

# **The British University in Egypt (BUE)**



**Professor Ronald McCaffer**

**London Forum on Infrastructure Projects in Egypt  
13<sup>th</sup> July 2009**

# British University in Egypt

## 2008/2009 Student Population

- Business Administration, Economics and Political Sciences  
**975**
- Engineering **740**
- Informatics and Computer Science  
**186**
- Nursing **37**

University Total

# Links with Industry

- Serving the Egyptian Economy.
- Sponsorship will be sought for individual degree programmes.
- A direct link with the industrial employers of the graduates.
- Guarantee of modernity and relevance.

department of civil and building engineering

working for the world's leading  
**construction companies in teaching,  
 research and training**



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teaching: sponsored degree programmes specified by industry  
 research: dedicated centres and research projects for industry  
 training: MERIT the national construction industry business simulation



providing able, talented and well-trained graduates for careers with leading companies >>>



## undergraduate degree programmes in civil and building engineering

- MEng in Civil Engineering\*
- BEng in Civil Engineering
- BSc in Commercial Management & Quantity Surveying\*
- BSc in Construction Engineering Management\*
- BSc in Architectural Engineering & Design Management
- BSc in Air Transport Management
- BSc in Transport and Business Management

\*Flagship degree programmes sponsored by industry

In partnership with industry we supply quality graduates equipped with the skills needed by industry

[www.lboro.ac.uk/civil](http://www.lboro.ac.uk/civil)



## sponsored degree programmes

### MEng in Civil Engineering



### BSc in Commercial Management and Quantity Surveying



### BSc in Construction Engineering Management



As well as sponsoring the Department, the companies listed sponsor students on their degree programmes by providing an annual bursary, employment during the vacation period, a work placement year in industry, help with project work and a job or graduation. Industry and the University working together provides the most modern and relevant technical education as well as professional and commercial development - providing better and more able graduates for the success in industry.

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Industry + University = a better education and better graduates

a major force in company-led research >>>



**loughborough innovative manufacturing  
and construction research centre**

## innovative manufacturing and construction research centre

- multi-disciplinary centre
- EPSRC funding over 10 years
- the largest of its kind in the UK
- established October 2001

[www.lboro.ac.uk/imcrc](http://www.lboro.ac.uk/imcrc)



