

The University of The Witwatersrand Presents

# Professional Certificate in CIO Practice

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Presented by: The School of Economic and Business Sciences

In conjunction with: - The Joburg Centre for Software Engineering (JCSE) / [www.jcse.org.za](http://www.jcse.org.za)  
- The School of Electrical and Information Engineering  
- The LINK Centre / [www.wits.ac.za/linkcentre](http://www.wits.ac.za/linkcentre)



UNIVERSITY OF THE  
WITWATERSRAND,  
JOHANNESBURG



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## Professional Certificate in CIO Practice 2016

Wits University has offered the CIO Programme since 2008, running for eight years with 140 participants and 126 graduates.

### COURSE OBJECTIVES

#### **The Professional Certificate in CIO Practice**

With the rapid growth of Information and Communication Technology (ICT), organisations in both the government and private sectors are faced with a range of new and difficult challenges. These include: on-going business re-engineering; issues around security and risk management; the growth of the Internet and its effects on the supply chain and work organisation; an increasingly mobile work force, and many more. At the same time the rapid availability of detailed and accurate information is growing in importance. To manage these challenges many organisations are appointing people at the senior executive level. Often called the "Chief Information Officer" (CIO), these people carry enormous responsibility in this new knowledge-based economy.

The CIO should be a person with a combination of strong technical, business and leadership skills. This Multi-disciplinary Certificate in CIO Practice is aimed at people aspiring to fill the CIO role, and covers a mix of topics dealing with issues relating to technology, strategic (C-level) management, business and human capital management processes, and ICT policy and regulation. The focus is to provide an integrated overview of issues and trends in all of these areas.

### PROGRAMME SUMMARY

The Professional Certificate in CIO Practice programme content is described within this brochure. The programme will consist of three one-week fulltime sessions. Each fulltime week modules. Each module will have an individual take-home examination and a syndicate assignment. Feedback on the prior fulltime week's modules will also be covered in each subsequent fulltime session.

The programme will run over approximately twelve weeks, and during the periods between fulltime sessions, the syndicates will be encouraged to meet regularly at a venue of each syndicate's own choice. Note that in order to earn a Certificate of Competence for the programme, students must have an aggregate of over 50% for their course modules.

## COURSE CONTENT

The CIO programme includes the following modules presented by academics and speakers who are currently practising CIOs.

Block	Module	Course	Description
Block 1	1	The CIO's landscape, including legal and regulatory issues	In the context of an emerging "network knowledge economy", key topics include access to Gigabit Internet; convergence, new media and e-services; ICT policy, law and regulation; cyber security in cyber space; key institutions; managing people, knowledge and talent in an era of complexity.
	2	The management of CIO's costs vs. offering business value	CIOs face increased pressure to reduce costs of IT, while also delivering greater value to the business. The only successful strategy in this environment is effective demand management, which ensures that IT resources are applied for the maximum benefit of the business. Without IT cost transparency, it is virtually impossible to operate IT efficiently and manage IT demand.
	3	An introduction to CMMI	A one-day introduction to the Capability Maturity Model Integration (CMMI), a model used to measure the maturity of an organisation's software development processes.
Block 2	4	Management and control of the ICT organisation	Subject matter includes information, organisation and control; organising and leading the IT function; managing IT outsourcing; IT operations and management processes; and a portfolio approach to IT development.
	5	Management of IT benefit realisation	This module includes an introduction to the formulation of a business case with the focus upon IT projects; benefits definition; sensitivity analysis and scenarios; IT solution acquisition, build versus buy; risk management in software delivery; software development lifecycle model; software development processes; and managing software development
Block 3	6	Strategic management and leadership in the IT/IS environment	Subject matter includes strategic IT management, planning and leadership; strategic planning for information systems (IT/IS strategy); change management; enterprise architecture for strategy implementation; IT governance processes and frameworks.
	7	Case study: Syndicate review report and presentation	A "capstone" IT case study addressing issues in all modules of the programme is handed out at the end of Block 2. The syndicate groups each submit a written report on the case study and present the report to the course facilitators during the final week.

## WHO SHOULD ATTEND

Senior/Middle-level managers in South Africa and the SADC region from either the ICT, or a business operations area of an (i) firms, (ii) government departments, (iii) of the GITO Council and SITA, (iv) of government ICT agencies in the SADC region, who see their career path leading towards a CIO or equivalent senior position.

## PREREQUISITES

Students eligible to enrol should possess a graduate qualification with honours, or suitable equivalent. However, those wishing to enrol who do not have a relevant qualification will be considered on the basis of their IT management experience. Applicants will be subject to an interview process before acceptance.

## COURSE WORK/CLASS SCHEDULE

Lectures will be held in Three Blocks of approximately one week each

Block 1 - 11 to 15 April 2016

Block 2 - 23 to 27 May 2016

Block 3 - 20 June to 24 June 2016

Modules 1-6 consist of lectures, a take home exam and a group assignment. Module 7 requires the submission of a syndicate Group Case Study and Assignment.

