. The final act of that series, passed in 1696, resulted in what is widely considered the world's first national education act. It provided for a school in every parish and a fixed salary for teachers.

The regional government's involvement in education—which ended in 1707, when Scotland merged into the United Kingdom—did not resume until the 19th century.

The Education (Scotland) Act of 1872 was the next major government intervention in education. The Act introduced:

- a new school building program to make education available to the general population
- compulsory education for children between the ages of 5 and 13
- · standards for teacher training

Shortly thereafter, the Scottish Parliament brought in free primary education (1890) and raised the school leaving age to 14 (1901).

In 1918 the Scottish government made secondary school free for all children in either junior or senior secondary schools. Only senior secondary school education led to the leaving certificate that was required to enter university. The junior secondary, or "Higher Grade" schools, offered a three-year course but no certification.

The selective system (selection at age 12) came to an end in 1965, and the move to a comprehensive system was completed by the 1970s. The school leaving age was set to 16 in 1972.

Scottish Universities

Four of Scotland's universities, founded in the 15th and 16th centuries, were among the first in the United Kingdom.

SCOTLAND'S FIRST UNIVERSITIES (KNOWN AS "THE FOUR ANCIENT SCOTTISH UNIVERSITIES")

- University of St. Andrews
- University of Glasgow
- University of Aberdeen
- . University of Edinburgh

Universities established in the 20th century include:

- Strathclyde, Heriot-Watt, Stirling and Dundee (between 1964 and 1967)
- Napier, Paisley, Robert Gordon and Glasgow Caledonian (1992)
- University of Abertay Dundee (1994)

NORTHERN IRELAND

Close proximity and political ties with the Republic of Ireland have played an important role in the education history of Northern Ireland. Whereas other parts of the United Kingdom had moved to increase government control of education and decrease the influence of churches, that wasn't the case in Ireland, where most schools were denominational.

When Northern Ireland separated from Ireland in 1920 it quickly established its own education administration within the United Kingdom, but the denominational school system continued. In the years that followed partition most Protestant schools transferred administrative control to the government and thus became the "public" schools, whereas the Catholic schools remained under the control of the Roman Catholic Church.

The Ministry of Education of Northern Ireland became responsible for all public education (except the universities) in 1921. In 1923 the first education act of Northern Ireland created a segregated, two-tier system of education:

- controlled (Protestant) schools
- voluntary (Catholic) schools

Over the years, the segregated system of education has caused much acrimony between Protestants and Catholics in Northern Ireland. Funding inequalities and questions over religious teaching have fuelled the cultural divide between the two groups.

Following England's Butler Act (1944) the Northern Ireland Parliament passed the Education Act of 1947. This act:

- reduced funding inequalities between the controlled and voluntary sectors
- made education compulsory for children up to age 15
- introduced selection at age 11 to determine what type of secondary school students would attend
- created grants for third-level education, making universities accessible to more people

During the 1970s a group of parents started a movement promoting the idea of integrated education where Protestant and Catholic children would be educated together. The first integrated school, Lagan College, opened in 1981. Several others followed. By the end of the decade integrated schools were receiving full funding from government (Phillips, 2000).

Northern Ireland universities

Queen's University, founded in Belfast in 1845, is Northern Ireland's oldest university and the ninth oldest in the United Kingdom. Two universities later became colleges of Queen's University:

- Saint Mary's University College—founded in 1900, affiliated with Queen's University later in the 20th century
- Stranmillis University College—founded in 1922, affiliated with Queen's University in 1998

The University of Ulster was formed in 1984 from the merger of Ulster Polytechnic and the New University of Ulster.

School Education

School education in the United Kingdom is divided into primary education and secondary education. In England, Scotland and Wales, education is compulsory from age 5 to age 16. In Northern Ireland, education is compulsory from age 4 to age 16.

SCHOOL EDUCATION IN ENGLAND, WALES AND NORTHERN IRELAND

The education systems of England, Wales and Northern Ireland share a similar structure. Maintained or state (publicly funded) schools offer:

- optional pre-primary/preschool education for children between the ages of 3 and 5
- compulsory primary education from age 5 to age 11 (or ages 4 to 11 in Northern Ireland)
- compulsory secondary education from ages 11 to 16
- optional secondary or further education from ages 16 to 18

Independent (private) schools generally follow a similar structure, but may use the terms "pre-preparatory" to refer to pre-primary/preschool education and "preparatory" to refer to primary education. It is useful to note that the British commonly use the term "public school" to refer to private schools.

The compulsory part of education is divided into four key stages (see Table 2). Key Stage 1 covers the first two years of primary school, when students are normally aged 5 to 7. Key Stage 2, the second and last stage of primary schooling, is for children aged 7 to 11.

TABLE 2. STRUCTURE OF SCHOOL EDUCATION IN ENGLAND, WALES AND NORTHERN IRELAND

YEARS OF SCHOOLING	AGE GROUP	EDUCATION STAGE	LEVEL OF EDUCATION	
13	16 to 18	Sixth Form	Further Education	
12	10 10 10	SIXUI FUIIII		
11	14 to 16	. 10 Kon Chana A	Secondary Education	
10	14 10 10	Key Stage 4		
9				
8	11 to 14	Key Stage 3		
7				
6				
5	7 to 11	to 11 Kou Stage 2		
4	7 10 11	Key Stage 2	Primary education (called preparatory	
3			education in some private schools)	
2	E to 7 You Chara 1			
1	5 to 7	Key Stage 1		
Nursery School	3 to 5	Foundation Stage	Pre-primary education (called pre- preparatory education in some private schools)	

Compulsory education

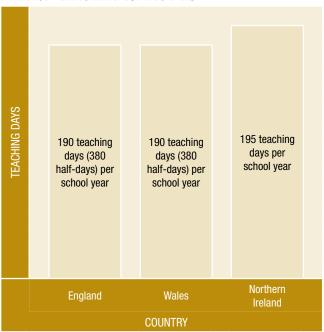
Note: There is one additional year of primary education in Northern Ireland where children start school at the age of 4 bringing the number of years of compulsory education to 12.

Key Stage 3 is the first part of secondary school. Students usually start Key Stage 3 at age 11 and complete it by age 14. Key Stage 4, for students aged 14 to 16, is the last part of compulsory education. At the end of Key Stage 4 students can stay in school or transfer to a further education college to take additional courses that lead to employment or higher education.

SCHOOL YEAR

The school year varies by school and by region, but generally starts between the middle of August and the beginning of September and lasts until between the end of June and the end of July. The year is usually divided into three terms: Autumn, Spring and Summer. Each term includes a week of holiday around mid-term. A two-week holiday at Christmas and Easter separates the Autumn and Spring terms and the Spring and Summer terms. The Summer holiday, which separates school years, is usually one and a half to two months in duration. Some schools have a six-term year, with two terms before Christmas and four terms after. Regardless of the format or exact dates of the school year, schools must provide a minimum number of teaching days.

MINIMUM ANNUAL TEACHING DAYS



Hours of instruction

The number of teaching hours is not legislated, so it varies by school and by region. However, central government guidelines are available to help schools plan their schedules. The recommended minimum number of teaching hours for each key stage varies from 21 hours per week in Key Stage 1 to 25 hours per week in Key Stage 4 (see Table 3). Those recommendations amount to yearly instruction hours that range from 798 in Key Stage 1 to 950 in Key Stage 4.

Alberta offers:

- 950 hours of instruction per year in grades 1 through 9
- 1,000 hours per year in grades 10 through 12

TABLE 3. RECOMMENDED MINIMUM NUMBER OF TEACHING HOURS FOR EACH KEY STAGE

KEY STAGE	YEARS	WEEKLY HOURS OF INSTRUCTION	YEARLY HOURS OF INSTRUCTION
Key Stage 1	1 and 2	21.0 hours	798
Key Stage 2	3–6	23.5 hours	893
Key Stage 3	7–9	24.0 hours	912
Key Stage 4	10 and 11	25.0 hours	950

ADMINISTRATION

Government bodies in each region are responsible for the administration of school education in their respective regions. They are:

- the Department for Education and Skills, in England
- the Department of Education, Lifelong Learning and Skills, in Wales
- the Department of Education of Northern Ireland, in Northern Ireland

School governance is shared between local and national governments and varies from region to region.

SOME OF THE PARTIES INVOLVED IN EDUCATION ADMINISTRATION:		
• local education authorities	 boards of governors 	
education and library boards	 head teachers 	
• councils		

FUNDING

There are two main types of schools, based on funding:

- maintained (state) schools
- independent (private) schools

Maintained schools (called "controlled schools" in Northern Ireland) are comparable to public schools in Canada. They receive public funding through local education authorities in England and Wales, and education and library boards in Northern Ireland. Over 90 per cent of students in the United Kingdom attend maintained schools (Foreign & Commonwealth Office, 2002).

Independent schools, commonly referred to as "public" schools, are funded and administered by private organizations and are often religiously affiliated. They usually charge fees to students who attend.

In Northern Ireland, independent schools include controlled schools, which are Catholic primary and secondary schools managed by the Council for Catholic Maintained Schools. Voluntary schools (Catholic grammar schools) and integrated schools (attended by Protestant and Catholic students together) are managed by their boards of governors.

Independent schools usually receive some form of government funding in addition to private funding.

CURRICULUM

Maintained primary and secondary schools in England, Wales and Northern Ireland have followed a compulsory national curriculum since it was introduced in 1988. Independent schools are not required to adhere to any set curriculum. However, the goal of schooling remains the same in both cases: preparing students for examinations leading to admission into further or higher education (that is, the General Certificate of Secondary Education, described later in this profile).

England

In England, the Qualifications and Curriculum Authority (QCA), a non-governmental public agency sponsored by the Department for Education and Skills, develops and reviews curriculum, which includes 12 main subjects taken over the course of the four key stages of education (see Table 4). English, mathematics and science are the three core subjects, while the others are considered non-core, foundation subjects.

TABLE 4. COMPULSORY NATIONAL CURRICULUM FOR ENGLAND

KEY STAGES	1	2	3	4
YEARS OF SCHOOLING	1–2	3–6	7–9	10–11
English	*	*	*	*
Mathematics	*	*	*	*
Science	*	*	*	*
Design and Technology	*	*	*	
Information and Communication Technology (ICT)	*	*	*	*
History	*	*	*	
Geography	*	*	*	
Modern Foreign Languages			*	
Art and Design	*	*	*	
Music	*	*	*	
Physical Education	*	*	*	*
Citizenship			*	*

Department for Education and Skills. (Retrieved April 2006 from www.nc.uk.net/nc_resources/html/ks3and4.shtml)

As shown in Table 4, Key Stage 4 has fewer required subjects, giving students more flexibility and choice in the subjects they choose to study. Schools can therefore offer many optional courses in addition to national curriculum subjects, including academic, vocational and technical courses. Students choose which courses they take based on their abilities, interests and the path they intend to follow once they leave secondary education. For example, students who plan to go to university may choose different courses than students who plan to go to a technical college or to enter the work force immediately.

In addition to the national curriculum, schools must offer these other statutory subjects:

- religious education in all key stages (parents may opt out)
- · careers education in Key Stages 3 and 4
- sex education in Key Stages 3 and 4
- work-related learning in Key Stage 4
- personal, social and health education in all key stages (non-statutory)

There are no statutory hours of instruction for each subject. However, government guidance is available in the form of "starting points" timetables for Key Stages 1 to 3. These timetables allocate more time for the teaching of English, mathematics and science than for other subjects. Time is also left available for schools to teach other subjects or add more time to one or more curriculum subjects.

The curriculum is under review in England, especially for students aged 14 to 19. Several changes are planned over the next few years.

Wales

The Qualifications, Curriculum and Assessment Authority (ACCAC) develops the Welsh curriculum. It is very similar to that of England, with a few exceptions:

- Welsh is one of the core subjects, along with English, mathematics and science. It is taught as a first language in Welsh-medium schools and as a second language in English-medium schools.
- The teaching of English is not statutory at Key Stage 1.
- Key Stage 4 only has five compulsory national curriculum subjects (English, Welsh, mathematics, science and physical education), leaving more room for optional courses and individualized learning.

Wales is presently conducting a review of the curriculum based on information presented in *The Learning Country* (The National Assembly for Wales, 2001). Reforms will continue over the coming years.

Northern Ireland

The Council for the Curriculum, Examinations and Assessment (CCEA) advises the government on the development of the curriculum in Northern Ireland. The curriculum is similar to the English one but is organized differently. Rather than being composed of compulsory subjects, it consists of seven compulsory areas of study and six cross-curricular themes (see Table 5).

Students must take at least one subject in each area of study in each key stage. The only exception is language studies, which is only compulsory in secondary education (Key Stages 3 and 4). In addition to the compulsory curriculum, there is considerable room for schools to offer additional courses.

TABLE 5. NORTHERN IRELAND CURRICULUM

COMPULSORY AREAS OF STUDY	CROSS-CURRICULAR THEMES
Religious Education	Education for Mutual Understanding
• English	Cultural Heritage
Mathematics	Health Education
Science and Technology (including design)	• Economic Awareness (at secondary level only)
 The Environment and Society (history, geography, business studies, economics, political studies, home economics, and social and environmental studies) 	Careers Education (at secondary level only)
• Creative and Expressive Studies (physical education, art and design, music)	
• Languages Studies (Irish, French, German, Italian, Spanish) (at secondary level only)	

Religious education is compulsory but, as in England and Wales, parents may withdraw their children from those classes. Sex education, though not a separate subject in the curriculum, is taught through science and as part of the health education theme. Irish language is an additional compulsory subject in Irish language schools throughout elementary and secondary levels of education.

The cross-curricular themes are not subjects on their own, but topics taught through the compulsory subjects. Two of those themes, education for mutual understanding and cultural awareness, are peculiar to Northern Ireland's circumstances. Their objective is to improve understanding and foster mutual respect between the Catholic and Protestant cultures.

As elsewhere in the United Kingdom the curriculum is currently under review in Northern Ireland. The revised curriculum is currently being phased in, and the government plans to have a new Curriculum Entitlement Framework in place by 2009.

PRE-PRIMARY/PRESCHOOL EDUCATION (FOUNDATION STAGE)

Pre-primary/preschool education is not compulsory anywhere in the United Kingdom, but many children participate in some form of organized early education from the age of 3 or younger until they reach elementary school age. Pre-primary education is offered in a variety of settings, including public nursery schools, pre-primary, nursery or pre-preparatory classes in primary schools, and privately run playgroups.

England, Wales and Northern Ireland promote similar areas of learning for preschool education either through a curriculum or through curricular guidance. These include:

- personal, social and emotional development
- · communication, language and literacy
- mathematical development
- knowledge and understanding of the world and the environment
- physical development
- creative/aesthetic development

ELEMENTARY EDUCATION (KEY STAGES I AND 2)

Children generally start elementary education—called primary school in the United Kingdom—at age 5 (except in Northern Ireland where they start at age 4). There are three main types of primary schools:

- infant (ages 5 to 7)
- junior (ages 7 to 11)
- combined infant and junior (ages 5 to 11)

The combined type is the most common.

All primary schools in England, Wales and Northern Ireland follow a prescribed national curriculum (see Table 4, page 15), but each school is responsible for its delivery.

SECONDARY EDUCATION (KEY STAGES 3 AND 4)

Students enter secondary education after the completion of primary school, usually at age 11. Education is mandatory until age 16.

Types of Secondary Schools

There are four main types of secondary schools in England and Wales:

- comprehensive schools—teach a broad curriculum
- grammar schools—usually selective schools that focus more heavily on academic subjects; specifically intended for students who want to pursue university studies
- secondary modern schools—teach a broad but more practical curriculum than comprehensive schools
- city technology colleges—specialize in technological or business-related subjects

About 90 per cent of students attend comprehensive schools, close to 10 per cent attend grammar schools and the balance attend secondary modern schools, city technology colleges or other less common types of schools.

Northern Ireland also has different types of secondary schools, including comprehensive schools with a broad curriculum and grammar schools for academically gifted students. Although all Northern Ireland schools are open to all students regardless of their religion, Protestant and Catholic students often attend separate schools, while a few go to integrated schools.

Secondary Education Qualifications

Students in England, Wales and Northern Ireland have been taking some form of public examination at the end of secondary education since the 1950s. For many years these exams shaped the syllabuses taught in schools. Since 1988 the examinations have been based on the national curriculum. Independent schools that do not follow the national curriculum still prepare their students for secondary school examinations leading to admission into further or higher education.

General Certificate of Secondary Education

At the end of secondary school—normally at age 16 after a total of 11 years of schooling—students in England, Wales and Northern Ireland take the General Certificate of Secondary Education (GCSE) examinations. Introduced in 1986 and administered for the first time in 1988, the GCSE is the public examination replacing the General Certificate of Education Ordinary Level and the Certificate of Secondary Education. The GCE O Level and the CSE are described in more detail further in this section.

GCSE examinations (also referred to simply as GCSEs) are administered at the end of secondary education (Key Stage 4), which corresponds to the end of compulsory education. Although GCSEs are optional, most students take them at the term of their secondary education.

GCSEs are offered in each subject of the national curriculum at Key Stage 4 (English, mathematics, science, information and communication technology, physical education, religious education, careers education, sex education and citizenship) as well as in all optional subjects offered in schools. In total, about 80 GCSEs are available.

Students generally take about nine GCSE examinations, but may take more or fewer. GCSEs often include a coursework portion, marked by the teacher, which counts toward the final grade. Coursework can include essays, fieldwork reports, artwork, investigations or making products. The percentage value of the coursework varies from subject to subject but is usually between 20 and 40 per cent. Coursework for more practical subjects, such as art or information and communication technology, tends to represent a greater percentage of that subject's total score.

GCSE examinations are offered in different tiers for students of different abilities. Until recently most subjects

had three tiers: Foundation, Intermediate and Higher. Mathematics is now the only subject with three tiers, but that is being reduced to two tiers as of 2006. Currently the majority of subjects have only two tiers (Foundation and Higher), but a few have only one.

Teachers decide which tier a student will enter for each subject, based on the student's classroom performance. The Higher tier examination is aimed at students performing at the level of grades A* (exceptional performance) to D and the Foundation tier at students in the C to G grade range. An overlap between tiers offers some protection against students being placed in the wrong tier or performing better or worse than expected on the exam.

The lowest grade a student can achieve by passing the Higher tier examination is D, and the highest grade awarded at the Foundation tier is C. Therefore, a student sitting a Foundation level exam cannot achieve a grade of A. Grades on GCSEs range from A* to G. Failure to attain the minimum grade in any tier results in a U grade.

TABLE 6. GCSE GRADING SCALE

GRADE	CORRESPONDING TIER
A*	
Α	
В	Higher Tier
С	
D	(Tiers Overlap)
E	
F	Foundation Tier
G	
U	Unclassified

Note: The examination tier is not indicated on the certificate.

In addition to normal GCSE courses, GCSE short courses are offered in certain subjects. These are equivalent to, and worth, half of a normal GCSE course in duration and content. On the certificate, short courses are identified as such in their titles.

As well, double award GCSEs, which count as two normal GCSEs and lead to double grades, are available in some subjects (such as science). On certificates, double awards are recorded by listing the grade achieved twice (for example, AA, CC or GG) or by listing the subject and grade twice, on separate rows.

Secondary Education Qualifications (Pre-1988)

The two precursors to the GCSE were the General Certificate of Education Ordinary Level and the Certificate of Secondary Education.

First introduced in 1951, GCE O Level examinations were originally intended for the top 20 per cent of students by ability, usually those attending grammar and independent schools. At that time the majority of students attended secondary modern schools and did not receive any formal qualification upon leaving school.

The CSE was introduced in 1965 to provide examinations for a wider range of abilities. It offered a more skills-based syllabus to students who were less academically inclined. The CSE was graded on a scale of 1 to 5, where Grade 1 was generally compared to the GCE O Level.

Both the GCE O Level and the CSE were replaced by the GCSE in 1986 (with the first GCSE examinations in 1988). However, GCE O Levels are still offered in many parts of the world through British awarding bodies.

International General Certificate of Secondary Education

Overseas students can take courses toward the International General Certificate of Secondary Education. The IGCSE is offered in over 100 countries around the world. It is recognized by universities in the United Kingdom and elsewhere as being equivalent to the GCSE.

The IGCSE curriculum provides both practical experience and theoretical knowledge. Because it is not based on the national curriculum and may be adapted to the local context, it is suitable for teaching in many different countries. Mostly taken by international students, the IGCSE is also open to students studying in independent schools in the United Kingdom.

