

# **RECOGNITION LIST**

# ENGINEERING

## RECOGNITION LIST

City & Guilds is a leading vocational education organisation, with over 135 years of experience in providing skills solutions for future career progression.

We work with employers and training providers in 80 countries to meet the needs of today's industries and we are proud that our offer is often regarded as the benchmark for workplace excellence.

Since 1878, millions of learners have used a City & Guilds qualification as a stepping stone to a new job. For many, our qualifications also lay the foundation for future learning and development including progression into higher education or towards achieving a professional certification.

The recognition list highlights some of these opportunities in the engineering sector. We hope these examples will inspire individuals around the world to continue learning new skills and help them transform their lives.

### GOVERNMENT p5 HIGHER EDUCATION PROFESSIONAL REGISTRATION p25 p29



## INTRODUCTION

Organisations featured in this document are examples of institutions that recognise the following qualifications, as shown in their individual statement:

- Engineering (2850)
- Telecommunication Systems (2730)
- Higher level engineering qualifications:
- Level 4 Diplomas in Engineering (9209)
- Level 5 Advanced Technician Diplomas in Engineering (9209)
- Level 6 Graduate Diplomas in Engineering (9210)
- Level 7 Post Graduate Diplomas in Engineering (9210)





Advanced Technician Diploma (9209)



Graduate Diploma (9210)

Post Graduate Diploma (9210)

Illustrations used throughout this publication are representative of the people and industries City & Guilds works with and supports. Persons shown may be unrelated to the statements or endorsements on the same or adjoining pages.

### R V SAMITH RAJAPAKSHA WINNER INTERNATIONAL LEARNER OF THE YEAR LION AWARD 2014

Samith completed a Level 2 IVQ Technician Diploma in Telecommunication Systems before joining Sri Lanka Telecom, as a trainee. A two-hour commute from a remote village in Sri Lanka never discouraged him from attending his training. To fund his course, he worked several part-time jobs which included farming in the paddy fields with his father.

His work, both at the training centre and then at Sri Lanka Telecom, has always been at a high standard and he progressed rapidly. Upon joining the company, he was soon allowed to perform tasks that were normally reserved for advanced technicians.

Samith is passionate about teaching others what he knows. While completing his studies, he produced a basic handbook for telecom technicians and gave it to his classmates to help them prepare for their exams. Today, he delivers lectures to students at the training centre where he obtained his City & Guilds qualification.

Samith's story is a shining example of how learning skills can help to transform lives. And transforming lives is what City & Guilds is about.

Engineering

introduction.02

### INTRODUCTION **KEYS EXPLAINED**

#### Engineering (2850)



Level 1 Certificate in Engineering (2850-80)

Level 2 Certificate in Engineering

- Maintenance Technology (2850-82)
- Fabrication and Welding Technology (2850-83)
- (2850-84)

Level 2 Diploma in Engineering

- Manufacturing Technology (2850-51)
- Maintenance Technology (2850-52)
- (2850-53)
- Electrical and Electronics Technology (2850-54)

Engineering (9209)



Level 4 Diploma

- Mechanical Engineering (9209-01)
- Electrical and Electronic Engineering (9209-02)
- Civil Engineering (9209-03)



- Level 5 Advanced Technician Diploma
- Mechanical Engineering (9209-11)
- Electrical and Electronic Engineering (9209-12)
- Civil Engineering (9209-13)

#### Engineering (9210)

Level 6 Graduate Diploma

- Mechanical Engineering (9210-01)
- Civil Engineering (9210-01)
- Electrical Engineering (9210-01)
- Electronic and Telecommunication Engineering (9210-01)
- Information Technology (9210-01)

- Level 7 Post Graduate Diploma
- Mechanical Engineering (9210-02)
- Civil Engineering (9210-02)
- Electrical Engineering (9210-02)
- Electronic and Telecommunication Engineering (9210-02)
- Information Technology (9210-02)

- Manufacturing Technology (2850-81)

- Electrical and Electronics Technology

- Fabrication and Welding Technology

Keys

Certificate

Certificate

Diploma

Diploma

Certificate

Diploma

Diploma

Diploma

Advanced Technician Diploma

Advanced Technician

Graduate Diploma

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3 Level 3 Diploma in Telecommunication Systems (2730-13)

Systems (2730-12)

Level 5 Advanced Technician Diploma in Telecommunication Systems (2730-03)

Level 3 Diploma in Engineering

- Fabrication and Welding (2850-87)

- Maintenance, Installation and Commissioning

- Electrical and Electronic Engineering (2850-90)

- Mechanical Manufacturing Engineering

Telecommunication Systems (2730)

Level 2 Certificate in Telecommunication

- Welding (2850-85)

(2850-88)

(2850-89)

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- Fabrication (2850-86)

This section outlines how the international engineering qualifications are recognised within national qualifications frameworks or accepted by government agencies and other regulatory authorities.

# GOVERNMENT RECOGNITIONS

Engineering

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### ENGINEERING

England

The Office of the Qualifications and Examinations Regulation (Ofqual) register.ofqual.gov.uk/

The engineering qualifications (2850) are accredited on the Qualifications and Credit Framework.

The level in the qualification title shows the Framework level that each qualification is accredited at.

The qualification number is the qualification accreditation number (\*).

Ofqual regulates qualifications, examinations and assessments in England and vocational qualifications in Northern Ireland.

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Ofqual sets the standards of qualifications and ensures that these standards are delivered. Ofgual also checks that bodies that award qualifications meet regulatory requirements.