## CERTIFICATION

Successful completion of the course will ensure you are equipped with:

- Tools and theory on the role of a CIO, balanced with relevant case studies.
- Useful insights derived from exposure to currently practising CIOs.
- Knowledge of helpful sources of information on all aspects of a CIO's role and responsibilities.
- An extensive network of contacts and relationships with like-minded peers and resource providers.

## COST

The fee of R44 000 (excl VAT) includes tuition, a copy of prescribed text book "Managing Information Technology", a study guide and instruction material, and lunches and refreshments during the 'Block Release' weeks of the course.

**FOR MORE INFORMATION**

Please contact Adelaide Mashoene at Wits Enterprise

Tel: +27 (0)11 717 4592

Email: Adelaide.Mashoene@wits.ac.za

**ONLINE APPLICATION**

To apply please complete the online application form.

Applications are invited from September 2015 and close on 31 March 2016.

**ONLINE APPLICATION FORM**

<http://wits-enterprise.co.za/c/professional-certificate-in-cio-practice>

BIOGRAPHIES:

WITS LECTURERS IN THE PROFESSIONAL CERTIFICATE IN CIO PRACTICE

**Programme Director**  
**Luci Abrahams / luciennesa@gmail.com**

Luci Abrahams is Director of the LINK (learning, information, networking, knowledge) Centre in the Faculty of Humanities at Wits University. Luci has been engaged in the arena of ICT and development from 1995. She teaches ICT policy and regulation; e-governance and e-development; analysing knowledge and innovation systems. Her research interests are 'institutions and economic sectors in the emerging knowledge economy'. As a practitioner, she has served on many boards and committees including the Financial and Fiscal Commission (FFC), the Council on Higher Education (CHE), the National Research Foundation (NRF), the State Information Technology Agency (SITA), the National Advisory Council on Innovation (NACI), and the Development Bank of Southern Africa (DBSA). She has a BSc Chemistry (UCT), a Post-graduate Diploma in Public Policy and Development Administration (Wits) and is completing a PhD (Wits).

**Professor Barry Dwolatzky / Barry.Dwolatzky@wits.ac.za**

Barry is the Executive Director of the JCSE and Head of Information Engineering at the School of Electrical and Information Engineering. He obtained his B.Sc. (Elec Eng.) and PhD at Wits. After working as a post-doctoral researcher at UMIST (Manchester, UK) and Imperial College (London), he joined GEC-Marconi Research Centre in Chelmsford, UK. He joined the staff of the School of Electrical and Information Engineering at Wits in 1989. Barry is leading the JCSE Capability Maturity Model Integration (CMMI) initiative in South Africa and has recently been awarded his CMMI Instructor qualification from Carnegie-Mellon University.

**Barry Myburgh / Email: barry.myburgh@insyte.co.za**

Barry is Special Projects Coordinator at the Joburg Centre for Software Engineering (JCSE) and a Sessional Lecturer at Wits, teaching the Principles of Software Engineering and Software Project Management. Barry graduated as an Electronics Engineer from the University of the Witwatersrand (Wits) and later complemented this qualification with an MBL from the University of South Africa (UNISA). (MBA equivalent).

He is currently associated with a number of professional bodies, including:

- Engineering Council of South Africa (ECSA) – registered Professional Engineer
- Director of ImprovIT - The South African IT Process Improvement Association
- Director of Insyte – Insyte Information Systems Engineering (Pty) Ltd.
- Executive Committee of the South African Chapter of SEMAT.
- Project Management South Africa (PMSA)
- The Institute for IT Professionals (IITPSA)
- The Computer Society of the Institute of Electrical and Electronics Engineers (IEEE)

**Dr Kiru Pillay, LINK Centre / kiru2010@gmail.com**

Kiru is a postdoctoral research fellow at the Council for Scientific and Industrial research (CSIR). He is based in the Command, Control and Information Warfare section. He is a visiting academic at the LINK Centre, engaged in teaching and Master's research supervision. His academic and research career began in 2011 at the end of his 23-year career in the ICT sector when he transitioned from industry to academia. He completed a PhD (Information Systems) in 2012 and has been based at three South African universities in a teaching, research, supervision and operational capacity. Kiru worked in the ICT sector for 23 years from 1988 to 2010. His technical experience has encompassed the entire systems development life cycle. He has gained management experience at operational and strategic levels. He has managed small and large teams, and has successfully completed projects in South Africa, Namibia, Zimbabwe, United Arab Emirates and Ireland. Kiru has a deep understanding of ICT and corporate disciplines such as strategic planning, IT operations, asset management, enterprise risk management, human capital, change management and strategic programme management.

**Suzanne Sackstein / Email: Suzanne.Sackstein@wits.ac.za**

Suzanne Sackstein is a Principal Tutor in the Information Systems Division at the University of the Witwatersrand. She is the co-ordinator of the Honours programme and lectures both undergraduate and postgraduate students. She has researched in the areas of change management and human computer interface design. She completed her MEd in 2012 dealing specifically with the changing educational context due to the ubiquitous use of mobile devices within the classroom. She has written and presented at conferences locally and abroad. Prior to joining the University in 1999 she was employed at IBM South Africa for 10 years and was product manager of their UNIX based offering.



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