The IGCSE offers more than 60 subjects in five curricular areas:

- languages
- humanities
- social sciences
- mathematics
- creative, technical and vocational

Courses are available for different levels of ability, including students whose first language is other than English. The courses are recognized internationally by universities and employers. Developed by the University of Cambridge International Examinations in 1988, IGCSEs are administered through two awarding bodies: Oxford, Cambridge and RSA Examinations and the Edexcel Foundation (see Awarding bodies, page 21).

Vocational Qualifications

In addition to general (academic) courses, students can study vocational subjects at Key Stage 4 and beyond. Vocational courses are usually offered by secondary schools and further education colleges.

Introduced in 2002, GCSEs in vocational subjects typically count as double awards and are considered equivalent to two GCSEs. In practice they normally require twice as much time as GCSEs to complete.

GCSE AVAILABILITY IN VOCATIONAL SUBJECTS:		
applied art and design	• health and social care	
• applied business	• leisure and tourism	
 applied information and communication technology 	manufacturing	
applied science	 construction and the built environment (in pilot phase) 	
• engineering		

In the past, vocational courses at this level included General National Vocational Qualification courses, but these are being phased out and are to be completely withdrawn by October 2007. Part One GNVQs have already been replaced by GCSEs in vocational subjects.

FURTHER EDUCATION (SIXTH FORM)

Several options are available to students beyond the age of compulsory education, including academic, vocational and professional education.

Advanced Level Qualifications

After completing the GCSE examinations, students in England, Wales and Northern Ireland may continue their education by taking Advanced General Certificate of Education (GCE A Level) courses and/or other Advanced Level qualifications, through their secondary school, at a Sixth Form college or at a further education college.

Advanced General Certificate of Education (A Levels, AS and A2)

GCE A Levels, also called simply GCEs or A Levels, are considered the main route to higher education. These two-year courses are normally taken as a progression from GCSE courses. However, students may be able to take an A Level without having taken the corresponding GCSE, as some subjects (law, for instance) are not offered at the GCSE level. GCE A Levels are available in over 70 subjects.

A Levels are divided into two equal parts: AS and A2. The first year of A Level study leads to the Advanced Subsidiary (AS) level qualification. Most students take four or five AS courses. These represent half of what is needed for a full A Level. AS courses cover the less demanding part of A Levels. The second year, students may take additional AS courses in other subjects, or they may specialize in three or four of these subjects at A Level.

The AS is upgraded to a full A Level by continuing to study the same subject at a more in-depth level for another year. This second part of the A Level, referred to as A2, covers the more demanding part of A Level courses. Like the AS, the A2 is worth half of a full A Level. However, unlike the AS, the A2 is not a qualification on its own, but because a student must earn the AS before proceeding to the A2 in the same subject, passing an A2 automatically results in an A Level qualification.

TABLE 7. STRUCTURE OF A LEVELS

FULL A LEVEL					
	AS			A2	
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
			_		
-		→	•		→
50 % of A Level		50	0% of A Leve	l	

As shown in Table 7, AS, A2 and A Levels are broken down into units. The AS and A2 each contain three units, adding up to a total of six units for the full A Level.

Prior to 2000, AS levels were known as Advanced Supplementary (rather than Advanced Subsidiary) levels. They were considered an alternative to A Levels rather than a part of full A Levels as the new AS levels are today. The older AS levels covered half of the content of full A Levels while remaining at the same academic level. Completion of two Advanced Supplementary levels was considered equivalent to the completion of one A Level.

Assessment of A Levels is based on a combination of coursework (usually around 30 per cent of the grade) and examinations (usually 70 per cent of the total grade). Some courses also include practical tests. Teachers assess coursework internally (subject to external moderation), while one of the awarding bodies administers the examinations externally. Grades on the AS and A2 each make up 50 per cent of the total A Level grade.

GRADING SCALE FOR A LEVELS

Grades are on an ascending scale from A to E, with A being the highest mark and E the minimum passing grade. A grade of N is awarded for narrow failure and U for unclassified.

TABLE 8. GRADING SCALE FOR A LEVELS

GRADE	DESCRIPTION
Α	Highest Mark
В	
C	
D	
E	Pass
N	Narrow Failure
U	Unclassified

Advanced Extension Award

Since 2002 a new qualification—intended for the top 10 per cent of students—has been implemented: the Advanced Extension Award. AEAs replace the old Special Papers. They are available in a range of subjects and are more demanding than A Levels. All AEAs are 100 per cent externally assessed by the awarding bodies. They are graded on a two-point scale, Merit or Distinction, with Distinction being the higher of the two. Students who fail to achieve the Merit level receive the mention ungraded on their certificate.

GCE A Levels in Applied Subjects

Secondary schools and further education colleges also offer A Levels in vocational subjects. This sector is in the midst of reforms, so several different qualifications are available but some are being phased out. The most current qualification, introduced in September 2005, is the GCE A Level in applied subjects. This qualification follows the same AS/A2 structure as the academic GCEs.

FORMAT OF GCE A LEVELS IN APPLIED SUBJECTS:

- ASGCE (3 AS units) = 1 AS level
- ASGCE double award (6 credits) = 2 AS levels
- AGCE (6 units: 3 AS units + 3 A2 units) = 1 A Level
- AGCE double award (12 units: 6 AS units + 6 A2 units) = 2 A Levels; graded AA, BB-EE

Students may take both types of GCE A Levels (academic or applied) during their studies. Grading is the same for A Levels in applied subjects as for A Levels in academic subjects (see Table 8).

The applied GCEs are available in a wide range of subjects (see Table 9), some of them in the same or similar subjects as academic GCEs. The main differences between the two are that GCEs in applied subjects are more work-related and have more internal assessment than the academic GCEs.

TABLE 9. GCEs IN APPLIED SUBJECTS

Art & Design
Business*
Engineering*
Health & Social Care*
Information & Communication Technology*
Leisure & Recreation
Media (Communication & Production)
Performing Arts
Science
Travel & Tourism

*Note: The three-unit qualification is available only in these subjects.

Both types of A Levels are equivalent to Level 3 qualifications in the National Qualifications Framework (described below) and both give access to employment and higher education.

From 2000 to 2004 the GCE A Levels in applied subjects were called Vocational A Levels or Vocational Certificate of Education (VCEs). Teaching of all VCEs is scheduled to end in 2006, with final examination re-sits in January 2007. Before 2000, students took Advanced General National Vocational Qualifications.

ASSESSMENT

National curriculum tests, commonly referred to as SATS (Standard Attainment Tests), were usually administered to students at the end of each key stage of elementary education. However, there has been movement away from "over testing" in some parts of the United Kingdom, and so mandatory testing has been reduced.

England retains the most testing, with compulsory national curriculum tests administered in English and mathematics at the end of Key Stage 1 (age 7), and again at the end of Key Stage 2 (age 11) along with science. The tests are designed and marked externally by the National Assessment Agency (NAA).

In Northern Ireland teachers now assess their own students using assessment units provided by the CCEA. Students in English-medium schools are tested in English and mathematics at the end of Key Stages 1 and 2 (ages 8 and 12). Students in Irish-medium schools are assessed in Irish and mathematics at the end of Key Stage 1, and in Irish, English and mathematics at the end of Key Stage 2.

In Wales there is no longer any statutory national testing at the end of Key Stages 1 and 2. Instead, teachers usually test students internally in the core subjects (English or Welsh, mathematics and science) at the end of each key stage. New skills tests in numeracy, literacy and problem solving are being introduced at age 10 (year 5). These tests are to be mandatory from 2008.

AWARDING BODIES

Independent awarding bodies (also referred to as examining boards) administer the GCSE examinations. There have been considerable changes in the names and numbers of awarding bodies over the years, some merging together and new ones being created.

AWARDING BODIES FOR ENGLAND, WALES AND NORTHERN IRELAND—2006		
IN ENGLAND: IN WALES:		
Assessment and Qualifications Alliance	Welsh Joint Education Committee	
Edexcel Foundation	IN NORTHERN IRELAND:	
Oxford, Cambridge and Royal Society of Arts Examinations	Council for the Curriculum, Examinations and Assessment	

The Joint Council for Qualifications represents all awarding bodies. It does not have any authority over the awarding bodies, but rather provides guidance, helping to establish common standards, policies and practices. The JCQ also ensures examinations are administered in a consistent way and compiles and publishes statistical data on the examinations.

Three regulatory authorities monitor examination standards and the quality to ensure consistency across the system. These are:

- in England—the QCA
- in Wales—the ACCAC
- in Northern Ireland—the CCEA

The awarding agencies coordinate the examination dates every year, scheduling them usually between the end of May and the end of June. The only exceptions are modern foreign languages courses, for which students complete an oral examination. Individual schools coordinate the dates of these examinations with the awarding bodies.

Examination results are usually published in August of the same year. Each awarding body issues a certificate that lists the examinations taken by a student.

Students may request a copy of their marked examinations papers through their school. A process of appeal is in place for students who want to contest their results. Resits are also available for students who want to repeat an examination. Replacement certificates are available directly from the awarding bodies (they also hold the records of previous awarding bodies that no longer exist).

NATIONAL QUALIFICATIONS FRAMEWORK

When they begin Key Stage 4, students in England, Wales and Northern Ireland start working on qualifications that fit in the National Qualifications Framework. The NQF establishes levels against which qualifications are recognized and helps students plan the course of their studies. The framework comprises eight levels. GCSEs correspond to Level 1 and Level 2 in the NQF, while GCE A Levels correspond to Level 3.

TABLE 10. NATIONAL QUALIFICATIONS FRAMEWORK FOR ENGLAND, WALES AND NORTHERN IRELAND

NATIONAL QUALIFICATIONS FRAMEWORK		
NQF Level	Examples of Qualifications	
Level 8		
Level 7		
Level 6		
Level 5		
Level 4		
Level 3	A Levels, Advanced Extension Awards	
Level 2	GCSEs Grades A*-C	
Level 1	GCSEs Grades D-G	
Entry Level		

Table 10 shows the structure of the current NQF and places the GCSE and A Level qualifications in the appropriate levels. Levels 4 to 8 in the framework correspond to higherlevel qualifications earned in further education.

The Qualifications and Curriculum Authority is currently (2006 to 2008) reviewing a new framework for qualifications. The proposed *Framework for Achievement* would recognize a wider range of achievements than does the current framework.

REFORMS IN 14-19 EDUCATION

A major reform of the education system for English students aged 14 to 19 began in 2005 and is set to continue until 2013. Some of the changes already underway include:

- development and trial of functional skills content for English, mathematics, and information and communication technology
- planning for new providers of age 14–19 education
- partnerships between schools, colleges and employers
- consultation on a new curriculum for Key Stage 3
- development of new specialized diplomas

A new *National Entitlement* will be in place by 2013 to ensure all students aged 14 to 19 have access to a variety of learning pathways, either general or applied, and can choose to pursue one of 14 specialized diplomas.

Wales also has a reform program for secondary education called *The Learning Country: Learning Pathways* 14–19 (The National Assembly for Wales, 2002). This program is designed to increase choice and flexibility in secondary

education by creating individualized paths to learning, and partnerships between education providers. A new Welsh baccalaureate qualification, already being piloted in some schools, will also be introduced to all schools by 2007.

Northern Ireland is bringing in a new curriculum entitlement framework by 2009, which will:

- guarantee all students access to a minimum number of courses in Key Stage 4 and post-16 education
- increase curriculum flexibility
- · focus more on skills development
- reduce compulsory components to give students more choice

Those changes will be introduced at various stages over the next few years. It will be necessary to keep up to date with these changes when students begin graduating with the new qualifications. All government bodies responsible for education regularly post updates about the planned reforms.

SCHOOL EDUCATION IN SCOTLAND

Scotland's education system differs in important ways from systems in the rest of the United Kingdom. Traditionally the Scottish system has emphasized breadth across a range of subjects, while the English, Welsh and Northern Irish systems have emphasized greater depth of education over a smaller range of subjects, especially at the secondary education level.

SCHOOL YEAR

The school year in Scotland is the same length as in England and Wales. Here, too, it varies by region, as each education authority sets its own specific term dates and holidays. School usually begins in the second or third week of August and continues until the end of June, with breaks of one or two weeks in October, at Christmas and Easter, and sometimes in February. Regardless of the format or exact dates of the school year, schools must open for teaching 190 days (380 half-days) per school year.

Hours of instruction

As in the rest of the United Kingdom, there is no mandated number of hours of instruction in Scotland, so each school decides how to plan its own schedule. In practice, however, most school pupils receive around 25 hours of instruction per week in primary school and 27 hours per week in secondary school, with approximately 38 weeks of school per year.

ADMINISTRATION

The government body responsible for the administration of school education in Scotland is the Scottish Executive Education Department. Administration is shared between regional and local government bodies, as well as other involved parties, including the schools themselves.

FUNDING

There are two main types of schools, based on funding:

- maintained (publicly funded, also called state schools).
 Maintained schools receive public funding from the education authorities.
- independent (fee-paying, also called private schools).
 Here, as in the rest of the United Kingdom, independent schools are often referred to as "public" schools.

The majority of schools are non-denominational, but by legislation, separate Roman Catholic schools having an element of control by the Roman Catholic Church are provided by the state system.

CURRICULUM

In Scotland there is no national curriculum, but there is broad consensus on what should be taught in schools. That consensus is reflected in the 5–14 National Guidelines, developed by the SEED and Learning and Training Scotland. These guidelines provide advice to school authorities, individual schools and head teachers on curriculum structure, delivery and subject areas.

Guidelines have been issued for a number of curricular areas:

art and design	• drama
• English language	• Gaelic
 health education 	• information and communication technology
• Latin	• mathematics
• modern languages	• music
• people and places	• people in society
•people in the past	• personal and social development
physical education	• religious and moral education
•science	• religious education: Roman Catholic Schools
technology	core skills (last two years of compulsory education)

STRUCTURE OF SCHOOL EDUCATION

In Scotland, as elsewhere in the United Kingdom, nursery school for children aged 3 to 5 is optional. Education is compulsory between the ages of 5 and 16; it includes seven years of primary education, from ages 5 to 12 (P1 to P7), and four years of lower secondary education, from ages 12 to 16 (S1 to S4). At age 16 students may leave school or continue on to upper secondary education (S5 and S6) (see Table 11).

PRE-PRIMARY/PRESCHOOL EDUCATION

Scotland has a *Curriculum Framework for Children 3 to* 5 that is used as a guideline for pre-primary/preschool education. The current curriculum includes the following key objectives:

- · emotional, personal and social development
- communication and language
- knowledge and understanding of the world
- expressive and aesthetic development
- physical development and movement

ELEMENTARY EDUCATION (PI TO P7)

In Scotland children attend elementary (primary) school from age 5 to age 12. Primary schools are the same in Scotland as in the rest of the United Kingdom, and also usually coeducational.

There is no prescribed curriculum in Scotland, but elementary education typically follows the 5–14 National Guidelines.

Assessment

Scotland does not have external national assessments for elementary education. Teachers are responsible for assessing their students in English and mathematics based not on a student's particular age, but on the teacher's judgment that the student has met the requirements of a certain level and is ready to move on to the next level. The government provides guidance to teachers on these assessments through its *National Assessments 5–14*. (See www.aifl-na.net for more information.)

LOWER SECONDARY EDUCATION (SI TO S4)

Scottish students enter secondary education after the completion of elementary education, usually at age 12. Lower secondary education is four years in length. It includes Levels S1 to S4. The completion of lower secondary education marks the end of compulsory education.

Scottish Qualifications Certificate

Since the year 2000 all qualifications obtained throughout secondary education appear on the Scottish Qualifications Certificate. It replaces the Scottish Certificate of Education, the Certificate of Sixth Year Studies and the Record of Education and Training.

TABLE 11. STRUCTURE OF SCHOOL EDUCATION IN SCOTLAND

YEARS OF SCHOOLING	AGE GROUP	LEVEL OF EDUCATION	EDUCATION STAGE	
13	17–18	S6	Upper Secondary Education	
12	16–17	S5		
11	15–16	S4		
10	14–15	S3	Lower Cocondary Education	
9	13–14	S2	Lower Secondary Education	
8	12–13	S1		
7	11–12	P7	Com Elementary Education	
6	10–11	P6		Compulsory education
5	9–10	P5		
4	8–9	P4		
3	7–8	P3		
2	6–7	P2		
1	5–6	P1		
	3–5	Nursery School	Pre-primary Education	

The SQC is a complete, cumulative record of the qualifications earned by a student at school, in college and in the workplace. All Scottish qualifications are included except university degrees. Qualifications achieved prior to 1994 do not appear on the SQC. The SQC is awarded by the SQA.

For students leaving full-time school, qualifications listed on the SQC could include:

- Standard Grades
- National Units and National Courses (Access 1, 2 and 3, Intermediate 1 and 2, Higher and Advanced Higher)
- Scottish Group Awards

National Qualifications

Introduced for teaching in 1999, the Scottish National Qualifications can be compared to GCSEs and GCE A Levels in the rest of the United Kingdom. The first candidates gained their certificates in 2000. National Qualifications include Standard Grades, National Units, National Courses and Scottish Group Awards, each described below.

Standard Grades

Standard Grades were introduced in 1986 to replace Scottish Certificate of Education ordinary grades. They are a type of National Qualifications. Standard Grades are usually taken over two years of study during the third and fourth year of lower secondary school. Most students take seven or eight Standard Grade subjects, including English and mathematics. Standard Grades include coursework, which is marked by the teacher throughout the year, and a final external examination administered by the SQA at the end of the school year.

There are three levels of Standard Grades: Foundation, General and Credit. Students usually take examinations at two levels, either Foundation and General, or General and Credit. This is to ensure that they can achieve the best grade for their level of ability. As with the GCSE tiers, each Standard Grade level allows students to earn a range of grades with the most challenging level (Credit) giving the highest grades. Unlike the GCSE, there is no overlap of grades between Standard Grade levels.

Standard Grades are scored on a reverse 7-point scale, 1 being the highest grade and 7 being awarded to students who have completed the course but failed to achieve at least grade 6. Table 12 indicates the grades associated with each level.

TABLE 12. STANDARD GRADES GRADING SCALE

STANDARD GRADE LEVEL	GRADE RANGE
Credit	1 or 2
General	3 or 4
Foundation	5 or 6
Course completed	7

National Units and National Courses

National Courses are newer and increasingly common National Qualifications that students can take in addition to or instead of Standard Grades. The first three levels of National Courses are Access 1, 2 and 3. Access 1 and 2 are intended for students who need support in their learning, while Access 3 is comparable to the Standard Grade Foundation level. The next two levels of National Courses are Intermediate 1 and 2, which are intended for more advanced students. Intermediate 1 and 2 can be compared to the Standard Grade General and Credit levels respectively. However, although they are equivalent in the qualifications framework, Intermediate 1 and 2 are considered slightly more difficult and a better preparation for further education than Standard Grades. Some schools no longer offer Standard Grades, in favour of National Courses, while other schools still offer both.

TABLE 13. COMPARISON BETWEEN STANDARD GRADES LEVELS AND NATIONAL COURSES LEVELS

STANDARD GRADES	NATIONAL COURSES
Credit	Intermediate 2
General	Intermediate 1
Foundation	Access 3
(no corresponding level)	Access 2
(no corresponding level)	Access 1

National Courses usually consist of three National Units, which are qualifications in their own right. Each National Unit represents about 40 hours of study. Students must successfully complete three National Units in a subject to qualify for a National Course.

All National Units are assessed internally by the teacher. National Courses at Access 1, 2 and 3 levels have no external assessment. However, for Intermediate 1 and 2 National Courses, students must pass a final external assessment administered by the SQA. This external assessment can take the form of an exam, project work or folios completed during the course.

Grades are based on student performance on the external assessment, but students must pass all three National Unit assessments as well as the external assessment to achieve the National Course qualification.

Grading

The grading scale for National Courses goes from A to D, where A is the highest grade and D is a fail. A grade of D represents a mark of 45 to 49 per cent. When a student performs below 45 per cent, no award is given.

TABLE 14. NATIONAL COURSE GRADING SCALE

GRADE	DESCRIPTION
Α	Highest Grade
В	_
C	Pass
D	Fail

Scottish Group Awards

Scottish Group Awards (SGAs) are another type of qualification students may earn in secondary school. They are available at all levels of National Qualifications, from Access 2 onward.