Accredited qualification title	CG no.	Qual. no.*	Accredited qualification title	CG no.	Qual. no.*
Level 1 Certific	cate in Engine	ering	Level 3 Diplom	ia in Engineer	ing
	2850-80	600/0879/9	- Welding	2850-85	600/0882/9
	2000 00		- Fabrication	2850-86	600/0882/9
Level 2 Certific	cate in Engine	ering	- Fabrication and Welding	2850-87	600/0882/9
<ul> <li>Manufacturing</li> <li>Technology</li> <li>Maintenance</li> </ul>	2850-81	600/0880/5	- Maintenance, Installation and Commissioning	2850-88	600/0882/9
Technology - Fabrication and Welding	2850-82	600/0880/5	- Mechanical Manufacturing Engineering	2850-89	600/0882/9
Technology - Electrical and	2850-83	600/0880/5	- Electrical and Electronic Engineering	2850-90	600/0882/9
Electronics Technology	2850-84	600/0880/5			
Level 2 Diplon	na in Engineei	ring			
- Manufacturing	1.1.1.1.2.1.3.1.001				
Technology	2850-51	600/0881/7			
<ul> <li>Maintenance Technology</li> </ul>	2850-52	600/0881/7			
<ul> <li>Fabrication and Welding Technology</li> </ul>	2850-53	600/0881/7			

- Electrical and Electronics

#### Technology 2850-54 600/0881/7

Certificate Certificate Diploma Diploma Certificate 4 Diploma Advanced Technician Diploma 5 Diploma 5 Advanced Technician Diploma Diploma Graduate Diploma Post Graduate Diploma

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### **HIGHER LEVEL ENGINEERING**

The Office of the Qualifications and Examinations Regulation (Ofqual) register.ofqual.gov.uk/

The engineering qualifications at levels 4 and 5 (9209) are accredited on the National Qualifications Framework of England, Wales and Northern Ireland (NQF).

The level in the qualification title shows the NQF level that each qualification is accredited at.

The qualification number is the qualification accreditation number (\*).

The engineering qualifications at levels 6 an 7 (9210) have been developed using the NQF level descriptors.

Ofqual regulates qualifications, examinations and assessments in England and vocational qualifications in Northern Ireland.

Ofqual sets the standards of qualifications and ensures that these standards are delivered. Ofqual also checks that bodies that award qualifications meet regulatory requirements.

Qualification title	CG no.	Qual. no.*	Qualification title	CG no
Level 4 Diploma	a		Level 6 Graduate	Diplon
<ul> <li>Mechanical Engineering</li> </ul>	9209-01	601/5555/3	- Civil Engineering	9210
<ul> <li>Electrical and Electronic</li> </ul>	9209-01	001/5555/5	- Electrical Engineering - Electronic and	9210
Engineering	9209-02	601/5556/5	Telecommunication Engineering	9210
- Civil Engineering	9209-03	601/5535/8	- Information Technology	9210
Level 5 Advanc	ed Technicia	n Diploma	- Mechanical Engineering	9210
- Mechanical			Lingineering	7210
Engineering - Electrical and Electronic	9209-11	601/5553/X	Level 7 Post Grad	uate D
Engineering	9209-12	601/5554/1	- Civil Engineering	9210
- Civil Engineering	9209-13	601/5534/6	- Electrical Engineering	9210
			- Electronic and Telecommunication	

Engineering

- Information

Technology

- Mechanical Engineering

no. Comparable level (NQF) ma 0-01 Level 6 Diploma 0-02 Level 7 0-02 Level 7 9210-02 Level 7 9210-02 Level 7 9210-02 Level 7

Keys Certificate Certificate Diploma 3 Diploma Ø Certificate 3 Diploma E Advanced Technician Diploma 4 Diploma 5 Advanced Technician Diploma Graduate Diploma Post Graduate Diploma

Engineering

### **TELECOMMUNICATION SYSTEMS**

England

The Office of the Qualifications and Examinations Regulation (Ofqual) register.ofqual.gov.uk/

Accredited Oual. no.\* CG no. The Telecommunication Systems qualifications qualification title at levels 2 and 3 (2730) are accredited on the National Qualifications Framework of England, 2 Wales and Northern Ireland (NOF). Level 2 Certificate The level in the qualification title shows the NQF in Telecommunication level that each qualification is accredited at. Systems 2730-12 601/1051/X The qualification number is the qualification Level 3 Diploma in accreditation number (\*). Telecommunication Systems 2730-13 601/0540/9

Ofqual regulates qualifications, examinations and assessments in England and vocational qualifications in Northern Ireland.

Ofqual sets the standards of qualifications and ensures that these standards are delivered. Ofgual also checks that bodies that award qualifications meet regulatory requirements.

UK's National Recognition Information Centre (UK NARIC) www.naric.org.uk

The Advanced Technician Diploma in Telecommunication Systems (2730-03) has been mapped by UK NARIC to level 5 of the National Qualifications Framework of England, Wales and Northern Ireland (NOF).

This comparability can be used to infer progression within the UK education system. Qualification title CG no. Comparable

Advanced Technician Diploma in Telecommunication 2730-03 Level 5 Systems

UK NARIC is the UK's National Recognition level (NOF)

Information Centre and National Reference Point for Vocational Qualifications (UK NRP), the official source of information on the comparability of international qualifications to those available in the UK (both academic and vocational).



#### Trinidad and Tobago

The Accreditation Council of Trinidad and Tobago (ACTT) www.actt.org.tt

Qualifications listed in this entry (please refer to the middle column) are available for delivery in Trinidad and Tobago by City & Guilds approved centres which are registered with ACTT.

Delivery of individual programmes is subject to ACTT approval..

ACTT is the governing body for quality assurance of post-secondary and tertiary education in Trinidad and Tobago, including the accreditation and recognition of local and foreign training institutions, programmes, awards and awarding bodies.

City & Guilds has been recognised by ACTT as a foreign awarding body to offer post-secondary and tertiary qualifications in Trinidad and Tobago.