## construction project collaborators

4Projects	DIRA	John Mearns & Company plc
ABB Lummus Global	Edin Shepherd-Denis	Kiewit (UK) Ltd
AC Lloyd (Buildings) Ltd	Collaborating for the Built Environment (CfE)	Laing Investment (Squalor plc)
ACTIVE Initiative Ltd	College Tundle & Hall	Laing O'Rourke
Advanced Visual Technology Ltd	Colt International	Lennox Industries
Air Products	Computer Sciences Co	M.N. Kellogg Limited
Allied McAlpine	Conrail	Manchester City Council
AMCC	Constructing Excellence in the built	Meris Construction Ltd
Amec Capital Products	Environment	Morgan Est (formerly Miller Civil Engineering)
Anglian Water	Constr. ROT	Mortenson Construction
Argent Group plc	Council for Aluminium in Building	Mot MacDonald
Arup	Crown House Engineering	MSS Clean Technology
Arma Demec	CSG (UK) Ltd	Nottinghamshire County Council
BAA plc	Curtiss Consulting Engineers plc	Parsons Construction Services
BACO Contracts	Cyrl Swent	Paid Architects
BAS Systems	DATS Holdings Lt	Reinforced Concrete Council
Beggidge Brick	David Langdon & Gwent	Revolutionary Pod Modules
Becthal Power Corporation	DDM	Rocking Frog.com
Bectel Ltd	Donald Smith Spencer and Roope	Sala-Rope plc
Birmingham City Council	East Midlands Centre for Constructing the Built	Seamore Deepway and Co
Birt Construction Ltd	Environment	Senior Kargames
BNFL	ICI	Shaw Group
Boyle Land Lease Europe	SCA	Shell
Boyle Land Lease Ltd	English Heritage	Shepherd Construction Ltd
BPE plc	Environmental Air Contracts	Shppard Robson
Bridge Planning and Building	in-Sound	swinerton
British Quality Foundation	Qide Salaries Ltd	Seamie Hayden
BriSpace Retractable Building Systems	Reguson McInnes	Taylor Woodrow Construction Ltd
Broadgate Estates Ltd	Rudd Building Service	The Chartered Institution of Building Services
BURA	Galwey Group (Northern)	Engineers (CIBSE)
BT	DN Aerospace	The Commission for Architecture and the Built
BT East Technologies	Glennko Ltd	Environment (CARG)
BT plc	Glens	The IDWJOC Partnership
Building Research Establishment	Global Monarch	The Royal Institute of British Architects (RIBA)
Buro Happold	Goodrich Automation Systems	The Royal Institution of Chartered Surveyors
Buro Happold Consulting Engineers	Halfway Roofing	(RICS)
Calderman BS	UDD Const. Midlands Ltd	The Steel Construction Institute
Capita Ltd	Health and Safety Executive	The Technology Partnership
Capita Property Consultancy	Ultra Building Services	TNT
CAPRA STRONG	Honeywell Control Systems	Tom Concrete Ltd
Carlton Construction Ltd	Hot Mixes Dussack Ltd	TUC
Carlton plc	IAN	Turner & Townsend Group
Causeway Technologies Ltd	INCOY	Turner & Townsend Project Management
CGI International Ltd	Innogy	W S Atkins Consultants Ltd
CGI, Corntec	Interne Industrial Services	Wharman Partnership
Chicoebridge	Interne plc	Wool, Oxford plc
Cholce	JMI Associates	Whitby Gil & Partners
Chitkani and Nielsen Ltd	John Lewis Partnership	

The companies listed above are all engaged in research projects related to construction.

The Innovative Manufacturing and Construction Research Centre (IMCRC) is a major research activity with a large effort dedicated to construction, funded by both industry and the Engineering and Physical Sciences Research Council (EPSRC). To ensure that research is directed to the current needs of industry many projects are undertaken together with an individual or group of companies.

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Industry + University = research directed to industry's needs

A relevant research programme for a modern industry >>>



Centre for Innovative Construction Engineering

## a collaborative research centre based on an EngD programme

representing a substantial research programme funded by EPSRC and industry, with over 40 EngD (engineering doctorate) research engineers who:

- undertake relevant research jointly with industry
- learn about the latest construction developments
- update their management and teamwork skills
- develop both research skills and links with industry
- study either full-time or part-time

[www.lboro.ac.uk/cice](http://www.lboro.ac.uk/cice)



## companies sponsoring EngD research engineers

Aprobit Training Exchange	Laser Optical Engineering Ltd	Arup
Asset Management Solutions	Mark Caldwell Fenwick	Balfour Beatty Infrastructure Services (Formerly FCC)
Autodesk	Microport Technologies	Conis R&D
Bank Land Lease	Modern Masonry Alliance	CTI
BRC	Mouchel Partners	Stantec Foundations
British Precast Concrete Federation	Mylad Velon	Stantec
BT	New Move Research Ltd	Balfour Beatty/Belec
Buro Happold	Quinzeq	AMCC
Causeway Technologies	Rock and Allium	
Charwood Molecular	Scott Wilson Pavement Engineering	
CTI	ServQ	
Crown House Engineering	3T Systems Ltd	
Curve and Bore	Tetris Incubator	
Collier	The Concrete Centre	
Hanley Veterinary Group	TMI	
Head Technologies Ltd	Wex	
Highways Agency	Whitby Ltd	
Jacobs Gable	Building Information Warehouse	

Focused on the needs of industry, research work is jointly sponsored by industry and the University. Each EPSRC supported research engineer is also engaged by the sponsoring company, guaranteeing the research effort is directed to the current needs of industry.