Core Skills

Core Skills, listed in Table 15, are defined as broad, transferable skills that students acquire throughout their education to help them participate fully and responsibly in society. The development of Core Skills is part of all courses in Scotland, from the school curriculum to National Qualifications, vocational qualifications and higher education degrees. They are often embedded into subjects and awarded automatically, but there are also specific Core Skills courses and assignments for students who are missing some.

TABLE 15. CORE SKILLS IN THE SCOTTISH CURRICULUM

Problem solving
Communication
Numeracy
Information technology
Working with others

All candidates who achieved SQA qualifications since 2000 receive a Core Skills profile as part of their formal certification. Candidates gain credit for achieving Core Skills at different levels, and this is recorded on their SQC. This profile can be achieved through Core Skills units done in the workplace or school or college, or acquired through other qualifications that cover skills. (See www.sqa.org.uk for more information.)

UPPER SECONDARY EDUCATION (S5 AND S6)

After they complete their lower secondary education, students can continue for another two years in upper secondary education (S5 and S6).

Highers and Advanced Highers

The Scottish equivalents to the GCE A Levels are the Highers and Advanced Highers. Taken in the fifth and sixth year of secondary school, these courses are the main qualifications required for entry in a university or college. Universities may also consider Advanced Highers for exemption from some first year courses.

MINIMUM ENTRY REQUIREMENTS FOR UNDERGRADUATE PROGRAMS

- undergraduate certificate = one Higher
- undergraduate diploma = two Highers
- undergraduate degree = three Highers

Both Highers and Advanced Highers are National Courses and are part of the SQF at Levels 6 and 7, respectively. They generally compare to GCE A Levels in the rest of the United Kingdom.

Introduced in 1999 as part of the *Higher Still* reforms, Highers replace the previous Scottish Certificate of Education Higher grade courses; Advanced Highers replace the Certificate of Sixth Year Study.

Highers are usually taken following the completion of Standard Grade Credit level courses or Intermediate 2 National Courses. Both Highers and Advanced Highers follow the same structure as other National Courses; that is, they are usually one-year courses made up of three units that must be passed, along with a final external assessment, to receive the qualification. As with all other National Qualifications, Highers and Advanced Highers are recorded on the SQC.

Grading

The grading scale for Highers and Advanced Highers is the same as for the other levels of National Courses (see Table 14, page 26).

SCOTTISH GROUP AWARDS

Scottish Group Awards are larger-scale qualifications that consist of groups of interrelated National Units or courses that form coherent programs of study. For example, the SGA in Science at Higher level requires the completion of 17 National Units (at least nine of which must be at Higher level), three exams at Higher level with a minimum grade of C and a required Core Skill.

SGAs are available at all levels of National Qualifications, from Access 2 to Advanced Higher. They are usually earned during one or, more often, two years of study.

There are two types of SGAs:

- general awards—in which the number of courses, units and core skills are specified, but there are no subject requirements
- named awards—in which there are subject requirements in addition to minimum numbers of courses, units and core skills

SGAs are recorded on the SQC.

HISTORICAL BACKGROUND OF SCOTTISH QUALIFICATIONS/EXAMINATIONS

The Scottish Certificate of Education was the predecessor to today's SQC. The SCE was issued until January 2000, when it was replaced by the SQC.

SCE qualifications were the main qualifications taken by secondary school students at the end of compulsory education. The SCE qualifications included Ordinary Grades, which were later replaced by Standard Grades, and Higher Grades.

Originally intended for the top 30 per cent of students, SCE Ordinary Grades were awarded to the majority of students by 1985. Still, some students left school without any certificate of achievement. The SCE Standard Grades were introduced to be accessible to all students and to give a better preparation for the Higher Grade examinations.

At the end of compulsory education, students who stayed in school could take additional qualifications, including SCE Higher Grades in their fifth year of secondary school and the Certificate of Sixth Year Study in their sixth. The CSYS was recorded on a separate certificate.

In 1999 the Higher Still reforms restructured upper secondary qualifications, keeping the Higher Grade and changing the CSYS to Advanced Higher. Both Highers and Advanced Highers are now National Courses that are part of the broader National Qualifications.

AWARDING BODY

The awarding body for Scotland is the Scottish Qualifications Authority. It was formed in 1997 by the merger of the Scottish Vocational Education Council and the Scottish Examination Board. The SQA's role is to develop, accredit and award all Scottish qualifications other than degrees and professional qualifications. These qualifications include:

- National Qualifications (that is, Standard Grades, National Units and National Courses)
- National Certificates and Diplomas
- Scottish Vocational Qualifications, or SVQs (to be discussed further under Technical and Vocational Education)

SCOTTISH CREDIT AND QUALIFICATIONS FRAMEWORK

All qualifications in Scotland fit into the Scottish Credit and Qualifications Framework, similar to the National Qualifications Framework used in England, Wales and Northern Ireland. The SCQF provides quality assurance for different qualifications and shows how academic, vocational and general qualifications relate to one another. Qualifications in the framework have been assessed by awarding bodies and are designed to be understood by qualification holders, employers, universities and colleges.

TABLE 16. SCOTTISH CREDIT AND Q	DUALIFICATIONS FRAMEWORK (SCO	F)
---------------------------------	----------------------------	-----	----

SCQF LEVEL	NATIONAL QUALIFICATIONS (SQA NATIONAL UNITS, COURSES AND GROUP AWARDS)	HIGHER EDUCATION	svq
12		Doctorates	
11		Master's	SVQ 5
10		Honours degree Graduate Diploma/Certificate	
9		Ordinary degree Graduate Diploma/Certificate	
8		Higher National Diploma in HE	SVQ 4
7	Advanced Higher	Higher Certificate in HE	
6	Higher		SVQ 3
5	Intermediate 2, Credit Standard Grade		SVQ 2
4	Intermediate 1, General Standard Grade		SVQ 1
3	Access 3, Foundation Standard Grade		
2	Access 2		
1	Access 1		

Note: The SVQs in the table give a broad indication of where they fit in the framework, as these awards are normally made up of units at a number of levels.

Important: The levels used in the SCQF serve only to compare the general outcome of an award, but do not indicate that different awards share the same purpose or content.

During their school education, specifically during lower and higher secondary, students can earn qualifications that fit into Levels 1 to 7 of the SCQF.

REFORMS IN 14-19 EDUCATION

Like the rest of the United Kingdom, Scotland is reforming secondary education. The *Lifelong Partners* program is creating partnerships between schools and colleges to offer more choice and opportunities for secondary school students. (See www.scotland.gov.uk/Resource/Doc/36328/0011881.pdf for more information.)

HIGHER EDUCATION

In the United Kingdom, higher education refers to education beyond courses offered in secondary schools and further education colleges. The British government has made some efforts in the recent past to widen access to higher education, including higher vocational, technical and academic studies, and to increase participation rates. This effort has resulted in dramatic growth in the number of higher education students. In 2003, participation rate of 18- to 30-year-olds was around 44 per cent (Department of Education and Skills, 2003). The government has set a

target of 50 per cent, which it considers necessary to meet the demand of the growing economy. The characteristics of the student population have also been changing. The number of mature students (over age 21) in higher education is increasing, and women now outnumber men. However, at present there is still an under-representation of people from less advantaged socio-economic backgrounds (Higher Education Funding Council for England, 2004).

FUNDING

The higher education sector is publicly funded everywhere in the United Kingdom. In three of the regions, funding councils are responsible for ensuring that higher education institutions receive the funding they need for teaching, research and other related activities, as well as infrastructure. The three funding councils are:

- Higher Education Funding Council for England
- Higher Education Funding Council for Wales
- Scottish Funding Council

Northern Ireland does not have a funding council. Instead, the Department for Employment and Learning fulfills that role, with advice provided by the Northern Ireland Higher Education Council.

Tuition and Other Fees

All higher education students in England, Wales and Northern Ireland must now pay some tuition fees. However, young Scottish students taking first degrees in a university in Scotland may be eligible for free tuition. Governments in all four regions have financial assistance programs to help students with the cost of higher education, including tuition fees and living expenses. Depending on their personal circumstances and the degree in which they enrol, students can apply for loans they will repay once they graduate or grants they won't have to repay. Most universities and colleges also offer financial assistance through bursaries.

ADMINISTRATION

The governments of the United Kingdom are responsible for the administration of higher education in their respective countries. The role of the higher education departments is to formulate policy and, in the case of Northern Ireland, administer funding to support education, research and related activities.

HIGHER EDUCATION ADMINISTRATIVE BODIES:

- England: Department for Education and Skills
- · Wales: Department for Lifelong Learning, Employment and Skills
- Northern Ireland: Department for Employment and Learning
- Scotland: Enterprise, Transport and Lifelong Learning Department

HIGHER EDUCATION INSTITUTIONS

The United Kingdom has two main types of higher education institutions:

- universities
- colleges of higher education

Universities are independent, self-governing institutions. All universities in the United Kingdom are recognized bodies, meaning that they have the power to award degrees (explained in more detail below). They decide their own admission criteria, develop courses and decide which degrees they offer. Most universities conduct research as well as teaching.

University colleges and institutes are affiliated with larger universities. Some university colleges and institutes are small and specialize in one area of study, while others are large institutions that offer many different programs. For example, the University of London consists of 20 self-governing colleges and a School of Advanced Study composed of 10 member institutes. The main university awards the degrees at these university colleges and institutes.

Colleges of higher education are another type of HEI. Some colleges of higher education are recognized bodies. Others offer higher education courses that lead to degrees awarded by another recognized body.

Some colleges of further education, institutes, foundations, academies and schools also offer higher education courses leading to degrees awarded by recognized bodies. Some of these, especially colleges of further education, also offer programs leading to qualifications other than higher education qualifications (such as A Levels).

Recognized Bodies and Listed Bodies

The governments of the United Kingdom recognize the degree awarding powers of universities and colleges. These recognized bodies, as they are called, have been granted degree awarding powers by either a Royal Charter (see below) or an Act of Parliament. All universities and some colleges of higher education are recognized bodies. As of 2006 there were over 130 such institutions.

In addition to the recognized bodies, over 550 other institutions offer courses leading to a degree but do not themselves have the power to award degrees. These are known as *listed bodies*. A university or college that has degree awarding powers validates their courses.

Lists of recognized bodies and listed bodies can be found on the website of the Department for Education and Skills (www.dfes.gov.uk/recognisedukdegrees).

Independent Sector

A growing number of independent HEIs are being established in the United Kingdom. They are not required to register with authorities so their exact number is not known, but it is estimated at over 3,000 (British Accreditation Council, June 2006). Independent higher education providers are often not subject to external accreditation, so quality can be difficult to assess.

Independent higher education providers cannot legally offer British qualifications. Only recognized bodies can offer degrees; listed bodies can only offer courses leading to degrees. Independent colleges accredited by the British Accreditation Council may offer courses leading to qualifications from overseas universities and colleges, provided that these, in turn, are recognized in their own countries. In these cases the overseas university or college—not the independent college—is the awarding body.

ROYAL CHARTERS AND THE PRIVY COUNCIL

The older universities (pre-1992) operate under Royal Charters. These charters set out the constitutions and statutes of the universities, detailing how they should operate. Royal Charters were granted to universities by the Sovereign on the advice of the Privy Council, which also approved any amendments made to the charters.

Most newer universities (post-1992) and other HEIs operate under Instruments or Articles of Government. The Privy Council must also approve any changes to these.

Other roles of the Privy Council are to approve the use of the title "university" in an institution's name and to approve degree granting powers of an institution. (See www.privycouncil.org.uk for more information.)

COUNCIL FOR NATIONAL ACADEMIC AWARDS

Prior to the Further and Higher Education Act of 1992, when HEIs included polytechnics, they and other non-university HEIs awarded degrees through the Council for National Academic Awards. Established in 1964, the CNAA was the largest degree-awarding body in the United Kingdom until the Further and Higher Education Act abolished it in 1992. The CNAA approved the courses and degrees of over 140 HEIs. CNAA awards were considered comparable to those of universities and are recognized by professional associations and employers.

When the CNAA was abolished, the Open University Validation Services accepted responsibility for maintaining and providing access to CNAA records. (See www.open. ac.uk/validate for more information.)

BRITISH ACCREDITATION COUNCIL

The British Accreditation Council is the national non-profit organization that provides accreditation to independent higher and further education institutions. As of 2006 the BAC had accredited over 200 independent colleges. (See www.the-bac.org/direct.htm for more information.)

QUALITY ASSURANCE

Several governmental and non-governmental agencies measure quality in the higher education sector. The reports and "league tables" (university and college rankings) produced by these quality assurance agencies provide valuable information to prospective students, employers and others. Funding agencies also use the information to distribute grants to institutions based, for example, on the quality of their research or teaching.

The Quality Assurance Agency, formed in 1997, plays a key role in quality assurance in British higher education.

QUALITY ASSURANCE AGENCY

- conducts external reviews of HEIs throughout the United Kingdom
- performs subject reviews
- helps define academic standards
- · provides guidelines on good practice
- reviews quality of research to recommend funding allocations
- publishes assessment reports on each university and college

QAA reports highlight an institution's strengths and the areas in which it needs improvement, to help students decide which institution to attend. The reports are found on the QAA website (www.qaa.ac.uk/default.asp).

ADDITIONAL HEI QUALITY ASSURANCE RESOURCES

- Teaching Quality Information: The TQI website provides reports and other official information about the quality of teaching in institutions and programs throughout the UK, including statistical data and the results of a national student survey. (www2.tqi.ac.uk/sites/tqi/home/index.cfm)
- Research Assessment Exercise: The RAE, a government-led evaluation of the quality of research in HEIs, is conducted approximately every five years. HEIs receive funding based on the quality of their research. (www.hero.ac.uk/rae/)
- Higher Education Statistical Agency Performance Indicators: Each year, on behalf of the government, HESA publishes data evaluating the performance of HEIs, including their success in widening participation, student retention, learning and teaching outcomes, research output and employment of graduates. (www.hesa.ac.uk/pi)
- Professional body accreditation: Various professional bodies visit relevant HEI departments before awarding their accreditation to programs.
- General league tables: Various media sources, such as The Guardian, The Times, The Daily Telegraph and The Sunday Times, rank the HEIs each year based on specific criteria.

UNIVERSITIES AND COLLEGES ADMISSIONS SERVICE

The Universities and Colleges Admission Service handles almost all applications for full-time, undergraduate higher education courses. Students send one application directly to UCAS, indicating up to six institutions to which they

want to apply. UCAS then forwards the applications to the institutions, which decide whether or not to offer the student a place. Offers can be *unconditional*, meaning the student already meets the institution's requirements and is accepted as is, or *conditional*, indicating the student has to meet additional requirements (for example, achieve a certain result on a future examination) by September 1 in the year of admission.

The deadline for most applications is 15 January (for admission in September of the same year). Applications to the universities of Oxford and Cambridge (students cannot apply to both Oxford and Cambridge on the same application), and for courses in medicine, dentistry and veterinary science/medicine, have an earlier deadline of October 15 (for admission the following September). Applications for some art and design courses are due later, by March 15. Late applications (those received between January 16 and June 30) will be submitted to universities and colleges, but will be considered only if the institutions want to make more offers.

Students who did not secure a place from their original application may use UCAS Extra or Clearing services:

- Extra gives students a chance to look for alternatives to their first six choices if these did not result in an offer made or the acceptance of an offer. Universities and colleges that still have vacancies will post them on the UCAS website, and eligible students can have an application sent directly to them. Extra operates from the middle of March to the end of June.
- Clearing is intended for students who did not receive any offer from their application and did not find a place through Extra, or who missed the first deadline. Through this process UCAS tries to match students to the remaining places in universities and colleges. The Clearing application deadline is the last week of September of each year.

UCAS also operates a points system called the UCAS Tariff. In this system all qualifications considered for admission are awarded a certain number of points that students can use to meet course entry requirements. Some universities and colleges require that students have a minimum number of points to be admitted into their programs. More information on this, as well as the UCAS tariff calculator, can be found on the UCAS website (www.ucas.com/he_staff/curriculumandquals/ucas_tariff/index.html).

UCAS offers a searchable list of all courses available in UCAS universities and colleges, including entry requirements and course descriptions (www.ucas.com/search/index.html). The UCAS website also provides an institution guide, which includes contact details, notes about the institutions and statistics about courses and students (www.ucas.com/instit/index.html).

ADMISSION REQUIREMENTS

As there are no standard admission requirements into higher education, each university or college can set its own criteria. In practice, however, most universities and colleges have fairly similar entrance requirements.

England, Wales and Northern Ireland

Generally, entry into an undergraduate bachelor's degree requires at least two GCE A Levels at grade E (or equivalent) or above, in addition to the appropriate GCSEs. Higher National Diploma (HND) courses usually require only one A Level or the equivalent (such as completion of a national diploma).

Advanced Subsidiary GCEs are also considered for admission by some HEIs, with two AS levels usually counting as one A Level. More prestigious universities or colleges typically have higher requirements. Some institutions also interview potential students to determine admissibility.

The most common qualifications used for admission into undergraduate programs are GCE A Levels taken in a secondary school or in a further education college.

Other qualifications may also be accepted for entry into a program by some HEIs. These can include Business and Technician Education Council (BTEC) and other vocational qualifications, such as National Vocational Qualifications (NVQs), and Scottish Vocational Qualifications (SVQs). Work experience, Access courses and other programs intended for adults wanting to further their education can also be considered as entry requirements into higher education.

Scotland

In Scotland the general minimum admission requirements for undergraduate programs are:

- Undergraduate Certificate = one Higher
- Undergraduate Diploma = two Highers
- Undergraduate Degree = three Highers

Some universities also consider Advanced Highers for exemption from some first-year courses.

Vocational qualifications and work experience may also be considered as entry requirements.

ACADEMIC YEAR

There is no standard academic year in UK HEIs. Most universities, however, have three equal terms per year. The typical year runs from the end of September or the beginning of October until the middle of June. Each term has 10 teaching weeks, for an annual total of 30 teaching weeks. Some institutions also offer a semester format. Notable exceptions include Oxford and Cambridge, both of which are in session for only 24 weeks per academic year, from the second week of October to mid-June. Each term at Oxford and Cambridge has only eight teaching weeks.

GRADING SCALES

Grading scales vary by institution but generally follow a similar structure, especially at the bachelor's degree (honours) level. Table 17 shows a typical grading scale for bachelor's degrees (honours). Generally, achievement of an upper second class (2:1) honours degree is considered the minimum requirement for admission into a graduate program.

TABLE 17. GRADING SCALE FOR BACHELOR'S DEGREES (HONOURS)

CLASS*	PERCENTAGE	DESCRIPTOR
First or 1st	70% and above	Excellent
Upper Second Class or 2:1	60–69%	Very Good
Lower Second Class or 2:2	50–59%	Good
Third or 3rd	44–49%	Fair
Pass	40-43%	Pass
Fail	39% and below	Fail

*Note: Institutions have different ways of expressing the class of their honours degrees, including:

i) spelling it out (First, Second, Third)

TYPES OF STUDY

Full-time and Part-time

Most bachelor's degree programs take three or four years of full-time study to complete. Some degrees, such as law or medicine, take longer. In many cases higher education programs can also be taken part-time over a longer period.

Sandwich Courses

Sandwich degree courses involve a period of work experience or language training "sandwiched" between two or three periods of classroom study. Usually, the work experience or language training is one year in duration and takes place in the workplace, in another university or in a foreign country.

In Alberta, work experience or language training courses are referred to as co-op programs.

Distance and Flexible Learning

Distance learning, also called flexible or open learning, is becoming increasingly common in the United Kingdom, as elsewhere in the world. Many HEIs now offer courses through video, print and online material, permitting students to study from home. Some programs require the student to periodically go to the campus, but others are offered entirely from a distance. These courses are particularly attractive to students who have other commitments (such as stay-at-home parents) or who work full-time.

One notable contributor to distance learning is the Open University. Entirely dedicated to distance learning, the OU offers courses to students in the United Kingdom as well as many other countries within and outside of Europe. The first students started in 1971, and more than 150,000 undergraduate and 30,000 graduate students now participate.

BOLOGNA PROCESS

The United Kingdom is one of the signatory countries of the Bologna Process. Launched in 1999, the Bologna Process aims to establish a common European system of higher education at both undergraduate and graduate levels by 2010. (See the Europe Unit website at www.europeunit. ac.uk/bologna_process for more information.)

ii) Arabic numerals (1, 2:1, 2:2, 3)

iii) Roman numerals (I, II:I, II.II, III)

iv) a combination of the previous (Second Class, Division I, II.1)

With reference to two key elements of the Bologna Process, the UK's position can be summarized as follows:

- Credits. HEI use of credits is common, but not universal. Wales, Scotland and Northern Ireland apply credits more consistently than does England. The United Kingdom bases the number of credits on learning outcomes rather than the number of study hours.
- Diploma Supplement. Some but not all HEIs issue the Diploma Supplement to their students. It is issued free of charge in English or in Welsh (in Wales). All HEIs are being encouraged to offer the Diploma Supplement.