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Level 3 Diploma in Engineering

- Welding (2850-85)
- Fabrication (2850-86)
- Fabrication and Welding (2850-87)
- Maintenance, Installation and Commissioning (2850-88)
- Mechanical Manufacturing Engineering (2850-89)
- Electrical and Electronic Engineering (2850-90)

#### Level 4 Diploma

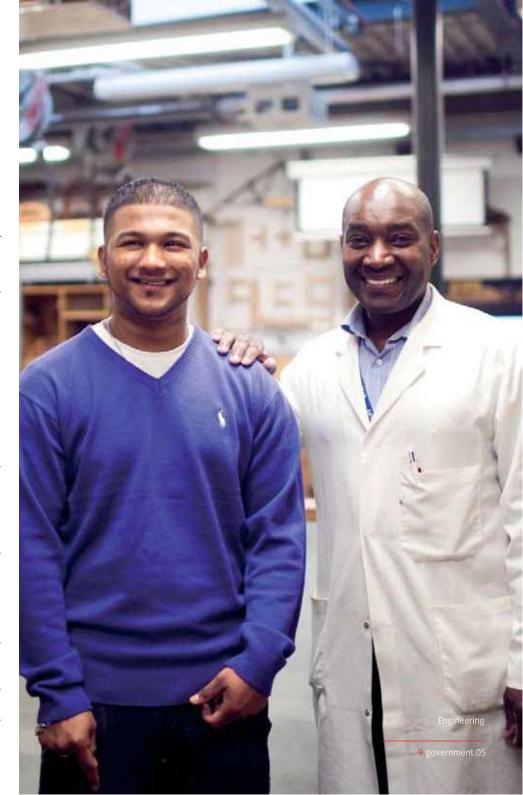
- Mechanical Engineering (9210-01)
- Electrical and Electronic Engineering (9210-02)
- Civil Engineering (9210-03)

Level 5 Advanced Technician Diploma

- Mechanical Engineering (9210-11)
- Electrical and Electronic Engineering (9210-12)
- Civil Engineering (9210-13)

Level 3 Diploma in Telecommunication Systems (2730-13)

Level 5 Advanced Technician Diploma (2730-03)



#### Zambia

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Certificate

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Advanced Technician Diploma

Advanced Technician Diploma

Graduate Diploma

Post Graduate Diploma

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Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) www.teveta.org.zm

Qualifications listed in this entry have been	Qualification title	CG no.	TQF level	Qualification title	CG no.	TQF leve
recognised by TEVETA within the TEVET Qualifications Framework (TQF).	Level 1 Certificat Engineering (2850-80)	te in 2850-80	Level 3	Advanced Technician Diploma in		
TEVETA is responsible for registering all technical, entrepreneurial and vocational training programmes offered in the country, the providers that offer them and the examinations these programmes lead to.	Level 2 Certificat	te in Enginee	ring	Telecommunication Systems	2730-03	Level 4
	- Manufacturing Technology	2850-81	Level 4			
	<ul> <li>Maintenance Technology</li> </ul>	2850-82	Level 4			
	- Fabrication and Welding Technology	2850-83	Level 4			
	<ul> <li>Electrical and Electronics Technology</li> </ul>	2850-84	Level 4			
	Level 3 Diploma	in Engineeri	ng			
	- Welding	2850-85	Level 4			
	- Fabrication	2850-86	Level 4			
	<ul> <li>Fabrication and Welding</li> </ul>	2850-87	Level 4			
	<ul> <li>Maintenance,</li> <li>Installation and</li> <li>Commissioning</li> </ul>	2850-88	Level 4			
	<ul> <li>Mechanical</li> <li>Manufacturing</li> <li>Engineering</li> </ul>	2850-89	Level 4			
	- Electrical and Electronic Engineering	2850-90	Level 4			

Institutions featured in this section are examples of universities and colleges which have recognised appropriate level(s) of the Engineering or Telecommunication Systems qualifications for admission to the relevant degree or degree linked programmes. Possible exemptions, where these may apply, are shown in each individual entry.

Levels shown indicate the levels accepted as minimum requirements.

Recognition and successful completion of the recognised level(s) do not guarantee admission and each application will be considered on an individual basis.

Applicants will be required to meet all other academic and non-academic entry requirements, including the English language proficiency, set by the recognising institution.

# HIGHER EDUCATION RECOGNITIONS

Engineering

### **TELECOMMUNICATION SYSTEMS**

United Kingdom



University of Abertay Dundee www.abertay.ac.uk

Holders of an Advanced Technician Diploma will normally be considered for entry to year 1 of the BSc (Hons) Computing programme.

Abertay is one of Scotland's leading universities and one of the top ten modern UK universities. It was the first university in the world to offer a degree in computer games and in ethical hacking and is still a leader in the field. The University has strong links with industrial partners from across the broadcast, interactive and wider digital media sectors including the BBC, Sony Entertainment Europe, Microsoft and Disney Interactive.

The University has almost 5,000 students from 60 countries, 17 percent of whom come from outside Europe including India, China, Malaysia, Thailand and Pakistan. Abertay is one of the largest providers of UK degrees in Malaysia.

Abertay is located in Scotland's sunniest city and offers an affordable lifestyle.

Anglia Ruskin University www.anglia.ac.uk

Holders of an Advanced Technician Diploma will normally be considered for entry to the first year of relevant undergraduate courses offered by the Department of Design and Electronics.

Anglia Ruskin University is modern university, one of the largest universities in the East of England and one of the most socially inclusive in the UK.

There are over 30,000 students including around 5,000 international students. The University has an extensive network of contacts with institutions throughout the world, delivering courses in countries as far as Malaysia and Trinidad.

The University works with leading employers to designs its courses which have a strong vocational focus. Its partners include Barclays Bank and some of the UK's largest retail opticians (eg Specsavers, Boots and Vision Express) who all play a part in the planning process of the courses.

Anglia Ruskin also offers an Employer Mentoring Scheme which matches second year undergraduates with a mentor from their chosen career field to help students' transition into the world of world upon graduation. Bournemouth University www.bournemouth.ac.uk

Students holding an Advanced Technician Diploma may be considered for entry to the second year of a Bournemouth University Bachelors degree, provided that evidence is submitted that they have already studied the subjects that they would have covered within the first year of this Bachelors degree.

Bournemouth University is recognised as one of the most innovative universities in the UK. The University has around 17,000 students, including around 2,000 international students from over 100 countries.

