



THE UNIVERSITY OF THE WEST INDIES
ST. AUGUSTINE, TRINIDAD & TOBAGO, WEST INDIES

FACULTY OF ENGINEERING
Department of Electrical & Computer Engineering

SENIOR LECTURER/LECTURER
IN
ENERGY SYSTEMS

Qualification & Experience

- PhD in Electrical Engineering specializing in Energy or Power Systems
- Considerable teaching and research experience in Energy Systems including:
 - Industrial Systems and Power Systems analysis, simulation and modelling;
 - Electric Machines and Drives;
 - Renewable Energy;
 - Analysis of Small Power Grids; and related areas, at both the undergraduate and postgraduate levels in an accredited engineering programme
- Knowledge of standard productivity tools such as MS Office suite

Special Responsibilities

- Teaching courses in Energy Systems
- Conducting publishable research in Energy Systems
- Providing related administrative support

Personal Attributes

- Must be a team player with good interpersonal skills, self-motivated, ability to work well with students, fluent and articulate communicator.

Further details on the post can be found at: <http://sta.uwi.edu/jobs/>

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Applications (two copies) should be sent to the Campus Registrar, The University of the West Indies, St. Augustine, Trinidad and Tobago, W.I., Fax No. 1-868-663-9684. Full CV and application (forms which must be completed fully and can be obtained at the above address and at <http://www.sta.uwi.edu>) must be submitted. The names and addresses of three (3) referees (one of whom should be from your present organization) must be indicated. In order to expedite the appointment procedures, applicants are advised to ask their referees to send references under CONFIDENTIAL cover DIRECTLY to the Campus Registrar at the above address without waiting to be contacted by the University.

CLOSING DATE FOR RECEIPT OF APPLICATIONS: 2012 JANUARY 20

Duties of the Appointee

Special Responsibilities

- Teaching courses in Energy Systems (including course preparation, development, delivery, examination and associated activities)
- Conduct publishable research in Energy Systems
- Provide related administrative support

Personal Attributes

- Team player
- Good organizational interpersonal skills
- Self-motivated
- Ability to work well with students
- Excellent oral and written communication skills
- Knowledge of standard productivity tools such as MS Office suite

Remuneration Package

ANNUAL SALARY RANGE (US\$1.00 = TT\$6.3)

Senior Lecturer: TT\$308,400 x \$6,072 - \$363,156/\$375,924 x \$6,072 - \$382,308

Lecturer: TT\$217,140 x \$6,072 - \$253,644 / \$271,896 x \$6,072 - \$302,316

Benefits:

- Special allowance of 6% of basic salary;
- Transportation Allowance of TT\$2,300 per month ;
- Up to five economy class passages plus baggage allowance of US\$1,800 (TT\$ equivalent) on appointment and normal termination;
- Unfurnished accommodation at 10% or furnished at 12½% of basic salary, or housing allowance of 20% of basic salary to staff making own housing arrangements;
- UWI contribution of equivalent of 10% of basic salary to Superannuation Scheme;
- Annual Study and Travel Grant (available after first year of service);
- Institutional Visit Allowance;
- Book Grant.

The Registry
St. Augustine
File #: 173/1/41
2010 October 19
/ag



**THE UNIVERSITY OF THE WEST INDIES
ST. AUGUSTINE
REPUBLIC OF TRINIDAD & TOBAGO**

**FURTHER PARTICULARS FOR THE POST OF
SENIOR LECTURER/ LECTURER IN ENERGY SYSTEMS
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
FACULTY OF ENGINEERING**

GENERAL

The University of the West Indies (UWI) is a well-established independent University that serves mainly the English-speaking territories of the West Indies. These countries listed hereunder all contribute to the UWI.

Anguilla

Antigua & Barbuda

Barbados

Belize

Bermuda

Grenada

Jamaica

Montserrat

St. Kitts & Nevis

St. Lucia

St. Vincent & the Grenadines

The British Virgin Islands

The Cayman Islands

The Commonwealth of the Bahamas

The Commonwealth of Dominica

The Republic of Trinidad & Tobago

The University has campuses at Cave Hill in Barbados, St. Augustine in Trinidad and Tobago, and Mona in Jamaica. The University has also recently established a fourth campus, the Open Campus, which is responsible for the delivery of programmes by face-to-face and distance mode. The current student body population (face-to-face mode) which is approximately 40,000, is distributed among the Faculties of Law, Humanities and Education, Pure and Applied Sciences, Social Sciences and Medicine at Cave Hill; Humanities and Education, Medical Sciences, Social Sciences and Pure & Applied Sciences at Mona; and Science & Agriculture, Engineering, Humanities & Education, Social Sciences and Medical Sciences (including Pharmacy, Dentistry, Veterinary Sciences and Nursing) at St. Augustine.