Generally, one academic year in the United Kingdom is equated to 120 credits. In the Bologna Process, one academic year equals 60 Europe Credit Transfer System credits. So one ECTS credit is the equivalent of two UK credits.

HIGHER EDUCATION QUALIFICATIONS

QUALIFICATIONS FRAMEWORKS

In all parts of the United Kingdom, qualifications fit into frameworks that serve as general indicators of the level of education attained. England, Wales and Northern Ireland share their frameworks, while Scotland has its own separate, though very similar, framework. Both are illustrated below.

Qualifications Frameworks for England, Wales and Northern Ireland

England, Wales and Northern Ireland share two qualifications frameworks: one covers all national qualifications, and the other covers higher education qualifications. The frameworks have been put side by side in an effort to compare all qualifications with each other. It is important to note that the levels are used only for general comparison and do not indicate that the qualifications have the same content or outcome.

Scottish Credit and Qualifications Framework

Scotland has a different qualifications framework, called the Scottish Credit and Qualifications Framework. The SCQF includes all qualifications, including higher education qualifications. As for the National Qualifications Framework, it is important to note that the levels are for general comparison purposes only and do not indicate the same content or outcome for qualifications at the same level (see Table 19).

UNDERGRADUATE QUALIFICATIONS

The main undergraduate qualifications in the United Kingdom are:

- Higher National Certificates and Diplomas
- Certificates and Diplomas of Higher Education
- Foundation degrees
- bachelor's degrees (also called first degrees)

Bachelor's degrees are the most common undergraduate qualification.

TABLE 18. NATIONAL QUALIFICATIONS FRAMEWORK FOR ENGLAND, WALES AND NORTHERN IRELAND

NATIONAL QUALIFICATIONS FRAMEWORK		FRAMEWORK FOR HIGHER EDUCATION QUALIFICATION LEVELS (FHEQ)
Original levels	Revised levels	
5 – Level 5 NVQ	8 - Specialist awards	D (doctoral) – Doctorates
	7 – Level 7 Diploma	M (master's) – Master's degrees, postgraduate certificates and diplomas
4 – Level 4 NVQ, Level 4 Diploma, Level 4	6 – Level 6 Diploma	H (honours) – Bachelor's degrees, graduate certificates and diplomas
BTEC HND, Level 4 Certificate	5 – Level 5 BTEC HND	I (intermediate) – Diplomas of higher education and further education, foundation degrees, higher national diplomas
	4 – Level 4 Certificate	C (certificate) – Certificates of higher education
3 – Level 3 Certificate, Level 3 NVQ, A levels		
2 – Level 2 Diploma, Level 2 NVQ, GCSEs Grades A*–C		
1 - Level 1 Certificate, Level 1 NVQ, GCSEs Grades D-G		
Entry – Entry Level Certificate in Adult Literacy		

TABLE 19. SCOTTISH CREDIT AND QUALIFICATIONS FRAMEWORK

SCQF LEVEL (SHE = SCOTTISH HIGHER EDUCATION LEVEL)	NATIONAL QUALIFICATIONS (UNITS, COURSES AND GROUP AWARDS)	HIGHER NATIONAL QUALIFICATIONS	QUALIFICATIONS AWARDED BY HIGHER EDUCATION INSTITUTIONS IN SCOTLAND	SVQs**
12 (SHE D*)			Doctorates	
11 (SHE M*)			Master's/Postgraduate Diploma and Certificate	SVQ 5
10 (SHE H*)			Honours degree	
9 (SHE 3)			Degree	
8 (SHE 2)		Higher National Diploma	Diploma of Higher Education	SVQ 4
7 (SHE 1)	Advanced Higher	Higher National Certificate	Certificate of Higher Education	
6	Higher			SVQ 3
5	Intermediate 2 / Credit Standard Grade			SVQ 2
4	Intermediate 1 / General Standard Grade			SVQ 1
3	Access 3 / Foundation Standard Grade			
2	Access 2			
1	Access 1			

^{*} Labels H, M and D refer to Honours, Master's, and Doctoral and are used consistently across the UK.

Classes are expressed in terms of modules, units or credits, depending on the institution and program.

A search of all available undergraduate courses, including entry requirements and course description, is provided by the UCAS on their website (www.ucas.com).

Higher National Certificates and Diplomas

Higher National Certificates and Diplomas are higher education BTEC qualifications awarded by Edexcel in England, Wales and Northern Ireland. In Scotland, HNCs and HNDs are higher National Qualifications awarded by the Scottish Qualifications Authority.

HNCs are usually one-year programs if studied full-time or two years if part-time. HNDs are usually two-year programs, but some last three years. Both HNCs and HNDs are more vocational and applied in nature. It is useful to note that credit from HNCs and HNDs can be applied toward degrees. Completion of an HNC can give access to the second year of a degree in a related subject, while completion of an HND can give access to the second or third year of a degree.

EXAMPLES OF HNC AND HND QUALIFICATIONS:

- HNC in Applied Science
- . HNC in Business and Marketing
- HNC in Computing
- . HND in Early Childhood Studies
- HND in Sports Science
- HND in Civil Engineering

Certificates of Higher Education

Certificates of Higher Education are generally one year in length and are usually taken as a qualification on their own. However, they may lead to further study.

EXAMPLES OF CERT HE QUALIFICATIONS:

- Cert HE in Business
- Cert HE in Food Science
- Cert HE in Fine Arts with Design
- Cert HE Introduction to Secondary Teaching
- Cert HE in Information Technology and Media

^{**} Provisional: work is continuing to refine the placing of SVQs within the SCQF.

Diplomas of Higher Education

Diplomas of Higher Education are usually two-year courses, similar to a degree but with less content. Some Dip HE programs last three years (such as Dip HE in Nursing). Dip HE sometimes give access to a profession, as in nursing or social work, or can give access to the final year of a full bachelor's degree.

EXAMPLES OF DIP HE QUALIFICATIONS:

- . Dip HE in Nursing
- Dip HE in Business Management
- Dip HE in Midwifery
- Dip HE in Sports Science
- . Dip HE in Education Studies

Foundation Degrees

Introduced in 2001, Foundation degrees are employment-related higher education qualifications. They are developed by employers who also help deliver the programs. Foundation degrees are designed to be accessible to many different kinds of students, from new graduates of further education programs to adults already in the workplace. The degrees are flexible, meaning they can be studied part-time or full-time, online or at work. The duration of a full-time Foundation degree is typically two years, but many students study part-time.

Like bachelor's degrees (see below), Foundation degrees come in two main types: Foundation degrees in Arts (FdA) and Foundation degrees in Science (FdSc). There are also other types of Foundation degrees, such as Foundation degrees in Technology (FdTech) and Foundation degrees in Engineering (FdEng). Over 1,600 Foundation degree courses are already available, with 800 more being developed. At present, Foundation degrees are not offered in Scotland.

Admission requirements for Foundation degrees tend to be more flexible than those for bachelor's degrees. Applicants can use work experience and vocational qualifications for entry into those programs.

Foundation degrees may lead to other higher education qualifications such as professional qualifications or the final year of a related bachelor's degree.

Foundation degrees are considered Level 4 qualifications in the NQF. Most Foundation degrees are offered by universities and other degree granting institutions. In addition, since 2004 Edexcel has also offered BTEC Foundation degrees in the areas of business, computing and engineering.

The popularity of Foundation degrees is growing. When they were introduced in 2001, only 4,000 students were enrolled in these degree programs. By the 2005–06 academic year, 47,000 students (half of whom were part time) were studying for Foundation degrees.

A FEW EXAMPLES OF FOUNDATION DEGREES INCLUDE:

- . FdSc in Civil Engineering
- FdEng in Electrical and Electronic Engineering
- FdA in Culinary Arts
- FdA in Early Years Education
- FdSc in Health and Social Care
- FdA in Mental Health
- · FdSc in Business Information Technology
- FdA in Law
- FdA in History with English

Bachelor's Degrees

The most common category of degree awarded is the bachelor's or first degree. All types of bachelor's degrees, including the Bachelor of Arts (BA) and the Bachelor of Science (BSc), are considered first degrees.

Bachelor's degrees usually take three or sometimes four years of full-time study to complete. The typical course load for a bachelor's degree is between three and six classes per term, with most students taking four or five classes.

The Bachelor of Arts and the Bachelor of Science are the two most common degrees. However, there are other bachelor's degree titles as well, such as the Bachelor of Education (BEd), the Bachelor of Engineering (BEng), the Bachelor of Law (LLB) and others.

Professional bachelor's degrees in architecture, dentistry and veterinary medicine usually take five years, while first degrees in medicine take five or six years. First degrees in medicine carry the title Bachelor of Medicine (MB) or the combined title of Bachelor of Medicine and Bachelor of Surgery (abbreviated MBChB, MBBCh, BMBS, MBBS, BSMS and so on).

TABLE 20. SAMPLE CURRICULUM OF A THREE-YEAR ELECTRONIC ENGINEERING BEng

1st year	Mathematics for Engineers
Eight core courses	Computer Engineering I
	• Linear Circuits & Dynamics
	Analogue Electronic Circuit Analysis & Design
	Electronic Engineering Laboratory I
	Core Transferable Skills
	• Introduction to Logic Design
	• Fundamentals of Communications
2nd year	Further Engineering Mathematics
Eight core courses	Computer Engineering II
	Analogue & Switching Circuit Design
	Microprocessor Systems
	• Telecommunications I
	Electronic Engineering Laboratory II
	Advanced Transferable Skills
	• Signals & Systems
3rd year	Core courses:
Four core courses plus three optional courses	• Project
	Engineering Management
	Communication Systems
	Engineering Physics & Semiconductor Devices
	Options:
	Digital Systems Design
	Wireless & Optical Communication
	• Introduction to Computer Networks
	• Fundamentals of Digital Signal Processing
	• Telecommunications II
	Control Systems or Real-Time Systems

First degrees in engineering are either bachelor's (BEng) or master's (MEng) degrees. Some universities offer a three- or four-year BEng, while others offer only the four- or five-year MEng. Both are normally considered first degrees.

Bachelor's degrees are either honours degrees or ordinary/pass degrees. Honours degrees are studied at a more complex level than ordinary degrees. There are single-subject degrees (single honours), two-subject degrees (joint honours), and two- or three-subject degrees (combined honours).

Honours degrees are divided in four classes (levels of achievement):

- First Class
- Upper Second Class (2:1)
- Lower Second Class (2:2)
- Third Class

Upper Second Class (2:1) is usually considered as the minimum grade for entry into postgraduate studies. Students who do not achieve the minimum standard of an honours degree will be awarded an ordinary/pass degree.

An *aegrotat* degree may be awarded to students who could not complete their final exams because of illness. The honours degree (aegrotat) or ordinary degree (aegrotat) is awarded on the understanding that the student would have passed if they had not been ill.

Scottish Bachelor's Degree

The most common first degree in Scotland is also the bachelor's degree. However, bachelor's degrees in Scotland are different from those in the rest of the United Kingdom. In Scotland all honours degrees require four years of study. The first two years are more general in nature; students study a broad variety of subjects. During the last two years, students specialize in one or two subjects to receive an honours degree. The final year also usually includes a dissertation.

Some universities, especially Scotland's "ancient universities" (Aberdeen, Edinburgh, Glasgow and St. Andrews), call their honours degree a master's degree (MA(Hons)). Elsewhere it is referred to as a bachelor's degree (BA, BEng or BSc(Hons)).

Students also have the option to study for an ordinary or general degree. Unlike in the rest of the United Kingdom, where the ordinary degree is rather uncommon and often considered a "failed" honours degree, the ordinary/general degree is a separate, well-regarded program in Scotland. The ordinary/general degree takes three years to complete when studied full-time. The first two years are similar to those of the honours degree, consisting of a variety of subjects. The final year is another year of general studies. There is no dissertation in the ordinary/general degree.

Like the honours degree, some universities (that is, the "ancient universities") refer to the ordinary/general degree as a master's degree (MA), and others refer to it as a bachelor's degree (BA, BEng, or BSc).

Admission to bachelor's degree programs in Scotland normally requires a minimum of three or four Highers. Alternative routes, such as Access courses, HNCs or HNDs, may also fulfill entry requirements. Relevant HNCs and HNDs will sometimes give access to the first, second or even third year of a degree.

GRADUATE QUALIFICATIONS

Graduate qualifications, referred to as postgraduate qualifications in the United Kingdom, include postgraduate certificates and diplomas, master's degrees and doctoral degrees. Postgraduate courses are usually taken after the completion of an honours degree.

More information on postgraduate courses, including course descriptions and institution information, is available on the *Prospects* website (www.prospects.ac.uk) and on the *Hobsons Postgrad* website (www.postgrad.hobsons.com).

Postgraduate Certificates and Diplomas

Postgraduate Certificates (PG Cert) and Diplomas (PG Dip) usually take six to nine months to complete and are taken following the successful completion of an undergraduate degree (normally a bachelor's degree). They are most often closely related to the subject of the first degree. Postgraduate Certificates and Diplomas may lead to further study (master's degree) or they may represent, by themselves, the professional qualification needed for entry into a particular career.

Postgraduate Bachelor's Degrees

Some HEIs offer postgraduate bachelor's degrees, such as the Bachelor of Philosophy (BPhil), offered in many subjects, and the Bachelor of Architecture (BArch). These programs are taken following the completion of a first bachelor's degree. Note that the BArch is considered a first degree by some institutions, while others award a BA, BSc as a first degree in architecture.

Master's Degrees

Master's degrees generally take at least one year of fulltime study (or two years part-time) to complete. They are taken following the completion of an undergraduate degree (usually an honours bachelor's degree).

Master's degrees are either *taught* or *research* degrees. Taught degrees consist mostly of coursework and include a dissertation, while research degrees require students to conduct original research and produce a thesis, often with oral defence of the thesis.

There are two main types of taught master's degrees:

- Master of Arts (MA), usually in arts, business and social science subjects (although science subjects are sometimes offered as MA degrees)
- Master of Science (MSc), usually offered in science subjects

The typical course load for taught degrees is four or five classes per term, plus completion of a research project and dissertation.

TABLE 21. SAMPLE CURRICULUM FOR AN MSc IN PUBLIC POLICY

1. Three compulsory core courses in the first term (weighted at 37.5% of the program)	Public Policy Formulation
	Public Policy Economics
	Analysis, and Law and Regulation
2. One compulsory core course in the first and second terms (Students must pass this course but the mark does not contribute to the overall final mark for the program.)	Quantitative and Qualitative Research Methods
3. Optional courses (equivalent to 37.5% of the program)	Such as:
	Public Policy Formulation
	Public Policy Economics and Analysis
	Law and Regulation I
	Theories of International Relations
4. Dissertation of no more than 10,000 words (25% of the program)	Topic of the student's choice

Taught master's degrees can have titles other than MA and MSc. At Oxford, for example, master's degrees for subjects in the arts and social studies carry the title of Master of Letters (MLitt). Some universities consider the Master of/by Research (MRe) to be a taught degree. The Master of Business Administration (MBA) is another type of taught master's degree.

It is important to note that some HEIs offer *research MA* and *research MSc degrees*, so it is always useful to verify the nature of the degree at a particular institution.

Research master's degrees usually include the following main types:

- Master of/by Research (MRe), typically offered in science subjects, with at least 60% of content being individual project work
- Master of Philosophy (MPhil), a two-year full-time (or four-year part-time) research degree that can lead to a doctoral degree for able students (the MPhil is usually considered the first part of a research doctorate degree)

Some institutions also offer the MRe degree as a taught degree.

The use of titles varies by institution, so it is always important to verify course descriptions and details using a search tool such as *Prospects* or *Hobsons Postgrad*.

Special case: Oxford and Cambridge universities automatically award MA degrees to graduates of BA degrees a number of years after graduation, upon payment of a nominal fee.

Doctoral Degrees

Doctoral degrees, commonly referred to as PhD or DPhil, are postgraduate degrees requiring at least three years of full-time (or six years part-time) study. Entry requirements for doctoral degrees are typically either a research bachelor's degree (honours, usually First Class or Upper Second Class) or a master's degree. Students who enter with only a bachelor's degree are often enrolled in a two-year research program (sometimes referred to as MPhil) and then proceed to the third year (PhD or DPhil) if deemed capable.

Taught doctoral degrees

- Taught doctoral degrees, sometimes known as professional doctorate degrees, include coursework in their programs and require a thesis of reduced scope.
- The names of these degrees may vary and include such titles as Doctor in Business Administration (DBA), Doctor of Applied Social Research (DASR), Doctor of Education Psychology (DEdPsy), Education Doctorate (EdD) and so on.

Research doctoral degrees

- Research doctoral degrees often require no coursework.
- Research doctoral degrees focus more on original research and require the completion of a longer, more in-depth thesis.

Although most doctoral degrees are research degrees, some taught doctorates are awarded.

HIGHER DOCTORAL DEGREES

Higher doctoral degrees, such as the Doctor of Letters (DLitt), Doctor of Science (DSc) or Doctor of Laws (LLD), are awarded to people who have distinguished themselves academically in their field, usually through research and publication.

PROFESSIONAL QUALIFICATIONS

The wide and varied sector of professional qualifications in the United Kingdom can be very confusing. No standard formula can be applied to gaining access to the various professions. Professional licensing is sometimes governed by law, while in other cases independent associations or societies license their own practitioners. Usually, qualifications are awarded following a board examination or recognition of other examinations (AACRAO, 2006).

There are two main categories of professional qualifications:

- Regulated professional qualifications are regulated by common law or statute in the United Kingdom. Only licensed practitioners are allowed to practise in those professions.
- Professional qualifications are those set out by professional associations, which determine practice requirements and control access to the profession. The degree of control each profession has depends on its reputation and history, where professions with the strongest reputation have the strongest control in deciding who is allowed to practise. One association with strong control over its profession is the Institute of Chartered Accountants in England and Wales.

REGULATED PROFESSIONS INCLUDE:		
• Actuary	Mine Manager	
Advocate (Scotland)	• Nurse	
• Auditor	Ophthalmic Optician	
Barrister (England, Wales, NI)	Patent Agent	
• Chemist	• Pharmacist	
• Dentist	• Solicitor	
Marine Engineer	• Teacher (public schools)	
Medicine	Veterinary Medicine	
Midwife		

Some professional qualifications do not fit into either category: for example, vocational and paraprofessional qualifications.

Most professional associations share a similar organizational structure. There are usually different levels of membership, from student level to full membership level. Some also offer honorary membership to certain individuals with additional education or to long-standing members. Table 22 presents a few examples of titles associated with different professional qualifications.

TABLE 22. EXAMPLES OF TITLES OF PROFESSIONAL QUALIFICATIONS

Associate Member of the Chartered Institute of Marketing	Associate of the Chartered Institute of Bankers
Chartered Accountant	Chartered Manager
Chartered Psychologist	Chartered Town Planner
Fellow of the Geological Society of London	Fellow of the Society of Professional Engineers
Incorporated Engineer	Licentiate of the Royal Academy of Dance
Licentiate of the Textile Institute	Member of the Institution of Electrical Engineers
Member of the Landscape Institute	Professional Engineer

Although professional associations decide their own membership requirements, full membership is usually granted to individuals once they have completed the relevant education requirements (including passing the appropriate examinations), as well as any practical training or employment required by the profession. Sometimes a membership fee must also be paid. In some cases, all or part of the education and examination requirements are waived. For example, an individual with other academic qualifications, membership in another profession or professional experience may be considered for automatic membership in an association.

Some professional associations are granted a Royal Charter by the Privy Council. These chartered associations have a code of professional conduct or standards that their members must follow, and also require that their members have the appropriate professional qualifications and experience, giving them the right to practise. Chartered associations are usually highly regarded.