The University is home to the National Centre for Computer Animation (NCCA) and has achieved numerous awards for its contribution to worldleading excellence and pioneering development in computer animation. Over 100 graduates have been involved in creating animated films which have been nominated for the Visual Effects and Animation Oscars including the Life of Pi, The Hobbit, Snow White and the Huntsman, Les Miserables and Skyfall.

Bournemouth boasts some of the best beaches in the UK and is less than two hours away from London.

Telecommunication Systems

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Advanced Technician

### TELECOMMUNICATION SYSTEMS

United Kingdom (continued)



Durham University www.dur.ac.uk

The University welcomes applications from holders of an Advanced Technician Diploma.

All such applicants will be treated on an individual basis, and considered on the merit, not only for entry itself, but also for any form of accreditation of prior learning or Advanced Standing which might be appropriate.

All Engineering programmes require evidence of performance in Maths to the equivalent of at least grade B at A level.

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Durham University is one of the UK top universities and the third oldest in England, after Cambridge and Oxford. There are around 17,000 students, including over 3,000 international students from more than 150 countries.

Durham is consistently ranked amongst the leading universities in the world and recognised for having world-class research in every single area of assessment across the sciences, social sciences and humanities.

The city is picturesque and students who secure a place at the University live and study in the midst of a world heritage site. University College, also known as the 'Castle', was founded in 1832 and is the oldest university building in the world. Edinburgh Napier University www.napier.ac.uk

The Advanced Technician Diploma will permit entry to year 3 of the BEng Electronic and Communication Engineering.

This will allow a degree to be obtained after one year of study and an honours degree after two.

Edinburgh Napier is one of Scotland's leading modern universities with a distinctly international flavour. There are around 17,000 students at the University, including over 4,000 international students from 109 countries. Edinburgh Napier has another 4,000 students studying on programmes delivered with partner institutions in China, Hong Kong, India and Singapore.

The University's academic outlook is largely vocational, offering a range of flexible study methods and entry routes. In the 2015 Guardian University League Tables, Edinburgh Napier University is ranked as the top UK Modern University and the top Scottish Modern University for studying General Engineering and the top UK Modern University for studying Civil Engineering.

#### ♥ இ 室 ♥ ▲ Hull UNIVERSITY OF Hull

University of Hull www.hull.ac.uk

The University welcomes applications from holders of an Advanced Technician Diploma. All such applicants will be treated on an individual basis. All BEng programmes require evidence of performance in Maths to the equivalent of at least grade C at A level.

Holders of an Advanced Technician Diploma will normally be eligible to apply for entry to the second year of a three-year BEng degree in Electronic Engineering.

Consideration will also be given for entry to the second year in all other programmes.

The University of Hull is a traditional, medium size university, with a reputation for friendliness.

There are around 20,000 students, including 2,000 international students from over 100 countries.

Students appreciate the modest cost of living and ready availability of accommodation, as well as the quality of courses.



Telecommunication Systems

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#### **TELECOMMUNICATION SYSTEMS**

United Kingdom (continued)



Northumbria University www.northumbria.ac.uk



Holders of the Advanced Technician Diploma will be considered for entry to

- level 6 (final year) of the BEng(Hons) Mobile **Communications Engineering degree** programme or
- level 5 (year 2) BEng(Hons) Electrical and Electronic Engineering degree programme.

Northumbria is a research-rich, businessfocused, professional university with a global reputation for academic excellence. It is based in the heart of Newcastle upon Tyne, which is regularly voted the best place in the UK for students. There are around 33,500 students, including more than 7,000 international students, from 136 countries.

The University has state-of-the-art teaching, research and sports facilities. General engineering, architecture and the built environment are among the highest scoring areas of research, judged as being 'worldleading' or 'internationally excellent'.

Famous alumni include Sir Jonathan Ive, the designer of the iMac, iPod, iPhone and iPad and Rob Law MBE, designer of the children's Trunki cases which sell in more than 60 countries.

Northumbria is top ten in the UK for the number of graduates entering professional employment and nine out of ten graduates are working or studying six months after graduation.

Northumbria works with more than 560 employers, including major corporates such as Nike, IBM, Nissan, Proctor & Gamble and the BBC, and over 60 professional bodies sponsor or accredit the University's programmes.

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Systems

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### **TELECOMMUNICATION SYSTEMS**

United Kingdom (continued)

#### Sheffield Hallam University

Sheffield Hallam University www.shu.ac.uk

Holders of an Advanced Technician Diploma in Applied Telecommunication Systems (including Advanced Mathematics 1) are eligible to apply for level 6 BEng Telecommunication and Electronic Engineering.

Sheffield Hallam has been voted as the best modern university in the north of the England (The Times and Sunday Times, 2015). With over 34,000 students from more than 100 countries, the University is a vibrant and diverse study destination.

Courses are designed in consultation with partners in business, industry and the public sector, including links with around 65 professional bodies and many of the world's leading brands including Sony, BP, Cisco, SAP and Microsoft.

Over the past years, more than £100 million has been invested into new facilities including international standard sports pitches, new lecture theatres and new research facilities.

The city of Sheffield has been named as one of the safest, greenest and happiest places to live in the UK. It also has a much lower cost of living than other major UK cities.



### **TELECOMMUNICATION SYSTEMS**

United Kingdom (continued)



University of Westminster www.westminster.ac.uk



Applicants who are awarded an Advanced Technician Diploma in Applied Telecommunication Systems will be considered for entry to Level 5 (Year Two) of the following courses in the School of Electronics and Computer Science:

- BSc (Hons) Electronic Engineering
- BSc (Hons) Computer Systems Engineering
- BSc (Hons) Computer Networks and Communications
- BSc (Hons) Computer Networks Security.

This is subject to the following criteria:

- An applicant must successfully complete and pass all modules on the Advanced Technician Diploma in Applied Telecommunication Systems with at least a grade C (credit) or above
- An applicant must successfully complete and pass the 'Software Engineering' unit and the 'Advanced Maths 2' unit at C (Credit) or above
- The offer of a Level 5 place is subject to the applicant achieving at least an IELTS score of 6.0 or an equivalent English qualification
- An applicant for the Course will be considered for admission provided that all other academic and non-academic requirements are met.