The University began teaching in 1948 as a University College affiliated with the University of London, and became an independent University in 1962. In 1963, Colleges of Arts and Sciences were set up at Cave Hill and St. Augustine. The former represented the institution of the third campus, while the latter was an extension of the facilities provided at St. Augustine, where the Faculties of Agriculture and Engineering were already established. The Faculty of Law was established in 1970. The University of the West Indies is now a dual mode institution offering teaching by distance education as well as face-to-face.

The UWI is well known as a Centre of Excellence and has among its Alumni, Heads of Government and Nobel Laureates for Literature (1992) and the Peace Prize (2007).

The Faculty of Engineering and the Department of Electrical & Computer Engineering

The Faculty of Engineering, established in 1961 with twenty-six (26) students, has now an enrolment of over seventeen hundred (1,700) students in the undergraduate and postgraduate programmes, distributed among the five Departments of Chemical, Civil & Environmental, Electrical & Computer, Mechanical & Manufacturing Engineering, and Geomatics Engineering and Land Management.

The mission of the Department of Electrical & Computer Engineering is to produce competent, bold, articulate engineering graduates and to conduct relevant and innovative research and development for the social, economic and intellectual growth of the Caribbean.

1. The Department offers a first-degree programme leading to the degree of B.Sc. in Electrical & Computer Engineering. At the postgraduate level, the Department offers specific programmes in Energy Systems, Electronic Systems, Computer Systems Engineering, Control Systems and Communication Systems together with M.Phil. and Ph.D. programmes in various research areas. The B.Sc. (Hons.) degree in Electrical & Computer Engineering is fully accredited by the Institution of Engineering and Technology (IET). The Current establishment is 4 Professors, 2 Senior Lecturers, 7 Lecturers and 3 Assistant Lecturers.

Teaching and research is largely organised in five major focus areas or subject groups:

The Communications Group conducts teaching and research in Telecommunications, including Telephony and Data Communications. The Nortel Laboratory for Data Communications provides meaningful exposure to state of the art data network solutions for local industries and government institutions. Group activities include Packet Radio Networking, Spread Spectrum Wireless Communications, Network Protocol Performance Analysis, and Multimedia Hyperlink Databases.

The Computer Systems Engineering Group conducts teaching and research in Computer System Hardware & Software Development. Group activities include Real Time Systems Design, Artificial Intelligence, Multimedia Systems, Digital Asset Management, Embedded Systems Design and Software Engineering.

The Control Systems Group engages in teaching and research in Industrial Automation, Control & Instrumentation. The group activities are in Distributed Control Systems (DCS), Digital Signal Processing (DSP) Applications, Programmable Logic Controllers (PLC's), Artificial Intelligence, Fuzzy Logic Control Systems and Real Time Systems.

The Electronics Group conducts teaching and research in Analog & Digital Electronic Systems. Group focus includes Systems & Development Environments using Field Programmable Gate Arrays (FPGAs) and Complex Programmable Logic Devices (CPLD's), Embedded Processor Systems and Analog Design using Operational Conveyors.

Postgraduate Courses (continued)

<p>MASc. Electronic Systems</p> <ul style="list-style-type: none"> • Analogue Electronic Systems • Digital Electronic Design • Digital Electronic Systems • Digital Integrated Circuits • Digital System Hardware Organisation and Design • Multimedia Communications Systems • Real Time Systems 	<p>MASc. Energy Systems</p> <ul style="list-style-type: none"> • Advanced Power System Protection • Computer Aided Power Systems Analysis • Electrical Drives and Industrial Power Systems • Energy Economics & Planning • Optimisation Techniques • Power System Dynamics • Power System Instrumentation • Power System Operations and Planning • Power Systems Monitoring and Control • Surge Phenomena and Insulation Coordination • Switchgear and Transformer Technology
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Postgraduate Courses

MASc. Communication Systems	MASc. Computer Systems	MASc. Control Systems
<ul style="list-style-type: none"> • Antennas and Radiation • Data Communication Networks • Multimedia Communication Systems • Optimisation Techniques • Performance Engineering of Computer Communication Systems • Principles of Communication • Principles of Switching • Stochastic Processes • Transmission Systems 	<ul style="list-style-type: none"> • Database Systems, Principles and Design • Distributed Computer Control • Multimedia Communication Systems • Real Time Systems 	<ul style="list-style-type: none"> • Distributed Computer Control • Linear Control Systems • Modem Control Strategies • Real Time Systems • Stochastic Processes