TABLE 23. EXAMPLES OF PROFESSIONAL ASSOCIATIONS

Association of Accounting Technicians	Association of Chartered Certified Accountants
Association of University Administrators	British Dental Association
British Medical Association	British Psychological Society
Chartered Institute of Linguists	Chartered Institute of Marketing
College of Chiropractors	Engineering Council UK
General Teaching Council for England	Institute of Chartered Accountants in England and Wales
Institute of Leadership & Management	Institute of Scientific and Technical Communicators
Law Society of England and Wales	Royal Institute of British Architects
Royal Society of Chemistry	Society for Editors & Proofreaders

Lists of professional associations can be found on the following websites:

- Higher Education Research Organization: www.hero. ac.uk/sites/hero/uk/reference_and_subject_resources/ groups_and_organisations/professional_bodies3790.cfm
- Professional Associations Research Network: www.parn.org.uk/parn2. cfm?sct=101&content=membership.cfm

Note that these lists are not exhaustive. Professional associations usually maintain their own websites, so an Internet search will usually provide the information needed.

TEACHER EDUCATION

ENGLAND AND WALES

All teachers in maintained schools in England and Wales must have Qualified Teacher Status and be registered with the General Teaching Council for England (www.gtce.org. uk) or the General Teaching Council for Wales (www.gtcw. org.uk), as appropriate. Teachers in independent schools are not required to have QTS, but may be asked by their school to obtain it.

There are different routes to obtaining QTS. The most direct route is through the completion of a Bachelor of Education, an honours degree that takes three or four years of full-time study to complete. BEd graduates receive their teacher training while they are completing their degree. Graduates are awarded QTS.

However, the most common route to QTS is through the completion of a bachelor's degree (such as Bachelor of Arts or Bachelor of Science) in the subject one wishes to teach (for secondary education) or that provides broad general knowledge of curriculum subjects (for elementary education). Teaching students then enrol in a Postgraduate Certificate of Education program or in a School Centred Initial Teacher Training program, both of which lead to the QTS.

Postgraduate Certificate of Education

- The PGCE is offered by universities and colleges and takes one to two years of full-time study to complete.
- The PGCE is primarily aimed at developing teaching skills.

School Centred Initial Teacher Training

- The SCITT is a one-year program where the teacher in-training spends most of the time in the classroom, getting direct experience teaching.
- Some SCITTs also lead to the awarding of the PGCE.

Another way to become a teacher is by completing a Bachelor of Arts or Bachelor of Science with QTS. These honours degree courses incorporate teacher training in their programs and generally take three or four years of full-time study to complete.

Also available are work-based, combination work-based/ academic, and assessment only programs that take into account individual background and experience. More information on these alternative routes can be found on the Training and Development Agency for Schools website (www.tda.gov.uk). (The TDA was known as the Teacher Training Agency prior to 2005.)

NORTHERN IRELAND

Teachers in primary and secondary schools in Northern Ireland are also required to have Initial Teacher Training through a degree. One route is to take a BEd in either primary or secondary education at a university or college. Another route is the one-year PGCE taken following the

completion of an undergraduate degree. Completion of one of these degrees, plus registration with the General Teaching Council for Northern Ireland (www.gtcni.org.uk), gives teachers eligibility to teach in Northern Ireland.

Teachers in further education are not required to have a teaching qualification. However, new further education teachers who do not already have a BEd or a PGCE are required to pass the Postgraduate Certificate in Further and Higher Education, available through some Northern Ireland universities.

SCOTLAND

All school teachers in Scotland must hold a degree accredited by the General Teaching Council for Scotland. These degrees, called Initial Teacher Education programs, are offered by Scottish universities.

For pre-primary/preschool and primary education, teachers must complete one of the following degrees:

- a four-year Bachelor of Education in Primary Education
- a one-year Professional Graduate Diploma in Education (also called a Teaching Certificate in Education) following completion of a four-year bachelor's degree

To teach at the secondary education level, there are three possible routes:

- a four-year Bachelor of Education
- a combined (or concurrent) degree with specialization subject courses, education courses and school experience
- a one-year Professional Graduate Diploma in Education, taken full-time or part-time (this is the most popular way of becoming a secondary school teacher)

All teachers in maintained schools must be registered with the General Teaching Council for Scotland. After successfully completing an initial probationary period (normally one to two years) during which their teaching is monitored, teachers are granted full registration status.

Teachers in independent schools do not have to register with the GTCS, but they may be encouraged to do so by their school.

Technical and Vocational Education

Technical and vocational education plays a large role in British education. The government views that sector as essential to the economy and encourages educational institutions to work with business and industry to provide programs that meet the needs of the growing economy.

For the sake of brevity, the expression *vocational education* will be used throughout this section to mean technical and vocational education.

Vocational education is introduced in secondary education and continues into further and higher education. There is often no clear distinction between general/academic qualifications and vocational qualifications. Both are offered through a wide range of HEIs such as schools, colleges and universities.

REGULATORY AUTHORITIES

There are several agencies involved in the regulation of vocational education:

England, Wales and Northern Ireland: The Qualifications and Curriculum Authority develops the framework for vocational qualifications, and accredits school, college and work-based qualifications (National Vocational Qualifications, General National Vocational Qualifications and Core Skills). QCA is also responsible for quality assurance of the vocational education sector throughout the United Kingdom.

Wales: The ACCAC (Awdurdod Cymwysterau, Cwricwlwm Ac Asesu Cymru/Qualifications, Curriculum and Assessment Authority for Wales) regulates all external qualifications in Wales except NVQs, which fall under the responsibility of the QCA.

Northern Ireland: The Council for the Curriculum, Examinations and Assessment is an independent awarding body in Northern Ireland. CCEA works with the QCA to equate standards in vocational qualifications.

Scotland: The Scottish Qualifications Authority is responsible for all Scottish qualifications other than degrees and professional qualifications. The SQA accredits Scottish Vocational Qualifications (SVQs, Scotland's equivalent to NVQs) and advises the Scottish government on qualifications, including education, training and assessment.

SECTOR SKILLS COUNCILS AND SECTOR SKILLS DEVELOPMENT AGENCY

The sector skills councils are employer-led, independent organizations that are each responsible for one particular sector in the United Kingdom. They are licensed by the Secretary of State for Education and Skills. In 2006 there were 25 SSCs covering about 85 per cent of the workforce.

The Sector Skills Development Agency is responsible for the sectors not covered by the SSCs. The SSDA also monitors the SSCs and provides them with funding and support.

Together, the SSDA and the SSCs ensure that employees have the skills and training required by employers in that sector. They achieve that mainly by:

- developing apprenticeships
- ensuring that qualifications, education and training are relevant to the needs of employers
- developing high-quality national occupational standards

The list of SSCs, as well as more information about them and the SSDA, can be found on the SSDA website (www.ssda.org.uk).

FUNDING

Public funding is available for some vocational education programs everywhere in the United Kingdom. The same organizations responsible for funding in the higher education sector are also responsible for funding in the vocational education sector. In England, Wales and Scotland these organizations are funding councils:

- Higher Education Funding Council for England
- · Higher Education Funding Council for Wales
- Scottish Funding Council

In Northern Ireland the Department for Employment and Learning is responsible for funding the vocational education sector.

VALIDATING, EXAMINING AND AWARDING BODIES

The main agencies involved in validating, examining and awarding most vocational qualifications are briefly described below, along with the qualifications they offer. More detailed descriptions of the qualifications follow. (An extensive list of awarding bodies can be found in the UK Vocational Qualifications link on the website of the National Reference Point for Vocational Qualifications at www.uknrp.org.uk.)

Edexcel Foundation is one of the largest awarding bodies in the United Kingdom. Along with academic qualifications, it offers a wide range of vocational qualifications, including:

- · GCSEs in applied subjects
- GCE A Levels in applied subjects
- NVQs
- GNVQs
- BTEC qualifications

More information about Edexcel and descriptions of the different qualifications can also be found on its website (www.edexcel.org.uk).

City & Guilds, established in 1878, has grown to become the most important vocational examining and awarding body in the United Kingdom. More recent changes to City & Guilds include:

- the purchase of the Pitman Examinations Institute (1990)
- the addition to the City & Guilds Group of three organizations:
 - the Institute of Leadership and Management (ILM) in 2002
 - the National Proficiency Tests Council (NPTC, agriculture and other land-based industries) in 2004
 - the Hospitality Awarding Body (HAB) in 2005

City & Guilds offers recognized qualifications in over 500 subjects, covering a wide range of industries such as:

- business and commercial services
- computing and information technology
- · education, training and development
- electrical and electronic engineering
- health and social care
- science and technology

City & Guilds qualifications are available from the entry level to Level 7 in the National Qualifications Framework, from basic skills to senior level qualifications.

Major City & Guilds qualifications include:

- NVQs
- SVQs (accredited by the SQA but offered through various awarding bodies, including City & Guilds centres)
- vocational qualifications (that is, technical awards, certificates or diplomas, and other general vocational qualifications not included in other categories)
- · Skills for Life and Key Skills
- · single-subject (formerly known as Pitman) diplomas
- + City & Guilds progression awards
- City & Guilds senior awards
- ILM qualifications
- NPTC qualifications (land-based and related industries qualifications)
- Higher Level Qualifications (such as National Qualifications Framework Level 4 Higher Professional Diplomas and NQF Level 7 Master Professional Diplomas)

City & Guilds also offers the following:

- Apprenticeships—Learners can earn qualifications through an apprenticeship model of learning.
- Engineering Council examinations—For learners who are unable to take an accredited degree or already have an unaccredited degree, these examinations can lead to the status of Chartered Engineer. Three levels of examinations lead to three different qualifications (listed below). Completion of the postgraduate diploma is the educational criterion required to apply for CEng status.
 - certificate (NQF Level 5)
 - graduate diploma (NQF Level 6)
 - postgraduate diploma (NQF Level 7)
- Senior awards—These awards are given to professionals
 as recognition of their achievement. An assessment of
 achievement and a fee payment are required to receive
 them. Candidates submit an application themselves or
 are nominated by someone else. Some examples are:
 - Licentiateship (LCGI, NQF Level 4)
 - Graduateship (GCGI, NQF Level 6)
 - Membership (MCGI, NQF Level 7)
 - Fellowship (FCGI, highest level of professional achievement; must be nominated by someone else)

City & Guilds International offers qualifications in approximately 100 countries. (See www.city-and-guilds. co.uk for more information.)

The London Chamber of Commerce and Industry Examinations Board offers vocational, business-related qualifications in over 100 countries. LCCI qualifications are recognized by employers and 30 professional associations (such as the Association of Chartered Certified Accountants, the Chartered Institute of Management Accountants and the Chartered Institute of Marketing) in the United Kingdom, as well as by universities worldwide, including institutions in Canada and the United States.

LCCI qualifications are offered at four LCCIEB levels (1 to 4) that correspond to Levels 1 to 4 of the NQF. Certificates are awarded for passing one subject and diplomas for passing groups of subjects.

LCCI qualifications are available in the following areas:

- business English
- finance
- business administration
- information technology
- marketing
- customer service
- international languages

(See www.lccieb.com for more information.)

The Joint Examination Board is an awarding body for further education teaching qualifications. JEB certificates and diplomas are offered in the following subjects:

- educational management
- · education principles and practice
- · information communications and technology skills
- information communications and technology, advanced
- word processing
- further education teaching

JEB also offers professional development courses for teachers, trainee teachers, trainers and college administrative and support staff. Courses are delivered through JEB certified centres and through distance learning programs. (See www.jeb.co.uk for more information.)

The Awarding Body Consortium offers a wide range of vocationally related qualifications from entry level to Level 4 of the NQF.

The sectors covered by ABC qualifications include:

- engineering and manufacturing technologies
- construction
- art and design
- hospitality and catering
- health and social care
- business
- languages

(See www.abcawards.co.uk for more information.)

The Welsh Joint Education Committee is an examining and awarding body for Wales. It awards both general and vocational qualifications, including:

- GCSEs in applied subjects
- GCE A Levels in applied subjects
- GNVQs
- NVQs

(See www.wjec.co.uk for more information.)

The Oxford, Cambridge and RSA Examinations is another important provider of general and vocational qualifications in the United Kingdom. It was formed in 1998 from the merger of two awarding bodies: Oxford & Cambridge Schools and the Royal Society of Arts.

Among its vocational qualifications, the OCR offers:

- GCSEs in applied subjects
- GCE A Levels in applied subjects
- GNVQs
- NVQs
- · OCR certificates in vocational subjects

(See www.ocr.org.uk for more information.)

The Scottish Qualifications Authority is the main awarding body in Scotland. It was formed in 1997 by the merger of the Scottish Vocational Education Council and the Scottish Examination Board. The SQA's role is to develop, accredit and award all Scottish qualifications other than degrees and professional qualifications.

SQA qualifications include:

- National Qualifications (that is, Standard Grades, National Units and National Courses)
- Higher National Certificates and Diplomas (HNCs and HNDs)
- SVQs

QUALIFICATIONS FRAMEWORKS

Vocational qualifications, like other qualifications, fit into a qualifications framework. There are two frameworks in the United Kingdom:

- the National Qualifications Framework (NQF) for England, Wales and Northern Ireland
- the Scottish Credit and Qualifications Framework (SCQF) for Scotland

Both qualifications frameworks are shown in Tables 24 and 25, with examples of available vocational qualifications given for each level. It is important to note that qualification levels are used for general comparison and do not indicate that the qualifications have the same content or outcome.

VOCATIONAL QUALIFICATIONS

Vocational qualifications become available to learners during secondary education and beyond. Both young people and adults continuing or returning to education have a wide range of technical and vocational options. Some qualifications are studied in formal settings such as schools, further education colleges or universities, others through distance learning, and still others through the workplace or other informal settings.

GENERAL CERTIFICATE OF SECONDARY EDUCATION IN APPLIED SUBJECTS

General Certificate of Secondary Education courses are usually taken in secondary school, starting at about age 14. GCSEs are offered in general academic subjects as well as in applied (vocational) subjects. GCSEs in applied subjects take twice as long to earn as academic GCSEs and are worth twice as much. Therefore grades for each vocational GCSE are recorded twice on the certificate, as if they were two courses (AA, BB, CC and so on).

TABLE 24. NATIONAL QUALIFICATIONS FRAMEWORK FOR ENGLAND, WALES AND NORTHERN IRELAND

NATIONAL QUALIFICATIONS FRAMEWORK		FRAMEWORK FOR HIGHER	
Original levels	Revised levels	EDUCATION QUALIFICATION LEVELS (FHEQ)	
5 – Level 5 NVQs; BTEC Advanced Professional Diplomas, Certificates and	8 – Specialist awards: BTEC Advanced Professional Diplomas, Certificates and Awards	D (doctoral)	
Awards	7 – BTEC Advanced Professional Diplomas, Certificates and Awards	M (master's)	
4 - Level 4 NVQs; BTEC HNDs and HNCs;	6 – BTEC Professional Diplomas, Certificates and Awards	H (honours)	
BTEC Professional Diplomas, Certificates and Awards	5 – BTEC HNDs and HNCs; BTEC Professional Diplomas, Certificates and Awards	I (intermediate)	
	4 – BTEC Professional Diplomas, Certificates and Awards	C (certificate)	
3 – Level 3 NVQs; GCE A Levels; BTEC Nation Awards			
2 – Level 2 NVQs; GCSEs Grades A*–C; BTEC First Diplomas and Certificates; BTEC Diplomas, Certificates and Awards			
1 – Level 1 NVQs; GCSEs Grades D–G; BTEC Introductory Diplomas and Certificates; BTEC Diplomas, Certificates and Awards			
Entry – Entry Level Certificate in Adult Literacy			

Note: The qualifications listed for each level serve as examples only.

TABLE 25. SCOTTISH CREDIT AND QUALIFICATIONS FRAMEWORK

SCQF LEVELS	SVQS*	NATIONAL QUALIFICATIONS (UNITS, COURSES AND GROUP AWARDS)	HIGHER NATIONAL QUALIFICATIONS	QUALIFICATIONS AWARDED BY HIGHER EDUCATION INSTITUTIONS IN SCOTLAND
12				Doctorate
11	SVQ 5			Master's degree/Postgraduate diploma and certificate
10				Honours degree
9				Ordinary degree
8	SVQ 4		Higher National Diploma	Diploma of Higher Education
7		Advanced Higher	Higher National Certificate	Certificate of Higher Education
6	SVQ 3	Higher		
5	SVQ 2	Intermediate 2/ Credit Standard Grade		
4	SVQ 1	Intermediate 1/ General Standard Grade		
3		Access 3/ Foundation Standard Grade		
2		Access 2		
1		Access 1		

 $^{^{\}star}$ Note: Provisional: Work is continuing to refine the placing of SVQs within the SCQF.

GCSES ARE AVAILABLE IN THE FOLLOWING VOCATIONAL SUBJECTS:		
applied art and design	 applied business 	
applied information and communication technology	applied science	
• engineering	 health and social care 	
• leisure and tourism	 manufacturing 	
 construction and the built environment (in pilot phase) 		

GCSEs are considered Level 1 or 2 qualifications in the NQF, depending on the grade achieved. GCSE grades D-G are at Level 1 in the NQF, while GCSE grades A*-C are at Level 2.

More information about GCSEs, including structure and grading scale, can be found in the School Education section.

ADVANCED GENERAL CERTIFICATE OF EDUCATION IN APPLIED SUBJECTS

Students who continue their secondary education past age 16 can take Advanced General Certificate of Education courses. Like GCSEs, these are offered in both general academic subjects and vocational subjects. Vocational GCE subjects are shown in Table 26.

GCE A LEVELS IN APPLIED SUBJECTS ARE OFFERED IN FOUR FORMATS:

- Advanced Subsidiary GCE (3 AS units) = 1 AS level
- ASGCE double award (6 AS units) = 2 AS levels
- AGCE (6 units: 3 AS units + 3 A2 units) = 1 A Level
- AGCE double award (12 units: 6 AS units + 6 A2 units) = 2 A Levels (graded AA, BB-EE)

Vocational A Levels are equivalent to Level 3 qualifications in the NQF and give access to employment and higher education.

TABLE 26. GCE A LEVELS IN APPLIED SUBJECTS

Art & Design
Business*
Engineering*
Health & Social Care*
Information & Communication Technology*
Leisure & Recreation
Media (Communication & Production)
Performing Arts
Science
Travel & Tourism

^{*} The three-unit qualification is available only in those subjects.

Before the introduction of the GCE A Level in applied subjects in 2005, students could take Vocational A Levels or Vocational Certificates of Education. Introduced in 2000, VCE courses were vocationally oriented courses offered to secondary school students. These qualifications have now been withdrawn. (Teaching of all VCEs ended in 2006, with final examination re-sits in January 2007.) Prior to 2000, students took Advanced GNVQs. More information on GCE A Levels can be found in the School Education section.

NATIONAL QUALIFICATIONS (SCOTLAND)

National Qualifications are Scotland's equivalent to the GCSEs and GCE A Levels in the rest of the United Kingdom. The first candidates gained their certificates in 2000. National Qualifications include Standard Grades, National Units, National Courses and Scottish Group Awards. These qualifications are offered in both academic and vocational subjects and are available from Level 1 to Level 7 of the SCQF. More information on National Qualifications can be found in the School Education section.

GENERAL NATIONAL VOCATIONAL QUALIFICATIONS

General National Vocational Qualifications are work-related courses usually offered by secondary schools and further education colleges. Since 2002, GNVQs are being withdrawn; the last courses will be offered in 2007.

GNVQs were offered at three levels:

- foundation level (comparable to 4 GCSEs grades D–G)
- intermediate level (comparable to 4 GCSEs grades A*-C)
- advanced level (comparable to 2 GCE A Levels)

A number of qualifications have already replaced GNVQs, including:

- GCSEs in applied subjects
- GCE A Levels in applied subjects
- Edexcel BTEC qualifications (Introductory Certificates/Diplomas and First Certificates/ Diplomas)
- OCR Nationals (National First Awards, National Awards and National Certificates)

Edexcel BTEC and OCR Nationals are described further in this section. For other GNVQ successors, see the QCA website (www.qca.org.uk).

NATIONAL VOCATIONAL QUALIFICATIONS

National Vocational Qualifications are work-based qualifications that can be studied at work, at a college or as part of an apprenticeship. They are "competence-based" qualifications, teaching the skills and knowledge needed to do a job. The assessment criteria are based on National Occupational Standards as defined by sector skills councils and standard-setting bodies. NVQs can also be awarded to people who have previously acquired knowledge and skills but no formal qualification.

There are five levels of NVQs (Levels 1 through 5 of the NQF), covering the range of skills and abilities required for the progression of different job roles. There are no formal entry requirements for NVQs, nor is there a fixed period of time in which to complete a qualification. Level 1 and 2 NVQs often take about one year to complete, while Level 3 NVQs can take about two years. However, learners must keep in mind that NVQs themselves are updated periodically and may not exist indefinitely.