The University of Westminster is modern university, located in the heart of London, with around 24,000 students, including 5,000 international students from over 150 countries.

The University is one of the top 15 most popular UK universities for international students and enjoys a global reputation for the quality of courses, research and teaching.

Westminster offers one of the largest international scholarships scheme in the UK and delivers courses in a number of countries outside the UK including Sri Lanka and Uzbekistan.

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### HIGHER EDUCATION RECOGNITIONS TELECOMMUNICATION SYSTEMS

Jamaica

Sri Lanka

University of Technology, Jamaica www.utechjamaica.edu.jm



Each student will be assessed on an individual basis and given credit for equivalent work completed.

The University of Technology, Jamaica (UTech) is the second largest university in Jamaica, offering over 100 programmes to 11,000 students. Colombo International Nautical & Engineering College (CINEC) www.cinec.edu

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The Advanced Technician Diploma will be accepted as entry qualification for admission to the second year of the Bachelor of Engineering (OBIF) programme.

Colombo International Nautical & Engineering College (CINEC) is Sri Lanka's largest private higher education institution offering over 175 training programmes to 14,000 students.

The Maleba campus of CINEC manages the Bachelor of Engineering (OBIF) programme of the University of South Australia (UniSA).

Students study the first years of the four-year programme at CINEC and transfer to UniSA for the next two years. Each programme consists of two semesters per year of study and the duration of the semesters is of such that the four semesters can be completed within 18 months, saving students time and money.

UniSA is one of the largest, fastest growing and innovative universities in Australia. The University is part of the influential Australian Technology Network (ATN), an alliance of five prominent universities from each mainland state, and is ranked among the top 200 universities in the world.



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#### **MECHANICAL ENGINEERING**

United Kingdom

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University of Derby www.derby.ac.uk



Students holding a Level 4 Diploma in Mechanical Engineering may be considered for entry to the second year of the BEng (Hons) Mechanical Engineering or the BEng (Hons) Mechanical and Manufacturing Engineering, provided that evidence is submitted that they have already studied the subjects that they would have covered within the first year of this degree.

This will be evidenced by a balanced profile of mechanical/manufacturing engineering, applied analytical methods, engineering design and workshop technology, underlying mathematics and principles, and laboratory skills. Students holding a Level 5 Advanced Technician Diploma in Mechanical Engineering may be considered for entry to the third year of the BEng (Hons) Mechanical Engineering or the BEng (Hons) Mechanical and Manufacturing Engineering, provided that evidence is submitted that they have studied the subjects that they would have covered within the first two years of this degree and achieved the appropriate classification.

This will be evidenced by a balanced profile of mechanical/manufacturing engineering, advanced applied analytical methods, engineering design modelling, thermodynamics/industrial control systems, structural analysis/design for manufacture and laboratory skills.

Students who complete the BEng(Hons) Mechanical Engineering programme and have studied with the University for a minimum of two full years will be eligible to apply for the Incorporated Engineer (IEng) status from the Institution of Mechanical Engineers (IMechE).

The BEng(Hons) Mechanical and Manufacturing Engineering is new for September 2014 and is undergoing accreditation by the Institution of Mechanical Engineers (IMechE). The University of Derby is a modern and friendly university located in central England, on the edge of the beautiful countryside of the Peak District.

There are over 20,000 students, including 1,700 international students from 120 countries. The university also has partnerships with colleges and universities in Europe, USA, Africa, Middle East and Asia.

Derby is ranked among the top modern UK universities for student support and faith provision, lecture quality, learning technology and student employability. It also features in the top 50 in the 2015 Guardian University League Table.

Derby has awarded more work-based qualifications than any other UK university. The university has built close links with the local industry and its partners include global brands such as Rolls-Royce, Toyota, Grosvenor Hotels, Wella, TONI&GUY, Mandarin Oriental Spas and Tui Travel Group. Most of the university's courses have been developed with employers and are accredited by professional bodies.

Mechanical Engineering

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Advanced Technician

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### **MECHANICAL ENGINEERING**

United Kingdom (continued)



Northumbria University www.northumbria.ac.uk

The Level 4 Diploma in Mechanical Engineering is recognised for direct entry into the second year of the BEng(Hons) Mechanical Engineering programme.

The Level 5 Advanced Technician Diploma in Mechanical Engineering is recognised for direct entry into the third year of the BEng(Hons) Mechanical Engineering programme. Northumbria is a research-rich, businessfocused, professional university with a global reputation for academic excellence. It is based in the heart of Newcastle upon Tyne, which is regularly voted the best place in the UK for students. There are around 33,500 students, including more than 7,000 international students, from 136 countries.

The University has state-of-the-art teaching, research and sports facilities. General engineering, architecture and the built environment are among the highest scoring areas of research, judged as being 'worldleading' or 'internationally excellent'.

Famous alumni include Sir Jonathan Ive, the designer of the iMac, iPod, iPhone and iPad and Rob Law MBE, designer of the children's Trunki cases which sell in more than 60 countries.

Northumbria is top ten in the UK for the number of graduates entering professional employment and nine out of ten graduates are working or studying six months after graduation.

Northumbria works with more than 560 employers, including major corporates such as Nike, IBM, Nissan, Proctor & Gamble and the BBC, and over 60 professional bodies sponsor or accredit the University's programmes.



#### **MECHANICAL ENGINEERING**

United Kingdom (continued)

#### Sheffield Hallam University

Sheffield Hallam University www.shu.ac.uk



The Level 4 Diploma in Mechanical Engineering is recognised for direct entry into the second year of the BEng(Hons) Engineering (Mechanical) (H303) programme.

Optional units taken must include the following units in order to make a candidate eligible for advanced entry:

- Computer Aided Design for manufacture
- Engineering design
- Principles of mechanical component manufacture
- Materials engineering.

The Level 5 Advanced Technician Diploma in Mechanical Engineering is recognised for direct entry into the third year of the BEng(Hons) Engineering (Mechanical) (H303) programme.