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Industry + University = relevant research

a strategic centre for innovation in  
healthcare infrastructure >>>



## health and care infrastructure research and innovation centre (HaCIRIC)

A unique collaborative venture by Imperial College and the universities of Salford, Loughborough and Reading has created a new HaCIRIC (Health and Care Infrastructure Research and Innovation Centre) supported by a new grant of £7.2m from the Engineering and Physical Sciences Research Council (EPSRC). HaCIRIC will promote innovation in healthcare infrastructures for the 21st century based on seven research themes:

- managing innovation in a context of technological change
- procurement for innovation
- innovation in facility design and construction processes
- the built environment and improving care delivery practices
- delivering increased performance of health and care infrastructures through operations management
- knowledge management in complex systems
- design and evaluation of integrated systems

[www.haciric.org](http://www.haciric.org)



## industrial stakeholders

Salfour Greedy Special Holdings	IGM UK	NHS
Scotts Lend Lease	Digital Investment Unit, London	NPRC, NE region
Carlton	U-T Group	Oracle Healthcare
CGO University Hospital Leicester	NHS Confederation	Patient Experience and Public Involvement, NPSA
David Hutchison Partnership	University of New South Wales	Patient Experience DH Strategy
DTI (Construction)	ANZ	Perroye and Prasad Architects
SMOOR Drake & Scull	OH Commercial	Sheffield Clients Group
Excelcare	DT	NS Akins
Faythful & Gould Conest	Orham	Canosne Partnership Limited
Interneer Projects	OH Healthcare	PHL Group (VQ) Ltd
Multi-design	Trifery Solutions, NPSA	Salisbury Ty (PPP)
NHS Modernisation Agency	SWA	Salfour Greedy Capital
be	Partnerships for Health	Nightingale Associates
Clear Modules	Salfour Kilpatrick	Langham Architects
UHL	www	MAAP Architects Ltd
AMP	CSM	Akins, Design & Engineering Solutions
CSC (Computer Science Corporation)	OH Healthcare	Carlton Healthcare
DH Capacity Planning	Healthstone	RSM
IGM UK	Idco	Salisbury Ty
Leung O'Scurie	Institute for Health Improvement	Kier Healthcare
NHS Confederation	Jonathan Bailey Associates	Canosne Partnership Limited
NHS Estates	Wessell (Director of National Projects)	
NS Akins	WCC	

### Research for Innovation in health and care infrastructures

Modernising health and social care infrastructures is an essential part of building the health and care system for the 21st century. HaCIRIC is providing a strategic capability that can help develop the tools and processes to embed innovation as normal business throughout infrastructure suppliers and users. The Centre is being established at a time of profound change in the UK's health and social care services, with unprecedented investment to renew the built and technical infrastructure. Tens of billions of pounds are being spent building new hospitals local health facilities, on new IT systems and medical technologies. But technological and scientific advances as well as changing demographics mean that the infrastructure planned today could prove obsolete in 20 years' time. HaCIRIC's programmes will include major new research projects designed to improve the way both new and existing built and technical infrastructures for healthcare are used, and how they can be better planned, procured, delivered and evolved. It will also investigate the likely impact of these new innovative approaches on care services. The research programme has been developed in partnership with the key stakeholders from the care system, including the Department of Health, the NHS, the Department of Trade and Industry, and the construction and healthcare industries.

Image 1 supplied by Anthony Maxwell. Image 2, 3 & 4 supplied by Emily Rogers and Mark Ellis.