Assessment of NVQs is evidence based: candidates have to demonstrate that they have acquired the job-related skills and knowledge that define a particular NVQ. This evidence of competence is collected through various means, such as:

- simulations
- direct observation
- oral examination
- projects and assignments
- questionnaires
- personal interviews
- log books
- · evaluation of work products

The assessment itself is conducted by several different people or agencies, which could include the following:

- centres (such as schools, colleges, universities or training providers)
- employers
- supervisors
- witnesses (such as colleagues or customers)
- expert witnesses
- assessors
- internal and external verifiers

OVER 1,300 NVQs ARE OFFERED IN 11 AREAS:	
• constructing	• tending animals, plants and land
• engineering	 extracting and providing natural resources
transporting	• providing health, social and protective services
• manufacturing	• providing goods and services
• communicating	 developing and extending knowledge and skill
• providing business services	

SCOTTISH VOCATIONAL QUALIFICATIONS

Scotland's equivalents to NVQs are Scottish Vocational Qualifications. Accredited by the SQA, SVQs are based on the same standards of competence as NVQs, so are portable throughout the United Kingdom. Various awarding bodies offer SVQs.

KEY SKILLS/CORE SKILLS

Key Skills are qualifications earned in England, Wales and Northern Ireland. They are the skills required to perform well in any job, in education and in everyday life. They include:

- communication
- application of numbers
- information technology
- working with others
- improving one's own learning and performance
- problem solving

Core Skills are Scotland's equivalent to Key Skills and include:

- communication
- working with others
- numeracy
- · information technology
- problem solving

Both Key Skills and Core Skills are acquired while pursuing other qualifications, vocational or otherwise. In fact they are usually competencies that are embedded into other qualifications. Some Key Skills and Core Skills (such as communication, application of number, numeracy and information technology) can also be taken as qualifications on their own through schools, centres, colleges and other institutions.

BUSINESS AND TECHNICIAN EDUCATION COUNCIL QUALIFICATIONS

Formed in 1983 from the merger of the Business Education Council and the Technician Education Council, the Business and Technician Education Council was a major vocational qualifications provider in Britain. In 1996 BTEC and the University of London Examinations & Assessment Council merged to form the Edexcel Foundation. Although Edexcel now awards the qualifications, they are still referred to as BTEC qualifications. They are available in England, Wales and Northern Ireland.

There are many different BTEC qualifications at every level of the NQF, from entry level BTEC certificates to Level 8 BTEC advanced professional diplomas, certificates and awards.

BTEC qualifications are offered by schools, colleges and universities. There are no standard entry requirements for BTEC qualifications; the requirements are set by each institution and vary depending on the course.

In older BTEC qualifications, duration of study (for instance, diploma = 2 years full-time, certificate = 1 year full-time) was more important than in the new system. With the newer BTEC qualifications, beginning in 2004, units can be taken over a more flexible period of study.

BTEC qualifications are usually composed of a number of core units and specialist units (options). The units are assessed through assignments based on work-related situations or teamwork activities, or through a final major project (for creative arts qualifications, for example). Grading is a simple four-level scale: fail, pass, merit or distinction.

BTEC Certificate in Skills for Working Life and BTEC Certificate in Life Skills

These entry level courses are offered to students 14 years of age and older, in schools and colleges of further education. They allow students to progress to Level 1 qualifications. Topics include:

- arts and media
- business administration and retail
- hair and beauty
- health and social care
- hospitality and catering
- information and communication technology
- sports and recreation
- · citizenship and community studies
- independent living skills
- relationships

BTEC Introductory Diplomas and Certificates

BTEC Introductory Diplomas and Certificates are Level 1 qualifications.

- The BTEC Introductory Certificate generally represents 4 units (180 hours) and is considered equivalent to 2 GCSEs grades D-G.
- The Introductory Diploma generally represents 8 units (360 hours) and is considered equivalent to 4 GCSEs grades D-G.

BTEC First Diplomas and Certificates

BTEC First Diplomas and Certificates are Level 2 qualifications offered to students age 16 or older. They are generally considered initial vocational qualifications for school leavers. There are no standard entry requirements for BTEC First Diplomas and Certificates, but institutions may require a number of GCSE courses or equivalent Level

1 or 2 qualifications, a BTEC Introductory Diploma or Certificate, or related work experience.

- The First Certificate is made of a combination of core units and specialist units totalling 180 guided learning hours and is comparable to 2 GCSEs grades A*-C.
 Note: First Certificates were unavailable between 2001 and 2004.
- The First Diploma is also made of a combination of core units and specialist units totalling 360 guided learning hours and is comparable to 4 GCSEs grades A*-C.

The number of core units and specialist units for each qualification depends on the field of study. All BTEC First Certificates and Diplomas give access to employment or further study.

BTEC National Diplomas, Certificates and Awards

BTEC Nationals are Level 3 qualifications that give access to employment or to further or higher education. Students must be at least 16 years old. Entry requirements vary by institution and may include GCSE courses, a BTEC First Diploma or Certificate, other Level 2 or 3 qualifications, or work experience.

- The National Award normally consists of 6 units and is equivalent to one GCE A Level. It is graded pass, merit or distinction (P, M, D).
- The National Certificate is generally 12 units in length and is considered equivalent to two GCE A Levels. It is given a double grade on the certificate (PP, MP, MM).
- The National Diploma is usually 18 units and considered equivalent to three GCE A Levels. It is triple-graded on the certificate (PPP, PPM).

BTEC National Qualifications have gone through some changes over the last few years, with newer BTEC Nationals introduced in 2002. Notable changes are the availability of the National Award and the number of units required for each qualification.

TABLE 27. NUMBER OF UNITS IN OLD AND NEW BTEC NATIONALS

	OLD BTEC NATIONALS	NEW BTEC NATIONALS
National Award	Not available	6
National Certificate	10	12
National Diploma	16	18

BTEC Higher National Certificates and Diplomas

BTEC Higher National Certificates and Diplomas are Level 5 qualifications awarded by Edexcel as BTEC qualifications in England, Wales and Northern Ireland. In Scotland the same qualifications are awarded as HNC and HND (without the BTEC) by the SQA.

Students applying for HNC and HND programs are normally at least 18 years old. Entry requirements may include a BTEC National Qualification, GCSE and GCE A Level courses or other equivalent qualifications or experience.

HNCs and HNDs are vocationally related higher-education qualifications offered by universities and colleges. The HNC normally requires 600 guided learning hours, usually taken over one year of full-time (or two years part-time) study. The HND requires 960 guided learning hours and is usually taken over two or three years of full-time study.

Credit from HNCs and HNDs can often be applied toward degrees. Completion of an HNC may give access to the second year of a degree (ordinary or honours bachelor's degree) in a related subject, while completion of an HND may give access to the second or third year of a related degree.

BTEC Professional Awards, Certificates and Diplomas

BTEC Professional Awards, Certificates and Diplomas (also referred to as BTEC Specialist Awards, Certificates and Diplomas) are offered at Levels 1 through 8 of the NQF. The number of units and learning hours varies depending on the subject and level taken. Entry requirements also vary depending on the program.

They are available in several disciplines, such as:

- art and design
- business and administration
- counselling, health and social care
- IT and computing
- + management
- nutrition
- teaching and learning

BTEC Customized Framework

BTEC qualifications can be customized by centres through the BTEC Customized Framework. This framework allows employers or other learning providers to have qualifications or professional development programs accredited through Edexcel as BTEC qualifications. BTEC Short Courses, Introductory, First, Nationals and Higher Nationals can all be customized.

OXFORD, CAMBRIDGE AND RSA NATIONALS

Oxford, Cambridge and RSA Nationals are work-related qualifications offered at Levels 1 to 3 in the NQF. All OCR Nationals are graded as fail, pass, merit or distinction.

Level 1 OCR Nationals include three types of qualifications:

- first award (4 units/120 guided learning hours), equivalent to one GCSE grades D-G
- award (8 units/240 guided learning hours), equivalent to two GCSEs grades D-G
- certificate (12 units/360 guided learning hours),
 equivalent to four GCSEs grades D-G

Level 2 OCR Nationals has one type of qualification:

 certificate (6 units/360 guided learning hours), which is comparable to four GCSEs grades A*-C

Level 3 OCR Nationals include three types of qualifications:

- certificate (6 units/360 hours), equivalent to one
 A Level
- diploma (12 units/720 hours), equivalent to two A Levels
- extended diploma (18 units/1,080 hours), equivalent to four A Levels

APPRENTICESHIPS AND MODERN APPRENTICESHIPS

Apprenticeships (England, previously called modern apprenticeships) and modern apprenticeships (Northern Ireland, Scotland and Wales) are an alternate route for earning qualifications. They are work-based training programs designed mostly for learners between the ages of 16 and 25 who have left full-time education or are already employed. Apprenticeship programs are also available for learners as young as 14 (see next section) and for adults over age 25.

There are two levels:

- apprenticeships (which includes apprenticeships and advanced apprenticeships)
- modern apprenticeships (referred to as MAs, regardless of level)

The different levels allow learners to work toward different levels of qualifications. Apprentices can also progress from one level to the next.

Apprentices and modern apprentices receive a salary as paid employees, but at the same time their employer provides them with on-the-job training and they receive off-the-job training through a learning provider. Entry requirements vary from simply being in the right age group (England) to being employed and having earned a minimum of four GCSEs at grade C or better (Wales). Apprenticeships and modern apprenticeships usually take between one and five years.

Depending on their particular program, learners earn several different qualifications during their apprenticeship, including:

- Level 2 or Level 3 NVQs/SVQs
- Key Skills/Core Skills
- industry specific qualifications (such as diplomas, certificates, additional NVQs/SVQs, HNCs/HNDs and so on)

More than 180 apprenticeships and modern apprenticeships are available in over 80 industries. Examples include (but are not limited to):

- accounting
- agricultural crops and livestock
- biotechnology
- business and administration
- construction
- dental nursing
- engineering
- gas industry
- health and social care
- meat and poultry
- plumbing
- travel services
- veterinary nursing

Young Apprenticeships

Young Apprenticeships are designed for secondary school students. Intended for students aged 14 to 16, YAs allow students to gain relevant work experience in a variety of fields:

- · art and design
- business administration
- engineering
- health and social care
- motor industry
- · performing arts

Students continue to study national curriculum subjects, but two days a week they participate in the YA program through a college, training provider or employer. There the students work toward vocational qualifications such as GCSEs in applied subjects or NVQs. The YA program prepares students for an apprenticeship at age 16, but they also have the option of pursuing a more general/academic route at that point.

GRADING SCALES

Grading in the United Kingdom follows different systems depending on the level of education and the type of course. Some grading scales are standardized while others are not.

SECONDARY EDUCATION GRADING

Grading scales in schools in the United Kingdom vary during primary education, but become more standardized in secondary school.

GENERAL CERTIFICATE OF SECONDARY EDUCATION

General Certificate of Secondary Education courses are graded on an ascending scale from A* to G (and U for unclassified). The grades are awarded according to the tier of the examination taken by the student, as shown in the table below. The School Education section has more information on GCSE grading, including an explanation of the different tiers.

TABLE 28. GCSE GRADING SCALE

GRADE	CORRESPONDING TIER
A*	
Α	
В	Higher Tier
C	
D	(Tiers Overlap)
E	
F	Foundation Tier
G	
U	Unclassified

Note: The examination tier is not indicated on the certificate.

Some GCSE courses, such as double award GCSEs and GCSEs in applied subjects, count as two regular GCSEs. These courses are graded twice on the certificate as if they were two separate courses (AA, BB, CC). Such cases will be indicated in the title of the course.

ADVANCED GENERAL CERTIFICATE OF EDUCATION

Advanced General Certificate of Education or A Level courses are graded on an ascending scale from A* to E, with A* being the highest mark and E the minimum passing grade. A grade of N is awarded for narrow failure and U for unclassified.

TABLE 29. GRADING SCALE FOR GCE A LEVELS

GRADE	DESCRIPTION	IQAS GRADE (%)
A*	Highest Mark	95
В		85
С		75
D		65
E	Pass	55
N	Narrow Failure	Fail
U	Unclassified	Fail

Note: The IQAS grade represents a suggested midpoint in a range of possible grades.

Some GCE A Levels in applied subjects come in double awards that have the value of two regular GCE A Levels. These courses are graded twice on the certificate as if they were two separate courses (AA, BB, CC).

ADVANCED EXTENSION AWARDS

Advanced Extension Awards are advanced courses intended for the top 10 per cent of students (by ability). They are graded on a two-point scale, merit or distinction, where distinction is the higher of the two. Students who fail to achieve the Merit level receive the mention ungraded on their certificate.

SECONDARY EDUCATION, SCOTLAND

Because its education system differs from that of the rest of the United Kingdom, courses offered in Scottish secondary education, Standard Grades and National Courses, have their own grading scales.

Standard Grades

Standard Grades are scored on a reverse, 7-point scale, 1 being the highest grade and 7 being awarded to students who have completed the course but failed to achieve at least grade 6. The table below indicates the grades associated with each level.

TABLE 30. STANDARD GRADES GRADING SCALE

STANDARD GRADE		
LEVEL	GRADE	IQAS GRADE (%)
Credit	1	95
	2	85
General	3	70
	4	65
Foundation	5	55
	6	50
Course completed	7	Course completed, exam failed

Note: The IQAS grade represents a suggested midpoint in a range of possible grades.

Explanation of the different levels is provided in the School Education section.

National Courses

National Courses are newer qualifications offered in secondary education in Scotland. They are available in seven different levels: Access 1, 2 and 3; Intermediate 1 and 2; Higher; Advanced Higher.

The grading scale for all National Courses goes from A to D, where A is the highest grade and D is a fail. A grade of D represents a mark of 45 to 49 per cent. When a student performs below 45 per cent, no award is given.

TABLE 31. NATIONAL COURSE GRADING SCALE

GRADE	DESCRIPTION
A	Highest Grade
В	_
C	Pass
D	Fail

HIGHER EDUCATION GRADING

Generally, higher education grades in the United Kingdom are lower than they are in Canada. The pass grade is often as low as 35 per cent, so a grade of 60 could be considered very good or excellent

Bachelor's (honours) degrees are usually graded on a class scale, from pass (lowest) to first class honours. A grade of second class honours, upper division (Upper Second Class), is usually required for entry into postgraduate programs. Some universities have a numeral scale associated with the degree classifications, but others do not.

No standard grading scale is used by all universities. The following tables are meant to be used for general guidance only.

TABLE 32. COMPARISON BETWEEN UK GRADES, DEGREE CLASSIFICATIONS AND IQAS GRADES (EXAMPLE)

UK GRADES		DEGREE CLASS	IQAS GRADE (%)
70–100	Α	First Class	90
60–69	В	Upper Second Class	75
50–59	С	Lower Second Class	65
40–49	D	Third Class	60
35–39	Е	Pass (Ordinary)	55
0–34	_	Fail	Fail

Note: The IQAS grade represents a suggested midpoint in a range of possible grades.

TABLE 33. SUMMARY OF GRADING SCALE FROM THE UNIVERSITY OF GLAMORGAN (SCOTLAND)

GRADE (%)	DEGREE CLASS	IQAS GRADE (%)
70–100	First	90
60-69.9	Upper Second	75
50-59.9	Lower second	65
40-49.9	Third	55
<40	Fail	Fail

Note: The IQAS grade represents a suggested midpoint in a range of possible grades.

Some universities use the European Credit Transfer System grading scale instead of—or in addition to—the more common degree classification described above. For an explanation of ECTS, see the Higher Education section.

TABLE 34. ECTS GRADING SCALE

ECTS GRADE	DEFINITION	DISTRIBUTION (%)
Α	Excellent—outstanding performance with only minor errors	10
В	Very good—above the average standard but with some errors	25
С	Good—generally sound work with a number of notable errors	30
D	Satisfactory—fair but with significant shortcomings	25
E	Sufficient—performance meets the minimum criteria	10
FX	Fail—some more work required before the credit can be awarded	_
F	Fail—considerable further work is required	_

University of Warwick Academic Office. (Retrieved November 2006 from www2.warwick.ac.uk/academicoffice/undergrad/ects/grading)

TECHNICAL AND VOCATIONAL EDUCATION GRADING

A wide variety of technical and vocational courses are available, and no grading scale applies to all. However, some major vocational qualifications do have standard grading scales, including GCSEs in applied subjects, GCE A Levels in applied subjects, Business and Technician Education qualifications and Oxford, Cambridge & RSA Nationals.

GCSES IN APPLIED SUBJECTS AND GCE A LEVELS IN APPLIED SUBJECTS

Both GCSEs in applied subjects and GCE A Levels in applied subjects are graded the same as their general, academic version.

BTEC QUALIFICATIONS AND OCR NATIONALS

BTEC qualifications and OCR Nationals are graded on a three-level scale, from pass (lowest) to distinction (highest), as shown in Table 35. Those who do not pass receive a fail grade.

TABLE 35. BTEC AND OCR NATIONALS GRADING SCALE

GRADE	DESCRIPTION	IQAS GRADE (%)
D	Distinction	90
M	Merit	75
Р	Pass	60

Note: The IQAS grade represents a suggested midpoint in a range of possible grades.

Depending on the number of units, BTEC National Qualifications and OCR Nationals may be graded more than once, as though they were two or three separate courses. For example:

- BTEC National Awards (6 units) are graded once (P, M or D).
- BTEC National Certificates (12 units) are graded twice (PP to DD).
- BTEC National Diplomas (18 units) are graded three times (PPP to DDD).

Documentation

The documentation presented by students coming from the UK education system can vary tremendously. Students may follow different paths of study, choose different types of courses and study at different types of institutions throughout their educational careers. Documents are issued by schools, colleges, universities and other types of educational institutions, as well as by awarding bodies and professional associations. This section describes some of the most common current documentation likely to be presented by British students.

SECONDARY EDUCATION DOCUMENTATION

Documentation at the secondary education level is probably the most standardized. It almost always includes results from General Certificate of Secondary Education courses and Advanced General Certificate of Education courses for students from England, Wales and Northern Ireland, and results from National Qualification Courses for Scottish students.

ENGLAND, WALES AND NORTHERN IRELAND

GCSEs and GCE A Levels, both academic and applied, are offered by external awarding bodies and have certificates or statement of results issued by the awarding bodies themselves. It is possible for the same student to have certificates from more than one awarding body.

Awarding bodies have changed and many have merged together over the years, so it is useful to verify the names and dates of existence on the Internet if possible. (For information about current awarding bodies, see pages 21 and 27.)

Awarding bodies will generally provide a Certifying Statement of Results or a duplicate copy of the original certificate/statement of student results, either directly to the student or to a third party.

The certificate or statement of results is not cumulative and therefore shows only the courses taken in that period (semester or year). A separate certificate is issued for each set of exams taken, including re-sits. Failed courses are sometimes recorded, but not always.

Certificates usually include the following information:

- personal data (name, date of birth, school or centre, identification number and so on)
- name of awarding body
- qualification information (GCSE, GCE A Level, short course, double award and so on)
- list of courses and/or units taken (course or unit number/code and title)
- grade achieved for each course and/or unit—the grade is expressed in terms of letters and the raw score is sometimes provided in numbers
- explanatory notes (grading scale and other pertinent information)
- date of issue

Examples of GCSE and GCE results are presented in Appendix B—Sample Documents.

SCOTTISH QUALIFICATIONS CERTIFICATE

Secondary school students in Scotland take different qualifications, all offered by the Scottish Qualifications Authority. Since January 2000, SQA qualifications are recorded on the Scottish Qualifications Certificate. The SQC may also include qualifications awarded by the SQA's predecessors (the Scottish Vocational Education Council and the Scottish Examination Board) after 1994. Qualifications achieved prior to 1994 are not recorded on the SQC.

The SQC is a cumulative record listing all achievements in SQA qualifications (that is, Standard Grades, National Units, National Courses, Group Awards) and may also give a Core Skills profile. Examples of SQCs are presented in Appendix B—Sample Documents.

HIGHER EDUCATION DOCUMENTATION

Graduates from higher education programs are issued different documents depending on the institution they attended and when. There is no standard documentation in this sector of education. Common documents include transcripts, degree certificates and diplomas, and professional certification and/or registration.

It is important to note that for many years, universities and colleges did not typically issue any transcripts—they issued only degree certificates. Even today some universities still may not provide any transcripts.

Examples of a few higher education documents are presented in Appendix B—Sample Documents.