Optional units taken must include two of the following units in order to make a candidate eligible for advanced entry:

- Project management
- Instrumentation and control principles
- Modelling engineering designs.

Students who complete the BEng(Hons) Mechanical programme will achieve Incorporated Engineer status from the Institution of Mechanical Engineers. Sheffield Hallam has been voted as the best modern university in the north of the England (The Times and Sunday Times, 2015). With over 34,000 students from more than 100 countries, the University is a vibrant and diverse study destination.

Courses are designed in consultation with partners in business, industry and the public sector, including links with around 65 professional bodies and many of the world's leading brands including Sony, BP, Cisco, SAP and Microsoft.

Over the past years, more than £100 million has been invested into new facilities including international standard sports pitches, new lecture theatres and new research facilities.

The city of Sheffield has been named as one of the safest, greenest and happiest places to live in the UK. It also has a much lower cost of living than other major UK cities.



ost Graduate Diploma

### **ELECTRICAL AND ELECTRONIC ENGINEERING**

United Kingdom



University of Derby www.derby.ac.uk

Students holding a Level 4 Diploma in Electrical and Electronic Engineering may be considered for entry to the second year of the BSc or BEng in Electrical and Electronic Engineering, provided that evidence is submitted that they have already studied the subjects that they would have covered within the first year of the Bachelors degree they apply for.

This will be evidenced by a balanced profile of electrical engineering, electronics, underlying mathematics and principles, and laboratory skills.

Students holding a Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering may be considered for entry to the third year of the BSc in Electrical and Electronic Engineering, provided that evidence is submitted that they have studied the subjects that they would have covered within the first two years of this degree.

This will be evidenced by a balanced profile of electrical engineering, electronics, underlying mathematics and principles, some applications (eg. in telecommunications, control and/or instrumentation), management and laboratory skills.

Students who complete the BEng(Hons) in Electrical and Electronic Engineering programme and have studied with the University for a minimum of two full years will be eligible to apply for Incorporated Engineer (IEng) status from the Institution of Engineering and Technology.

Application for accreditation by the Institution of Engineering and Technology has been made for the BSc(Hons) in Electrical and Electronic Engineering programme, which is new for September 2014. The University of Derby is a modern and friendly university located in central England, on the edge of the beautiful countryside of the Peak District.

There are over 20,000 students, including 1,700 international students from 120 countries. The university also has partnerships with colleges and universities in Europe, USA, Africa, Middle East and Asia.

Derby is ranked among the top modern UK universities for student support and faith provision, lecture quality, learning technology and student employability. It also features in the top 50 in the 2015 Guardian University League Table.

Derby has awarded more work-based qualifications than any other UK university. The university has built close links with the local industry and its partners include global brands such as Rolls-Royce, Toyota, Grosvenor Hotels, Wella, TONI&GUY, Mandarin Oriental Spas and Tui Travel Group. Most of the university's courses have been developed with employers and are accredited by professional bodies.



lectrical and Electronic: Engineering

#### **ELECTRICAL AND ELECTRONIC ENGINEERING**

United Kingdom (continued)



Northumbria University www.northumbria.ac.uk



The Level 4 Diploma in Electrical and Electronic Engineering is recognised for direct entry into the second year of the BEng(Hons) Electrical and Electronic Engineering programme.

Optional units taken must include the following units in order to make a candidate eligible for advanced entry:

- Data communication and networks
- Electrical supply and distribution
- Sequential and combinational logic circuits
- Programming using C.

The Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering is recognised for direct entry into the third year of the BEng(Hons) Electrical and Electronic Engineering programme.

Optional units taken must include the following units in order to make a candidate eligible for advanced entry:

- Instrumentation and control systems
- Electronic communication systems
- Digital design
- Principles and operations of electrical machines and systems
- Analogue design.

Northumbria is a research-rich, businessfocused, professional university with a global reputation for academic excellence. It is based in the heart of Newcastle upon Tyne, which is regularly voted the best place in the UK for students. There are around 33,500 students, including more than 7,000 international students, from 136 countries.

The University has state-of-the-art teaching, research and sports facilities. General engineering, architecture and the built environment are among the highest scoring areas of research, judged as being 'worldleading' or 'internationally excellent'.

Famous alumni include Sir Jonathan Ive, the designer of the iMac, iPod, iPhone and iPad and Rob Law MBE, designer of the children's Trunki cases which sell in more than 60 countries.

Northumbria is top ten in the UK for the number of graduates entering professional employment and nine out of ten graduates are working or studying six months after graduation.

Northumbria works with more than 560 employers, including major corporates such as Nike, IBM, Nissan, Proctor & Gamble and the BBC, and over 60 professional bodies sponsor or accredit the University's programmes.

Keys

Certificate
Diploma
Advanced Technician
Diploma

Advanced Technician Diploma



Electrical and Electronic Engineering

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### **ELECTRICAL AND ELECTRONIC ENGINEERING**

United Kingdom (continued)

#### Sheffield Hallam University

Sheffield Hallam University www.shu.ac.uk

The Level 4 Diploma in Electrical and Electronic Engineering is recognised for direct entry into the second year of the BEng Electronic Engineering (H610) programme.

Optional units taken must be the following units in order to make a candidate eligible for advanced entry:

- Statistical analysis for engineers
- Data communication and networks
- Principles and operation of electrical machines
- Electrical supply and distribution
- Testing and measurement of electronic and electrical systems
- Principles of analogue circuits
- Sequential and combinational logic circuits
- Microprocessor based systems
- Programming using C.

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#### The Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering is recognised for direct entry into the third year of the BEng Electronic Engineering (H610) programme.

Optional units taken must include the following units in order to make a candidate eligible for advanced entry:

- Instrumentation and control systems
- Electronic communication systems
- Digital design
- Signal processing
- Analogue design.

Students who complete the BEng(Hons) Mechanical programme will achieve Incorporated Engineer status from the Institution of Mechanical Engineers. Sheffield Hallam has been voted as the best modern university in the north of the England (The Times and Sunday Times, 2015). With over 34,000 students from more than 100 countries, the University is a vibrant and diverse study destination.