The Energy Systems Group treats with issues in power generation, transmission and distribution, as well as the control of electrical machines. The group has strong links with electric utilities and manufacturing companies throughout the Caribbean region. In addition to its academic activities, the Department administrates and manages the Real Time Systems Group (RTSG), a separate unit under the UWI. The RTSG's mission is to explore mechanisms for increasing the level of Caribbean innovation in computer software and hardware systems. Its modus operandi is to conduct strategic projects with industry; these projects provide a wealth of experience to staff and industry personnel in the process of developing technical solutions with commercial potential. Recent projects include the development of call monitoring and accounting software, fraud detection software for a telephone utility company, design and construction of a full-statistic electronic display cricket scoreboard, SCADA software and the development of online education ('edutainment') systems. The Department is in the process of exploring mechanisms for integrating the innovation aspect into academic programmes at all levels.

The Department maintains its website at <http://www.eng.uwi.tt/depts/elec>.

Current Members of Academic Staff

Brian Russell Copeland B.Sc.(Eng.), (UWI); MSc (Toronto); Ph.D.,(USC); SMIEEE	Professor
Stephan Gift B.Sc.(Eng), Ph.D.(UWI), FAPETT, SMIEEE, MCAS, REng	Professor/ Head
St Clair King BSc, MSc (MIT) (Eng), PhD (Glas)	Professor Emeritus
Chandrabhan Sharma B.Sc., MSc (Eng.), Ph.D.(UWI); SMIEEE; FAPETT, SMIEEE, SenMemISA, MAWEA, REng	Professor
Ajay Joshi Dip. (Fabrication Tech.); BS (Physics), (Bombay); Ph.D. (Applied Physics)	Senior Lecturer
Kim Mallalieu B.Sc. (MIT); MSc (Rochester); Ph.D. (London)	Senior Lecturer
Richelle Adams BSc, MSc (Eng), (UWI/ Lucent); Ph.D, (Georgia Tech)	Lecturer
Sanjay Bahadoorsingh BSc. (UWI); MSc, PhD (UMIST)	Lecturer
Fernando Castellanos BSc., MSc. (Colombia); PhD (British Columbia); MIEEE	Lecturer
Ronald DeFour BSc (Eng.), (UWI); MPhil (UWI), PhD (UWI), MIEEE	Lecturer
Fasil Muddeen BSc., MSc (Eng.), PhD (UWI)	Lecturer
Cathy-Ann Radix B.Sc. (UWI); PhD. (Plymouth), MIEEE	Lecturer
Musti Sastry BTech, MTech, Ph.D (India)	Lecturer
Ravi Deonarine BSc, MSc (Eng.), (UWI)	Assistant Lecturer
Crista Mohammed BA (Hons), Dip. Ed. (Distinction) (UWI)	Assistant Lecturer
Akash Pooransingh BSc (Eng) (Hons), MSc (Eng) (Distinction) (UWI)	Assistant Lecturer

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Undergraduate Courses

The undergraduate programme consists of three (3) years or six (6) semesters of coursework leading to the BSc degree. Students can attain an Honours degree after

having achieved an average of at least 50% over a period of no more than four (4) years. Current course offerings are listed below:

Year 1	Year 2	Year 3
• Communication Skills for Engineers	• Communications Systems I	• Electromagnetic Field Theory
• Digital Electronics	• Computer Systems & Software Design	• Industrial & Commercial Electrical Systems
• Electrical Circuits	• Control Systems	• Introduction to Engineering Management & Accounting Systems
• Electronics	• Electromechanical Energy Conversion Systems	• Special Project (2 semesters)
• Engineering Mathematics I	• Electronics & Instrumentation	
• Engineering Science & Technology	• Introduction to Microprocessors	
• Introduction to Electrical Energy Systems	• Laboratory and Project Design II, III	
• Introduction to Programming	• Mathematics for Electrical Engineers II	
• Introduction to Thermodynamics	• Signals and Systems	
• Laboratory and Project Design I		
• Mathematics for Electrical Engineers I		Options as listed below

Year 3 options include:

- Communication Systems
- Computer Systems Engineering
- Control Systems
- Electronic Systems
- Energy Systems

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