TECHNICAL, VOCATIONAL AND PROFESSIONAL EDUCATION DOCUMENTATION

Graduates of vocational, technical and professional education programs will present a wide variety of documents, as no standardized documentation is in place in those sectors. Documents commonly presented include transcripts, diplomas, and professional certification and/or registration. Examples of a few technical, vocational and professional education documents are presented in Appendix B—Sample Documents.

References

PRINT RESOURCES

Dunn, Seamus. (2000). Northern Ireland: Education in a divided society. In David Phillips (Ed.), The education systems of the United Kingdom. Providence, RI: Symposium Books.

Gearon, Liam. (Ed.). (2002). Education in the United Kingdom. Oxford: David Fulton Publishers.

Gillard, Derek. (2004). Education in England: A brief history.

Gorard, Stephen. (2000). For England, see Wales. In David Phillips (Ed.), The education systems of the United Kingdom. Providence, RI: Symposium Books.

Green, James E. (2001). Education in the United Kingdom and Ireland: International studies in education. Bloomington, IN: Phi Delta Kappa International.

Higashi, Sylvia K., Weaver, Richard, & Margolis, Alan. (Eds.). (1991). The educational system of the United Kingdom: The admission and placement of students from the United Kingdom and study abroad opportunities. (PIER Workshop Report, American Association of Collegiate Registrars and Admissions Officers and NAFSA: Association of International Educators). Culver City, CA: International Education Research Foundation.

National Office of Overseas Skills Recognition. (1992). Country education profiles: United Kingdom, a comparative study. Canberra: Australian Education International.

Skinner, Maureen. (2006). The educational system of the United Kingdom. Washington, DC: American Association of Collegiate Registrars and Admissions Officers.

INTERNET RESOURCES

NOTE: The URLs referenced in this section were accurate and functional as at the time of writing, but since websites and Internet content are subject to change, their ongoing status cannot be guaranteed.

INTERNATIONAL WEBSITES

Central Intelligence Agency. (2005). The world factbook. Retrieved from www.cia.gov/library/publications/the-world-factbook/index.html

Encyclopædia Britannica Online. (2006). *History of education*. Retrieved January 2006 from www.britannica. com/eb/article-47656

Encyclopædia Britannica Online. (2006). *United Kingdom: The Industrial Revolution*. Retrieved January 23, 2006, from www.britannica.com/eb/article-44910

Encyclopædia Britannica Online. (2006). Wales. Retrieved January 2006 from www.britannica.com/eb/article-9110755

Statistics Canada. (2006). Imports, exports and trade balance of goods on a balance-of-payments basis, by country or country grouping. Retrieved January 2006 from www40.statcan.ca/l01/cst01/gblec02a.htm

World Tourism Organization. (2004). World's top tourism destinations. Retrieved January 2006 from www. world-tourism.org/

UK WEBSITES

Bell, Robert, & Jones, Gill. (2002). Youth policies in the UK: A chronological map (2nd ed.). Retrieved from www.keele.ac.uk/youthpolicies

British Accreditation Council. Independent sector. Retrieved June 2006 from www.the-bac.org/indep.htm

British Association for Commercial and Industrial Education & European Centre for the Development of Vocational Training (CEDEFOP). (1987). Vocational training in the United Kingdom.

Eton College. (2001). Eton's history. Retrieved February 2006 from www.etoncollege.com

Government of the United Kingdom, Department for Children, Schools and Families. *The 14–19 gateway, Department for Education and Skills.* Retrieved May 2006 from www.dfes.gov.uk/14-19/index.cfm?sid=26

Government of the United Kingdom, Department for Children, Schools and Families. *Timetable for reforms*. Retrieved May 2006 from www.dfes.gov.uk/14-19/index.cfm?sid=29

Government of the United Kingdom, Department for Education and Skills. (2003). *The future of higher education*. Retrieved June 2006 from www.dfes.gov.uk/hegateway/strategy/hestrategy/pdfs/DfES-HigherEducation.pdf

Government of the United Kingdom, Foreign & Commonwealth Office. (2002). Education and training in the United Kingdom.

Government of the United Kingdom, National Statistics. Population estimates. In National statistics online. Retrieved August 22, 2007, from www.statistics.gov.uk/cci/nugget.asp?id=6

Government of the United Kingdom, UK Overseas Territories, Foreign & Commonwealth Office. (2006). Retrieved February 2006 from www.fco.gov.uk/

Higher Education and Research Opportunities. Retrieved March 2006 from www.hero.ac.uk/

Higher Education Funding Council for England. (2004). Regional profiles of higher education 2004. Retrieved June 2006 from www.hefce.ac.uk/pubs/hefce/2004/04_48/RP04.pdf

HM Revenue & Customs, uktradeinfo. Overview of EU & non EU totals/annual imports & exports: 1996–2004. Retrieved from www.uktradeinfo.com/

King's School, Canterbury (The). 597 and all that: A brief history of The King's School, Canterbury. Retrieved February 2006 from www.kings-school.co.uk/

King's School, Ely (The). History: The King's School Ely. Retrieved February 2006 from www.kings-ely.cambs. sch.uk/index.asp?inc=history

National Assembly for Wales. (2001). *The learning country*. Retrieved May 2006 from www.wales.gov.uk/subieducationtraining/content/PDF/learningcountry-e.pdf

National Assembly for Wales, Department for Training and Education. (2002). *Learning country: Learning pathways* 14–19. Retrieved May 2006 from www.wales.gov.uk/subieducationtraining/content/Consultation/learning/LearningCountry(E).pdf

Northern Ireland Government, Department of Education. (2005). Curricular guidance for pre-school education. Retrieved April 2006 from www.deni.gov.uk/index/pre-school-education_pg/16-pre-school_education-curricularguidance_pg.htm

Northern Ireland Government, Department of Education. (June 15, 2005). Entitlement framework – Initial guidance. Retrieved May 2006 from www.deni.gov.uk/2005_18-entitlement_framework-initial_guidance.pdf

Northern Ireland Government, Department of Education. (2005). New arrangements for post-primary education. Retrieved March 2006 from www.deni.gov.uk/22-postprimaryarrangements-new-arrangements_pg.htm

Northern Ireland Government, Office of Public Sector Information. (2002–2005). Education Reform Act 1988. Retrieved March 2006 from www.opsi.gov.uk/acts/acts1988/Ukpga_19880040_en_1.htm

Official Web Site of the British Monarchy. (2006). Symbols of the monarchy. Retrieved February 2006 from www.royal.gov.uk/

Qualifications and Curriculum Authority. Designing and timetabling the primary curriculum: A practical guide for Key Stages 1 and 2. Retrieved June 2006 from www.qca.org.uk/2799.html

Qualifications and Curriculum Authority. Designing the Key Stage 3 curriculum. Retrieved June 2006 from www.qca.org.uk/2799.html

Qualifications and Curriculum Authority. About the National Curriculum: Key Stages 3 and 4. In *National Curriculum online*. Retrieved April 2006 from www.nc.uk.net/nc_resources/html/ks3and4.shtml

Scottish Consultative Council on the Curriculum. (1999). Curriculum framework for children 3 to 5. Retrieved April 2006 from www.ltscotland.org.uk/earlyyears/images/CF3to5_tcm4-115469.pdf

Scottish Executive. (2005). Lifelong partners: Scotland's schools and colleges building the foundations of a lifelong learning society: A guide for schools, colleges and local authorities. Retrieved May 2006 from www.scotland.gov.uk/Resource/Doc/36328/0011881.pdf

Scottish Government. (June 16, 2004). *National dossier on education and training in Scotland 2004*. Retrieved February 2006 from www.scotland.gov.uk/library5/education/etsnd4-00.asp

Stockport Grammar School. School history. Retrieved February 2006 from www.stockportgrammar.co.uk/

University of Aberdeen. (2006). A concise history of the University of Aberdeen. Retrieved February 2006 from www.abdn.ac.uk/

University of Cambridge. (2006). A brief history: Cambridge through the centuries. Retrieved February 2006 from www.cam.ac.uk/

University of Glasgow. (2006). Past and present. Retrieved February 2006 from www.gla.ac.uk/

University of Oxford. (2006). A brief history of the university. Retrieved February 2006 from www.ox.ac.uk/aboutoxford/history.shtml

University of St. Andrews. (2006). *History of the university*. Retrieved February 2006 from www.st-andrews. ac.uk/

University of Warwick Academic Office. (2006). ECTS grading scale. Retrieved November 2006 from www2. warwick.ac.uk/academicoffice/undergrad/ects/grading/

Warwick School. History of Warwick School. Retrieved February 2006 from www.warwickschool.org/welcome/history.htm

Appendix A—Placement Recommendations

Placement recommendations provide guidelines for comparing international and Canadian educational credentials and standards. These recommendations are advisory in nature, and indicate the general level of a credential in Canadian terms.

Placement recommendations represent benchmark assessments and do not cover all credentials. However, the fact that a credential is not mentioned in the placement recommendations does not mean it cannot be assessed by IQAS. International credentials not specifically covered should be referred to IQAS for individual evaluation.

Given the different educational philosophies, objectives and program structures in educational systems around the world, evaluation in terms of direct equivalence to specific Canadian credentials is not possible. For this reason IQAS placement recommendations are made in terms of 'generally compares' to and not 'equivalent' to.

When evaluating international credentials IQAS considers the following:

- the education system of the country concerned
- + the recognition of the awarding institution
- the level, length and structure of the program

When appropriate, IQAS may:

- consider that comparison to a different level of education may more accurately reflect the level of the international credential in Canadian terms
- combine two or more credentials

Credential name	IQAS RECOMMENDATION
General Certificate of Secondary Education (GCSE) in academic and applied subjects • General Certificate of Education Ordinary Level (GCE O Level), [no longer in use] • Certificate of Secondary Education (CSE) (no longer in use)	The General Certificate of Secondary Education [and the former General Certificate of Education Ordinary Level], with a minimum of 5 courses passed, generally compares to the completion of grade 12 for employment purposes. The Certificate of Secondary Education generally compares to the completion of grade 12 for employment purposes, if at least 5 courses are passed with a grade of 1. Otherwise, the CSE generally compares to the completion of grade 11.
Advanced General Certificate of Education (GCE A Level) in academic and applied subjects	If the student passes one A Level course (or two AS Level courses), the General Certificate of Education, in combination with GCSE courses [or the previous GCE O Level courses], generally compares to the completion of grade 12. If the student passes at least two A Level (or at least four AS Level) courses, the GCE, in combination with GCSE [or the previous GCE O Level] courses, generally compares to at least the completion of grade 12, including courses required for university admission. Note: GCE A Level examinations are taken following 13 years of combined primary and secondary education and, in combination with GCSE [or previous GCE O Level] examinations, give access to university education in the United Kingdom. Some North American universities grant undergraduate transfer of credit for the Advanced Level examinations.
Scottish Qualifications Certificate (Lower Secondary) Scottish Qualifications Certificate (SQC) — National Courses at Access and Intermediate Levels, and Standard Grades, or any combination thereof Scottish Certificate of Education (SCE) — Standard Grades [no longer in use]	If the student passes at least five subjects, the Scottish Qualifications Certificate (listing Standard Grades, National Courses* or a combination of both) [or the prior Scottish Certificate of Education, Standard Grades] generally compares to the completion of grade 12 for employment purposes. *Note: Each National Course consists of three units, each of which must be passed an Access 3 level or above.
 Scottish Qualifications Certificate (Upper Secondary) Scottish Qualifications Certificate (SQC) – National Courses at Higher and Advanced Higher levels Scottish Certificate of Education (SCE) – Higher Grades [no longer in use] Scottish Certificate of Sixth Year Studies (SCYS) [no longer in use] 	The Scottish Qualifications Certificate (listing National Courses at Higher or Advanced Higher levels) [or the former Scottish Certificate of Education—Higher Grade] generally compares to the completion of grade 12. If the student passes at least three Higher courses, the SQC (listing National Courses at Higher or Advanced Higher levels) [or the former Scottish Certificate of Education—Higher Grade] generally compares to the completion of grade 12, including courses required for university admission. The former Scottish Certificate of Sixth Year Studies (SCYS) represented one year of additional study beyond the Scottish Certificate of Education (SCE)—Higher Grades.
Higher National Certificate/Diploma (BTEC HNC/HND) Business and Technician Education Council Higher National Certificate/Diploma (BTEC HNC) Business and Technician Education Council Higher National Diploma (BTEC HND)	The (BTEC) Higher National Certificate generally compares to the completion of a two-year post-secondary diploma. The (BTEC) Higher National Diploma generally compares to the completion of a three-year post-secondary diploma.

CREDENTIAL NAME	IQAS RECOMMENDATION
Certificate/Diploma of Higher Education (Cert HE/Dip HE)	The one-year Certificate (or Diploma) of Higher Education generally compares to the completion of a one-year post-secondary certificate.
	The two-year Diploma (or Certificate) of Higher Education generally compares to the completion of a two-year post-secondary diploma.
Foundation Degree For example: • Foundation degree in Arts (FdA) • Foundation degree in Science (FdSc) • Foundation degree in Education (FdEd) • Foundation degree in Engineering (FdEng) • Foundation degree in Technology (FdTech)	The Foundation Degree generally compares to: • completion of two years of undergraduate study [or] • a two-year post-secondary diploma (if appropriate) (As of 2007, foundation degrees are not offered in Scotland.)
England, Wales and Northern Ireland Bachelor's Degree (Ordinary or Honours) For example: Bachelor of Science (BSc) Bachelor of Arts (BA) Bachelor of Architecture (BArch) Bachelor of Music (BMus)	The Bachelor's Degree (Ordinary/Pass) generally compares to the completion of a four-year bachelor's degree. The Bachelor's Degree (Honours) generally compares to the completion of a four-year bachelor's degree (honours).
Scotland Bachelor's Degree (Ordinary or Honours) • General Degree • First Degree • Master's Degree (MA) • Bachelor of Science (BSc) • Bachelor of Arts (BA)	The three-year Bachelor's Degree (Ordinary/General) generally compares to the completion of a three-year bachelor's degree. The four-year Bachelor's Degree (Honours) generally compares to the completion of a four-year bachelor's degree.
Bachelor of Education (BEd) Bachelor of Arts/Bachelor of Science with Qualified Teacher Status (BA/BSc with QTS) Postgraduate Certificate in Education (PGCE) Postgraduate Diploma in Education (PGDE)	The Bachelor of Education (BEd) generally compares to the completion of a four- year Bachelor of Education with a focus in elementary/secondary education. The Postgraduate Certificate/Diploma of Education (PGCE/PGDE) generally compares to the completion of a Bachelor of Education after-degree program.
Bachelor of Nursing (BN) • Bachelor of Science in Nursing (BSc) • Bachelor of Arts in Nursing (BA) • Diploma of Higher Education in Nursing (Dip HE)	The bachelor's degree in Nursing (BN, BA or BSc) generally compares to the completion of a four-year Bachelor of Science degree with a focus in nursing. The Diploma of Higher Education in Nursing (Dip HE) generally compares to the completion of a three-year post-secondary diploma with a focus in nursing.
Bachelor of Medicine (MB) • Bachelor of Medicine and Bachelor of Surgery (abbreviated MBChB, MBBCh, BMBS, MBBS, BSMS, etc.)	The Bachelor of Medicine generally compares to the completion of a first professional university degree in medicine.
Bachelor of Engineering (BEng) (Honours or Ordinary) For example: • Bachelor of Science in Engineering (BScEng) • Master of Engineering (MEng) • Master of Science in Engineering (MscEng—rarely a first degree, usually a graduate course) • Bachelor of Automotive Engineering • Bachelor of Civil Engineering • Bachelor of Computer Engineering • Bachelor of Bectrical Engineering • Bachelor of Mechanical Engineering	The Bachelor of Engineering generally compares to the completion of a four-year Bachelor of Science with a focus in engineering (<i>if sandwich degree program</i> , plus one year of co-op work experience).

CREDENTIAL NAME	IQAS RECOMMENDATION
Postgraduate Certificate/Diploma (PG Cert/PG Dip)	The Postgraduate Certificate generally compares to the completion of a graduate certificate.
	The Postgraduate Diploma generally compares to the completion of a graduate diploma.
Master's Degree For example: • Master of Arts (MA) • Master of Science (MSc) • Master of Letters (MLitt) • Master of Business Administration (MBA) • Master of/by Research (MRe)	The master's degree generally compares to the completion of a master's degree. The Master of Philosophy degree generally compares to at least a master's degree.
Doctorate Degree For example: Doctor of Philosophy (PhD/DPhil) Doctor of Business Administration (DBA) Doctor of Applied Social Research (DASR) Doctor of Education Psychology (DEdPsy) Education Doctorate (EdD)	The doctorate degree generally compares to the completion of a Doctor of Philosophy degree.

Appendix B—Sample Documents general certificate of secondary education (GCSE)

	N K
	RECOGNISING ACHIEVEME
General Certificate of Secondary Ed	lucation
This is to certify that the candidate named below v following grade(s) in the subject(s) shown:	was awarded the
JUNE 1999	
Name	
Date of Birth: 2	
GCSE SCIENCE: BIOLOGY SCIENCE: PHYSICS ENGLISH [Speaking and Listening Grade B(b)] ENGLISH LITERATURE GEOGRAPHY HISTORY	A*(a*) A*(a*) A(a) A(a) A(a) A(a)
Maray Maray	u Woss
OCR is recognised by the Secretary of State for Education examining body for the General Certificate of Secondar (Explanatory notes are printed overleaf)	

EXPLANATORY NOTES FOR GCSE

Definitions of Grades

The results of the GCSE examinations are reported on an 6-point scale of grades: A*(s*), A(s), B(b), D(c), D(c), E(c), F(f), G(g), Candidates who fail to reach the minimum standard for O(g) receive no grade and a subject receiving no grade is not recorded on the catilitatis.

Double Award in Science

The results in these syllabuses are reported on the fi-point scale and the grade is recorded twice on the certificate to indicate that the results in these syllabuses have the same status as GCSE grades in two other single certification subjects.

Speaking and Listening in English

The assessment of English incorporates the assessment of Speaking and Listening. The results of the Speaking and Listening assessment, are shown apparately and are reported on the 6-point scale, with grade A* indicating the highest level of attainment and grade G G the lowest. The grade for Speaking and Listening is not a GCSE subject grade but represents an integral part of the overall assessment of GCSE English.

The Speaking and Lebening result is recorded on the certificals provided that both the ownell GCSE English result and the Speaking and Ustoning result are grade 0 of higher.

GCSE (Short Course)

The Short Course is designed to cover not less than half the syllabus content of the corresponding full GGSE subject course of study and the same grading standards are applied. The GCSE (Short Course) is, therefore, broadly equivalent to half the corresponding full GGSE.

Explanation of Sombole

- The condition was exempt from satisfying the full range of assessment objectives in this subject. Details may be obtained from OGR, 1 Hills Road, Cambridge CB1 2EU.
- The condidate was absent from part of the examination in this subject and was awarded zero marks for this part. The grade was awarded on the components actually taken.

Abbreviations

in reporting results, the following abbreviations are used:

O & T is used to represent Design and Technology, IT is used to represent Information Technology.

Conditions of Issue

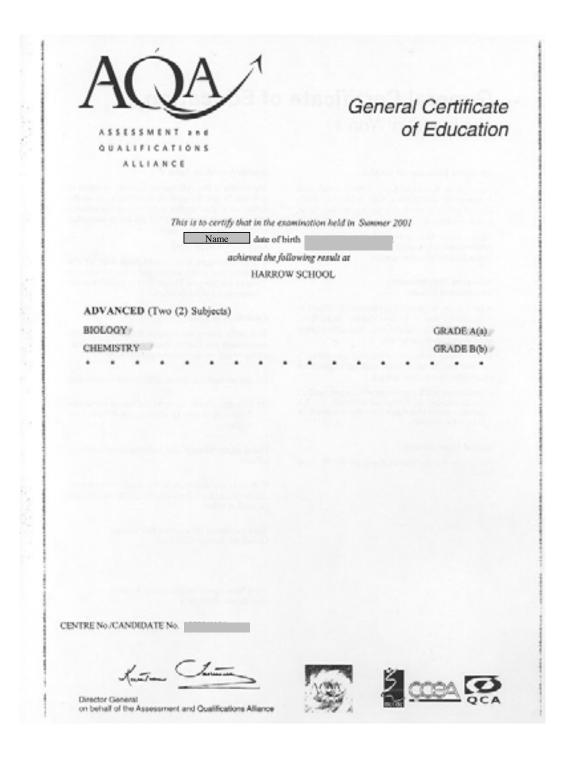
This certificate is and remains the property of OCR at all times and issued on the following conditions:

(a) any afteration to this certificate renders it invalid.