Courses are designed in consultation with partners in business, industry and the public sector, including links with around 65 professional bodies and many of the world's leading brands including Sony, BP, Cisco, SAP and Microsoft.

Over the past years, more than £100 million has been invested into new facilities including international standard sports pitches, new lecture theatres and new research facilities.

The city of Sheffield has been named as one of the safest, greenest and happiest places to live in the UK. It also has a much lower cost of living than other major UK cities.



Electrical and Electronic Engineering

### HIGHER EDUCATION RECOGNITIONS CIVIL ENGINEERING

United Kingdom



University of Derby www.derby.ac.uk



The Level 4 Diploma in Civil Engineering is recognised for direct entry into the second year of the BSc(Hons) Civil Engineering programme.

Holders of the Level 4 Diploma in Civil Engineering will be considered for direct entry into the second year of the BEng (Honours) in Civil and Infrastructure Engineering, subject to individual assessments.

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The Level 5 Advanced Technician Diploma in Civil Engineering is recognised for direct entry into the third year of the BSc (Hons) Civil Engineering programme provided that the holder of the qualification has completed the following optional units:

- Advanced surveying technology
- Transport engineering
- Measurement, costing and contracts for civil engineering
- Pavement design.

Candidates who have completed other optional units may be required to do bridging modules, depending on their background.

#### Holders of the Level 5 Advanced Technician Diploma in Civil Engineering will be considered for direct entry into the third year of the BEng (Honours) in Civil and Infrastructure Engineering, subject to individual assessments.

The BSc(Hons) in Civil Engineering and the BEng(Hons) in Civil and Infrastructure Engineering are both accredited as fully satisfying the educational base for an Incorporated Engineer (IEng).

These programmes lead to Membership of the Institution of Civil Engineers (MICE), the Institution of Structural Engineers (MIStructE), the Chartered Institution of Highways and Transportation (MCIHT), and the Institute of Highway Engineers (MIHE) following a period of relevant experience and a professional review.

In addition, the BEng(Hons) Civil and Infrastructure Engineering is accepted as partially satisfying the requirements for a Chartered Engineer (CEng) registration. The University of Derby is a modern and friendly university located in central England, on the edge of the beautiful countryside of the Peak District.

There are over 20,000 students, including 1,700 international students from 120 countries. The university also has partnerships with colleges and universities in Europe, USA, Africa, Middle East and Asia.

Derby is ranked among the top modern UK universities for student support and faith provision, lecture quality, learning technology and student employability. It also features in the top 50 in the 2015 Guardian University League Table.

Derby has awarded more work-based qualifications than any other UK university. The university has built close links with the local industry and its partners include global brands such as Rolls-Royce, Toyota, Grosvenor Hotels, Wella, TONI&GUY, Mandarin Oriental Spas and Tui Travel Group. Most of the university's courses have been developed with employers and are accredited by professional bodies.

**Civil Engineerin** 

Keys

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Advanced Technician

Advanced Technician

aduate Diploma

ost Graduate Diploma

City & Guilds has worked with the UK's leading professional institutions to align the Graduate Diploma and Post Graduate Diploma in Engineering with the requirements for Incorporated Engineer (Graduate Diploma) and Chartered Engineer (Post Graduate Diploma) registration.

This section outlines how the City & Guilds engineering qualifications can be used towards achieving professional registration.

# PROFESSIONAL REGISTRATION

Engineering



#### THE ENGINEERING COUNCIL www.engc.org.uk

The register of Chartered Engineers (CEng) and Incorporated Engineers (IEng) is held by the Engineering Council, the UK regulatory body for the engineering profession.

The Engineering Council sets and maintains the internationally recognised standards of professional competence and ethics that govern the award and retention of these titles.

To become professionally qualified, candidates must be a member of a licensed professional engineering institution, who will act as the awarding body for their registration. IET, IMechE and ICE are the three largest licensed professional engineering institutions in the UK, allowed to assess candidates for inclusion on their register of professional engineers.

Engineering

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**PROFESSIONAL REGISTRATION** 

Engineering and Technology

The Institution of Engineering and Technology (IET) www.theiet.org

The Institution of Engineering and Technology (IET) welcomes applications from holders of the following City & Guilds qualifications:

For Incorporated Engineer (IEng) registration:

Graduate Diploma in

- Electrical Engineering
- Electronic and Telecommunication Engineering
- Information Technology.

For Chartered Engineer (CEng) registration:

Post Graduate Diploma in

- Electrical Engineering
- Electronic and Telecommunication Engineering
- Information Technology.

IET and City & Guilds are working together to ensure the qualifications are aligned with the registration requirements for Incorporated Engineer (for the Graduate Diploma) and Chartered Engineer (for the Post Graduate Diploma). Candidates with these qualifications will be considered individually under the IET's Peer Review process. Founded 140 years ago, the IET is one of the world's leading professional societies for the engineering and technology community. The IET has more than 150,000 members in 127 countries, with active networks of members in 37 countries. To support its worldwide membership it has offices in Europe, North America and Asia Pacific.

IET's activities include membership and professional development, professional registration under licence from the Engineering Council, publishing and events as well as government and stakeholder engagement on engineering related policy issues. IET also produces independent authoritative fact files and briefings on key topics.

### **PROFESSIONAL REGISTRATION**

#### Institution of MECHANICAL ENGINEERS

The Institution of Mechanical Engineers (IMechE) www.imeche.org

The Level 3 Diplomas in Engineering have been approved by the Institution of Mechanical Engineers (IMechE) for inclusion in the Engineering Council's public database for technician related qualifications.

The qualifications can be used towards meeting the requirements for professional registration as an Engineering Technician (EngTech). Applicants must also undergo a Professional Review by IMechE. IMechE welcomes applications from holders of the following City & Guilds qualifications:

City & Guilds Graduate Diploma in Mechanical Engineering for Incorporated Engineer (IEng) registration.

City & Guilds Post Graduate Diploma in Mechanical Engineering for Chartered Engineer (CEng) registration.