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Industry + University = Innovation as normal business

a major institute representing key companies >>>



## a collaborative research and training body

- established in 1990
- Independent non-profit making and funded by members
- modelled on American "Construction Industry Institute" (CII)
- seeks alignment and co-operation with like minded bodies

[www.eci-online.org](http://www.eci-online.org)



## eci members

ABB Ltd	ECU (The Graduate School of Management)	DEC (The Office of Government Commerce)
ABB Lummus Global BV	Euro	F&G (Procter and Gamble)
Air Products PLC	Fabcom	Finesse Maxima
Aker Kværner	Fajoli S.p.A.	FM (Project Management Group Ireland)
Alstom Group Ltd	Falchini & Soid	Politecnico di Milano
AMEC	RM Engineering	Portoali
ANMP of Italy	Rizz Daniel BV	PROEN
Ansaldo	Rizz	RWE Power
Autodesk Engineering	Romer Mwalali Ibeta SA	Saipem s.p.a.
Ausgabe Formula S.p.A.	Restfield Shubhaus Dinger	SEEDING S.r.l.
Bentley	Haden Freeman	Shell Global Solutions International BV
BP	Heinen Safety	Shell Global Solutions UK
British Pipeline Agency	Humbert Polymersysteme	Sison BV
British Nuclear Group	IM Europe Ltd	Siemens
CB&I (Chicago Bridge & Iron)	Itchu Europe Plc	Stamprogetti
CSL International	Jacob Engineering	Shaw Stone & Webster Ltd
CSC Group	JMI Associates	Technip
Costain	K-Horn Engineering	Tecnimont
Cumie & Brown	Kingfield Group	The Shaw Group
Cytek Projects	Lake-Mert Engineering	Thames Geog
DC (Defence Estates)	Loughborough University	UNAGA
Delft University of Technology	Network Rail	
ECIF (Engineering Construction Industry Training Board)	Norton Rose	

ECI is a research and training institute funded by industry. ECI undertakes studies in topics relevant to industry, see [www.eci-online.org](http://www.eci-online.org) for a list of published reports. ECI also undertakes a series of training Masters Classes to develop industry's skills in project management.

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Industry + University = relevant advice and training

dedicated to organisations in plant and equipment >>>



the only collaborative  
research and training  
centre dedicated to the  
plant and equipment  
sector

[www.operc.com](http://www.operc.com)



companies that have either supported OPERC and/or funded  
University research activities include:

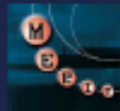
Galfour Besby Utilities  
Tarmac  
Lafarge Aggregates  
British Safety Council  
Finning  
Lafarge Cement  
Galfour Besby Power Networks  
Morgan Ec  
Cortain  
Defence Logistics Organisation  
Royal School of Military Engineering  
JCB  
Volvo  
Ceseco/Doosan  
Shepherd Construction  
HSE  
Contractors Mechanical Plant Engineers  
Hilti  
Milwaukee  
DeWalt  
Makita  
MacDonald Air Tools  
Standal  
Gelle Construction Equipment  
Wacker  
Major Contractors Group  
Construction Confederation

OPERC is a research and training centre funded by industry in the plant equipment sector. OPERC undertakes research and provides 'Good Practice Guides' and 'Training Modules' for the industry. See [www.operc.com](http://www.operc.com) for further details.

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Industry + University = better research and  
training in the plant sector

successful training software  
developed for successful companies >>>



## how well could you manage a modern construction company?

You can find out by using the MERIT simulation, which gives you the opportunity to run your own simulated construction company, and benchmark your progress against other competing teams

- the leading WEB-based training vehicle
- In continuous use as the National Construction Business game with the Institution of Civil Engineers since 1988
- over 25,000 young engineers have been trained by MERIT – enabling UK construction to remain competitive
- available also as In-house training and as part of university degree programmes globally

[merit.lboro.ac.uk](http://merit.lboro.ac.uk)