(b) this certificate must be delivered up to OCR on request by OCR.

Use of an altered certificate could constitute a criminal offence.

GENERAL CERTIFICATE OF EDUCATION (GCE)



EXPLANATORY NOTES FOR GCE

General Certificate of Education

Explanatory Notes

Advanced Examination Grades

A pass in an Advanced Level subject is indicated by one of the five Grades: A(a), B(b), C(c), D(d), E(c), of which Grade A(a) is the highest and Grade E(e) is the lowest

Grade N(n) indicates that the candidate's performance fell short of the standard required for Grade E(e) by a narrow morgin.

Advanced Supplementary Examination Grades

A pass in an Advanced Supplementary subject is indicated by one of the five Grades: A(a), B(b), C(c), D(d), E(e), of which Grade A(a) is the highest and Grade E(e) is the lowest.

Grade N(n) indicates that the candidate's performance fell short of the standard required for Grade E(e) by a narrow margin.

Examinations in AS subjects are of the same standard as examinations in Advanced subjects, but AS syllabuses cover about half the subject content of Advanced syllabuses.

Special Paper Grades

The grades for the Special Paper are Grade 1 and Grade 2.

Double Awards in Science

The results in this syllabus are reported in terms of A-E and N and the grade is recorded twice on the certificate to indicate that the results in this syllabus have the same status as GCE grades in two other single-certification subjects.

Explanation of Symbol

The candidate was absent from part of the examination in this subject and was awarded zero marks for this part. The grade was awarded on the components actually taken.

Conditions of Issue

This certificate is and remains the property of the Assessment and Qualifications Alliance at all times and is issued on the following conditions:

- (a) any alteration to this certificate renders it invalid;
- (b) this certificate must be delivered up to the Assessment and Qualifications Alliance on request.

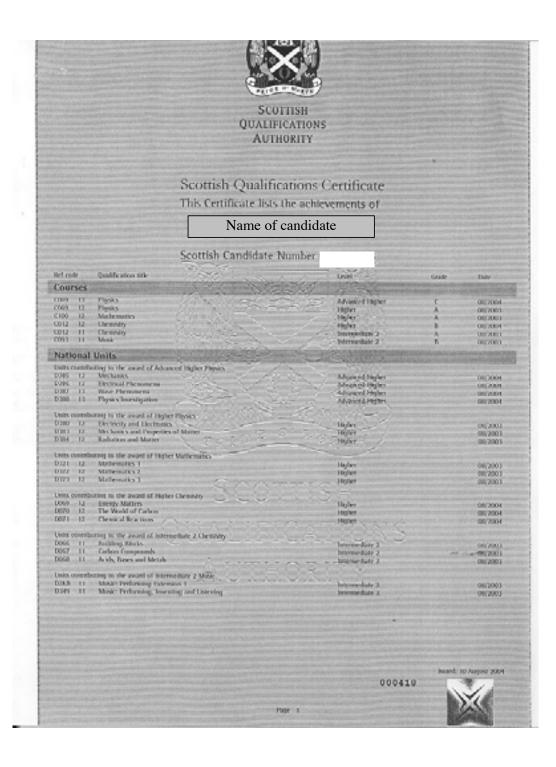
Use of an altered certificate could constitute a criminal offence.

If there is any doubt about the details recorded on the certificate write for confirmation to the Director General at either:

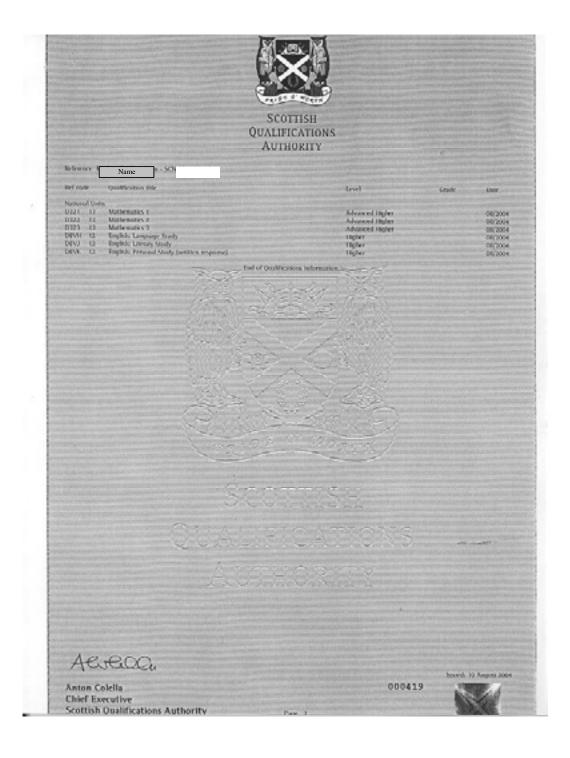
AQA Guildford Office, Stag Hill House, Guildford, Surrey, GU2 7XJ

AQA Manchester Office, Devas Street, Manchester, M15 6EX

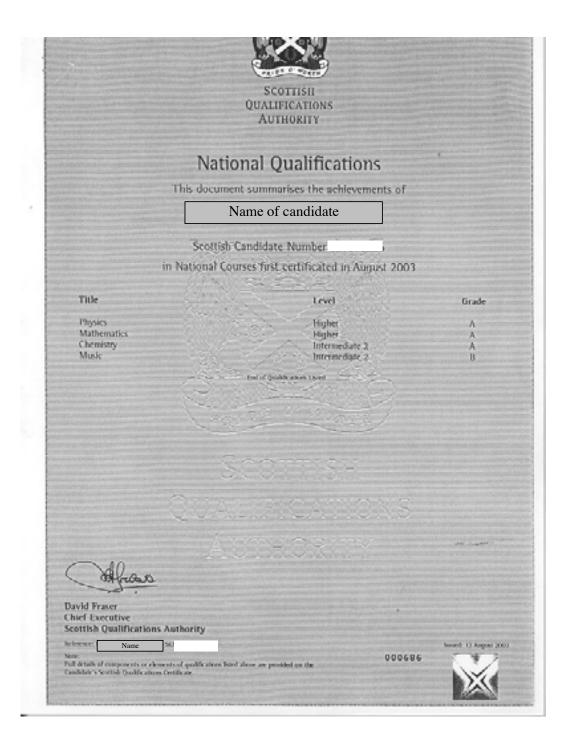
SCOTTISH QUALIFICATIONS CERTIFICATE (SQC)



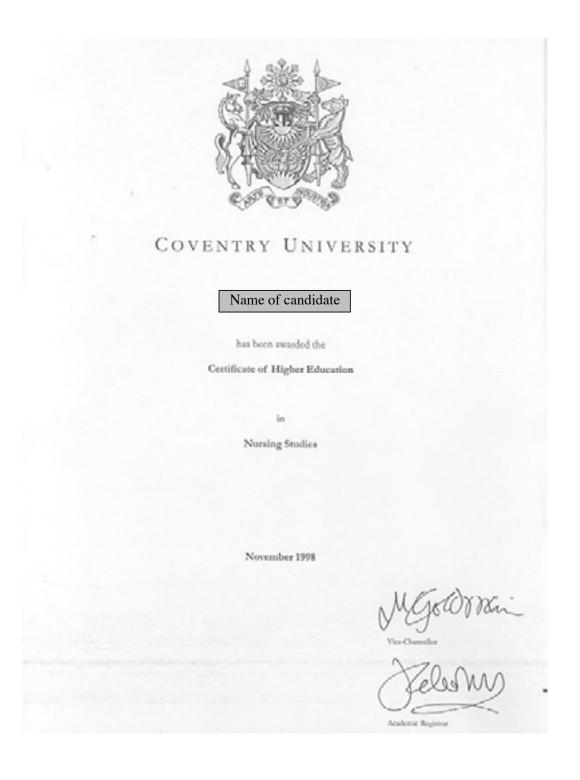
SQC (CONTINUED)



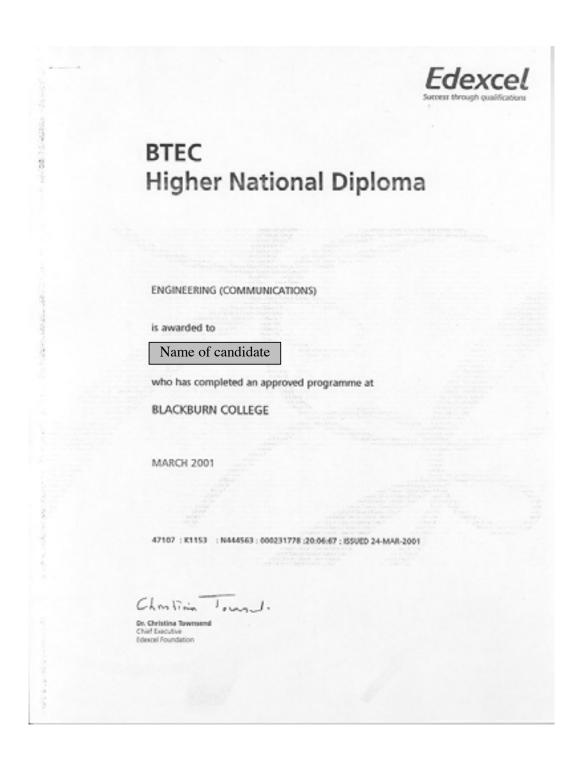
SQC (CONTINUED)



CERTIFICATE OF HIGHER EDUCATION (CERTHE)



HIGHER NATIONAL DIPLOMA (HND)



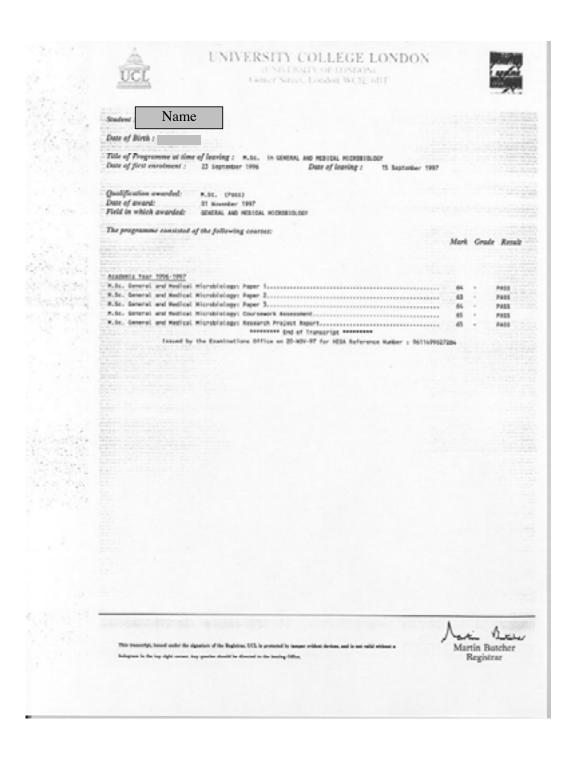
TRANSCRIPT FROM BACHELOR OF ARTS HONOURS DEGREE

Mine Accounting and Accounting accounting and Accounting	d Flance	361			
Miss. Accounting an	that				
Miss. Accounting an	that				
Miss Accounting an	that				
Accounting an	that				
DISC NETTE CONSTITUTIONS	that				
ING METER COMPLETIONS	Unit East				
ING METER COMPLETIONS	tau			Tage .	Subject 6
CHOICE AND SEASON SHOWS		Credita	1.40	Made French	Board I
	1	26	-	35 Pers	88 Echesary 2
SOUTHWAYS STATESTAN		30		54 Pars	64 Schoony P
		.30	1	22 Fam	04 February 7
SERVICIONE ACCUSORO		20	1	Mr. Paus	14 forc 7
es .		26	- 1	55 Park 68 Park	14 June 2 14 June 2
		20		10 790	11.000
CLAW		20		64 Para	#1 February 2
	,	36	- 1	66 Pari	88 Echanics 2
MENT ACCOUNTS WERE COMP.		39	- 1	80 Peex	66 Echesory 2
ARREST AND LYSIS	3	30	- 1	\$1 Pass	12 hour 3
	2	30	1	62 Pain	12 hore 2
D. ACTOUNTING	2	20	1	59 Pare	12.hore 2
0.140891376	3	36	1	25 Pass	15 Mach 2
CE PRODUCTAL ROSCACEMENT	3	29		57 Feet	15 Mach 2
DANAGED CONTRO	,	20	2	50 Part 50 Part	20 July 2 12 Juny 2
ERONCHE ACCOUNTRIES		76		79 Paris	12 June 2
TENNA ACCOUNTS OF THE		56		65 Fam	17 June 2
Assessment Board:	20 July 2001				
Austr					
word:	Accounting a	d Finan	ne		
	.,,,,				NA Argest 200
dom:		Award Canfer b: Backelor of A Accounting as	Award Conferred Enthelor of Arts Hone Accounting and Finan	Award Conferred Enthelor of Arts However, Accounting and Finance	Award Canferred E: Backeter of Arts Honours

EXPLANATORY NOTES FOR BACHELOR OF ARTS HONOURS DEGREE

		UNDERGRADUATE DEGREE SCHEME TRANSCRIFT
'	2000/1. These changes will be	table of your performance is all the units you have tall on up far. The meandage of unit and overall shed below. Please note that new regulations have been introduced with effect from Session are the following impleations for the information contained within your transcript.
	the range of year party result decisions for an assessed up to and to	parasion decisions is slightly different to that stind in province, priors; sto that have been accessed to 2006/1 even have different explanations than these that sense (unlong 1999).0.
	Explanations of both unit and y	ear decisions are shown below
2	Degree Requirements thats are designated at Levels of full-time bosours degree.	0, 1, 2 and 3, which coveraged respectively to the foundation. Next, second and third year of a
	A standard full time y A standard horseway	ear consists of 170 cooles, i.e. 6 standard 20 coole only. legree consists of 360 cooles, operatly 170 at earls of timels 1, 2 and 3.
,	Unit Decisions	
3.1	Unit Decisions up to and in Fave.	chading Session 1999/0 A pars mark has been achieved.
	Compressed Pass	Componented pass in a only which use marginally failed.
	SIt/Submit	The unit has not here parted and or assessment is previled, as though for the first time one retrieval actions.
	Resit/Re-submit	the out but not been posted and or assessment is permitted with the outs math capped at 60% (see retrieval action):
	fall	the unit has not been passed and se assessment may be premitted time settingal actions
	Fail - Exclude	the unit has not been passed and re assessment is not normally promitted.
12	Unit Decisions from Session Para	n 2000/1 oswardi A para mark ban hore achieved;
	Compressated Paris	Compensated pars in a unit shick was exerginally failed.
	Not Passed	the sait has not been pasted and re-assessment is permitted fore retrieval actions.
	fireviewal not promitted	Capping will not apply: The unit has not been passed and re-assessment is not permitted.
4	Year Decisions An overall/year decision is tal	ion normally after the completion of one year of academic study
	Proceed	you may proceed to the sent year of the programme but should take note of the reviewd action required for units that hour not been precised.
	Defer	One or recen writs are not possed and it is not possible to make a final prospection decision at this stage. A further decision will be made once you have had an opposituality to satisfy any specified retrieval actions:
	Chan's Action	becomplete information available to the Assessment Board, which requires further tenestigation by the Chair before a decision may be reached.
	Fall - Report	You may not proceed to the mest year of the programme level without undertaking further study which will extend the overall leopth of your programmer.
	East - Exclude	You have falled the Lovel and must beave this programme of yorky
5	have any problems, you this	ake if you have not pursued a unit is shown under the heading of 'Interioral Action' overleaf. If you did contact the relevant that Leader or Solyect Area on-ordinates. With effect from Cristian 2000/1 Lup to four 'opportunities' to pursueny unit of stody.
6	South and copies of the reter	Separte an associatement decisions may appead to accordance with the University's requirement. Appead wast sections of engolations, can be obtained from the Department of Stanford Administration at the Blackup, Dockhands and Stanford Campusers, or engogened by relegious 8200-8273-2057; sould be foulded with the Department of Quality Accordance, Barking Campus, within 14 days of the goal the relevant results for.
7	Re-enrolment Please note that all students any information about re-en-	who are continuing their studies next session are required to se excel. If you have not yet received referred, please contact the Emplement of Student Administration at the earliest opportunity

TRANSCRIPT FROM MASTER OF SCIENCE DEGREE



MASTER OF SCIENCE DEGREE



UNIVERSITY OF LONDON

University College London

Name of candidate

having completed the approved course of study and passed the examinations has this day been admitted by University College London to the University of London Degree of

MASTER OF SCIENCE

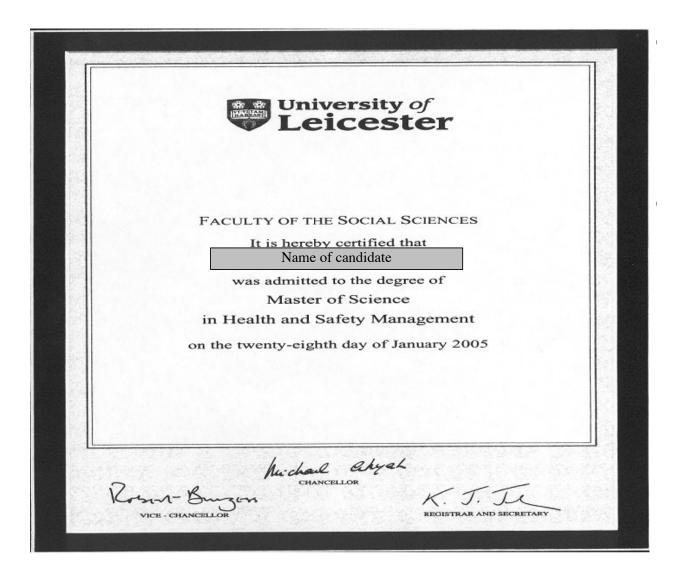
in General and Medical Microbiology

Provost, University College London

Vice-Chancellor

1 November 1997

MASTER OF SCIENCE DEGREE



TRANSCRIPT FROM POSTGRADUATE DIPLOMA (FIRST YEAR OF MSc PROGRAM)

STM

School of Technology and Management

Kings Head House, Kings Head Yard London SUL 1NA, U.K. Tel: 020 7078 9061 / 020 7057 0077 Fax: 020 7400 1163

Fax: 020 7403 1163 Email: infollstedondon.co.uk Website: www.stedondon.co.uk In collaboration with

University of East London University of Sunderland Liverpool John Moores University

24 May 2006

TRANSCRIPT

Student Name: Name of candidate
Student Id
Course: Masters of Science in Computer Systems Engineering (MSc CSE)
Semester 1 & 2

Subject	Final Result
Numerical Method	CR
Programming Methodologies Part I	PS
Systems Analysis and Design Part I	PS
Data Communications and Computer Network	CR
Digital Communication	CR
Programming Methodologies Part II	PS
Systems Analysis and Design Part II	PS
Digital Signal Processing	PS

Uma Mohan

1.4---

STM Course Leader

Leanne Keetch Examinations Officer Dissinction = Abone 20%.
Crodit Pass = 60% - 60%,
Pass = 50% - 50%,
Pass = 50% - 50%,
Pass = 50% - 50%,
Pat (not = Pat because not all assessment completed
Pat (1) = Pat bocause of playleshess,
DO = Dissinction Distance (non-redimension of
assignmental coams of other minigolog ciscomsococy)





POSTGRADUATE DIPLOMA



School of Technology and Management

This

Postgraduate Diploma in Computer Systems Engineering
is awarded to

Name of candidate

Who has satisfied the requirements of the School's examiners in

Numerical Methods
Data Communications and Networking
Programming Methodology I
Programming Methodology II
Systems Analysis and Design I
Systems Analysis and Design II
Digital Communication
Digital Signal Processing

Academic Administration



DOCTOR OF PHILOSOPHY DEGREE (PhD)



DEGREE OF DOCTOR OF PHILOSOPHY

By the Authority of the Senatus Academicus

Name

was admitted to the Degree of Doctor of Philosophy in the Faculty of Medicine on the Fourteenth day of July, Two Thousand and One.

Stewart R. Subbeland

incinal and Vice Chancellor

70996

los las

Dean of the Faculty

Secretary to the University



© 2007 the Crown in right of the Province of Alberta Government of Alberta, International Qualifications Assessment Service (IQAS) ISBN: 978 - 0 - 7785 - 6988 - 6

PRINTED IN CANADA • JANUARY 2008