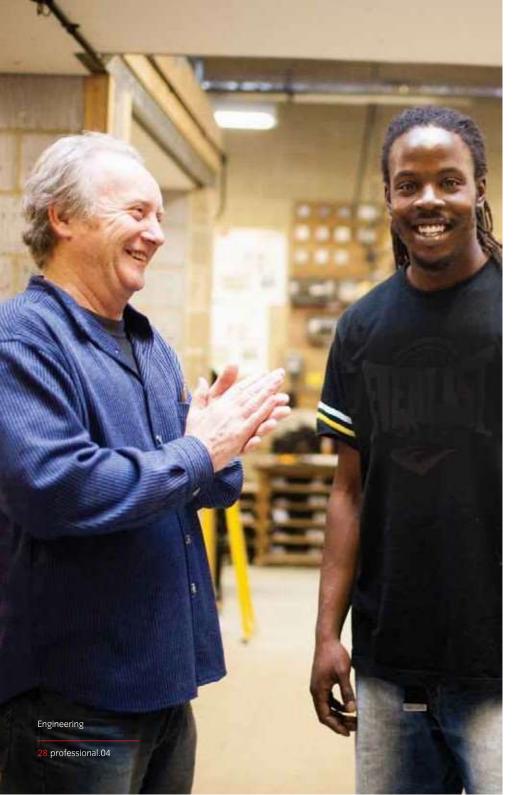
IMechE and City & Guilds are working together to ensure the qualifications are aligned with the registration requirements for Incorporated Engineering (for the Graduate Diploma) and Chartered Engineer (for the Post Graduate Diploma), which will be considered individually by the Institution's Academic Assessment Committee. IMechE is the fastest growing professional engineering institution in the UK. IMechE has been at the heart of the world's most important and dynamic industries since its formation in 1847.

Today, the Institution has over 100,000 members and is a market leader among professional engineering bodies. It represents mechanical engineers in over 120 countries and the Institution is the largest network of mechanical engineering knowledge, skill and opportunity in the world.

IMechE is committed to ensuring that the views of engineers are well represented in the public domain and is an internationally recognised thought leader in the areas of energy, climate change and future transport.



Engineering



## **PROFESSIONAL REGISTRATION**



The Institution of Civil Engineers (ICE) www.ice.org

The Institution of Civil Engineers (ICE) welcomes applications from holders of the following City & Guilds qualifications:

City & Guilds Graduate Diploma in Civil Engineering for Incorporated Engineer (IEng) registration.

City & Guilds Post Graduate Diploma in Civil Engineering for Chartered Engineer (CEng) registration.

ICE and City & Guilds are working together to ensure the qualifications are aligned with the registration requirements for Incorporated Engineering (for the Graduate Diploma) and Chartered Engineer (for the Post Graduate Diploma), which will be considered individually by the Institution's Academic Qualifications Panel. ICE was founded in 1818 and is dedicated to foster and promote the art and science of civil engineering.

Today, the Institution represents nearly 80,000 members worldwide. ICE is a qualifying body, a centre for the exchange of specialist knowledge in civil engineering, and a provider of resources to encourage innovation and excellence in the profession worldwide.

The international engineering qualifications are all supported by a Europass Certificate Supplement.

The Certificate Supplement is designed to help to facilitate the mobility of individuals for work, study or leisure.

City & Guilds was the first UK awarding body to launch the Europass Certificate Supplement.



# EUROPASS

Engineering europass.01

### **EUROPASS**



**Europass Certificate Supplement** www.cityandguilds.com/europass www.uknec.org.uk europass.cedefop.eu.int

The Certificate Supplement helps to ensure that qualifications are easily understood across national systems and makes it easier for learners to find employment or training opportunities beyond the borders of their own country.

It provides details on the skills that candidates are required to demonstrate in order to achieve a certificate, helps learners to prepare for job interviews and allows employers to choose the best candidate to work for them.

Engineering (2850)



2

(2850-83)

(2850-84)

(2850-53)

(2850-54)

Level 1 Certificate in Engineering (2850-80)

Level 2 Certificate in Engineering

- Manufacturing Technology (2850-81)

- Maintenance Technology (2850-82)

- Fabrication and Welding Technology

- Electrical and Electronics Technology

- Manufacturing Technology (2850-51)

- Maintenance Technology (2850-52)

- Fabrication and Welding Technology

- Electrical and Electronics Technology

Level 2 Diploma in Engineering

3

Level 3 Diploma in Engineering

- Welding (2850-85)
- Fabrication (2850-86)
- Fabrication and Welding (2850-87)
- Maintenance, Installation and Commissioning (2850-88)
- Mechanical Manufacturing Engineering (2850-89)
- Electrical and Electronic Engineering (2850-90)

**Telecommunication Systems (2730)** 

Level 2 Certificate in Telecommunication Systems (2730-12)



Level 3 Diploma in Telecommunication Systems (2730-13)

Level 5 Advanced Technician Diploma in Telecommunication Systems (2730-03)





Engineering

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### **EUROPASS**

Europass Certificate Supplement (continued)

Engineering (9209)

### Level 4 Diploma

- Mechanical Engineering (9209-01)

- Electrical and Electronic Engineering (9209-02)
- Civil Engineering (9209-03)



Level 5 Advanced Technician Diploma

- Mechanical Engineering (9209-11)
- Electrical and Electronic Engineering (9209-12)
- Civil Engineering (9209-13)

#### Engineering (9210)



- Level 6 Graduate Diploma
- Civil Engineering (9210-01)
- Electrical Engineering (9210-01)
- Electronic and Telecommunication Engineering (9210-01)
- Information Technology (9210-01)
- Mechanical Engineering (9210-01)



Level 7 Post Graduate Diploma

- Civil Engineering (9210-02)
- Electrical Engineering (9210-02)
- Electronic and Telecommunication Engineering (9210-02)
- Information Technology (9210-02)
- Mechanical Engineering (9210-02)



Engineering

Every effort has been made to ensure that the information contained in this publication is true and correct at time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept responsibility for any loss or damage arising from the use of information in this publication.

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