## MERIT sponsoring companies

2020 Liverpool	Oford	Salford MBC
Alfred McAlpine	Older Associates	Severn-Trent Water
Amec	Palston	Sirkin Knight Merz
Amey	Highways North Yorkshire	Stirling Maxwell & Partners
AmeyMouchel	Hongkong Chamber of Commerce	Taylor Woodrow
Arup	Hydro Consulting	Transmanche Link
Atkins	Inersolve	Tony Gee and Partners
Atkins/Birmingham City	Jacobs	Tube Lines
Balfour Beatty	JGR	URS Corporation
Building Design Partnership	Lang O'Rourke	W A Rahurst & Partners
Buys Green	Nice	Wah Associates
Duro Haggold	Nigan GSI	Warwickshire County Council
Coventry County Council	Wrs Macdonald	Watermark
Cameron Taylor	Witchel Partners	WGS & STappert
Comptech Health Consulting	WJ Kellogg	Worson Water
Capita Spacode	WMA	Wright Gill
Carlson	Qwen Williams Railways	White Young Green
Carl Bro	Rezone Brinkworth	WSP Group
Cottain, Mouchel Partners	Pal Frishman	WSP/Neil Frishman
Curtis Consulting Engineers	Pearl Green Associates	
Doran Consulting	Pick Swered	
FaberMaunell	RIS	
Fitzpatrick Contractors	RIS Consulting Engineers	
Flanagan Construction	Task Wilson	

Most engineering and construction students undertake a degree programme and training that is technically based, yet most successful construction executives have financial and managerial responsibilities. MERIT training can provide the ideal solution by introducing these employees into the world of company financial and strategic management in a simple and effective manner. Aid with some 25,000 young construction executives trained this way since 1988, MERIT can claim to have provided the financial understanding to most of today's construction staff.

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Industry + University = better training

# Possibilities at BUE

- Sponsored degrees
- Dedicated and relevant research Institutes
- Training and support
  
- .....and why not??
- .....Thank you















developing talented graduates with leading companies >>>



## sandwich training programmes

Most of our students undertake training in industry. This is supervised by an industrial supervisor, an academic supervisor, and assessed as part of their ongoing studies. It is a major element in preparing our graduates for good, well rewarded jobs and is a significant reason why our students are in great demand by industry.

[www.lboro.ac.uk/civil](http://www.lboro.ac.uk/civil)



## companies providing an industrial training year for our students

Civil Engineering REng Employees	Civil Engineering MEng Employees	Commercial Management and Quantity Surveying Employers	Architectural Engineering and Design Management Employers
Dugston Construction	Carson Taylor	Kier Group	Balfour Beatty Construction
Enn	Laing O'Rourke	Allenbuild Ltd	HDB UK Ltd
Amec Group	Conus Rail Consultancy	Skanska	Kier Group
Interserve Projects	Jackson Civil Engineering	Canilon	Taylor Woodrow Construction
Jackson Civil Engineering	Sir Robert McAlpine	Sir Robert McAlpine	Sidley Design Associates
Soles Land Lease	Development Agency	Soles Land Lease	Amec Group
Giese Civils	Giese Civils Ltd	Laing O'Rourke	John Sisk & Son Ltd
Edmund Nutall	Kier Group	Carlin Ltd	
Gleeson	Carlin	Balfour Beatty Construction	
Ian Holdings Associates	Keller Geddes Holt	Wood & Wain Partnership	
R. S. Pells Ltd	Tony Gee and Partners	Turner & Townsend	
Wells Design Solutions	Warfolk County Council	Harwell Hotel	
White Young Green	Symon Construction	Taylor Woodrow Construction	
Balfour Beatty Construction	Harwell Hotel	RCK Group	
JMP consulting	Adine		
	Edmund Nutall		
	Ruro Haggott		
	Carlton		
	Mackem plc		

Sandwich training programmes provide students with twelve months of training in industry, supervised by both industry and the University. The students gain valuable experience on how industry works, its managerial practices and how it applies and uses the principles of engineering, quantity surveying and management taught as part of their degree programme. The Sandwich training programme is often the start of our graduates working relationship with industry and the first step in training for their future career.

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Industry + University = better trained graduates