



CONTINUING EDUCATION UNIVERSITY OF PRETORIA

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Course Brochure

PROGRAMME IN ENGINEERING MANAGEMENT

Presented by the Graduate School of Technology Management, University of Pretoria

Block 1: 01 – 05 March 2010

Block 3: 26 – 30 July 2010

Block 2: 10 – 14 May 2010

Block 4: 18 – 22 October 2010

Presented during 20 contact days (4 blocks of 5 days each)

P000498-01-2010

BRIEF DESCRIPTION

The objective of this programme is to provide management education for technical professionals involved or interested in management within technology-based enterprises. The programme offers balanced training in both technical and general management. Successful candidates will receive the Certificate in Engineering Management, awarded by the University of Pretoria.

WHO SHOULD ENROL?

Persons involved in or associated with technical management functions such as design/development, manufacturing/construction, operations, quality and maintenance, will benefit from this programme. Skills, tools and techniques acquired in this programme are relevant to a wide variety of industry and business sectors, including government.

PROGRAMME STRUCTURE

The 8 modules of the programme are presented in 4 blocks of one week each (20 days). Candidates must obtain a pass mark for each module, based on group assignments and an individual assignment on a work-related problem. Presentation of modules consists of lectures, group discussions and case studies.

ACCREDITATION

The University of Pretoria is an accredited higher education provider. The programme is recognised by ECSA for CPD points.

LEARNING ASSUMED TO BE IN PLACE

Matric or Grade 12 with some working experience.

ASSESSMENT

An assignment for each module must be given in for assessment and a University of Pretoria certificate will be awarded on successful completion of all assignments.

CONTENT

TECHNOLOGY MANAGEMENT

- Technology concepts, audits, scanning and forecasting
- Acquisition and Exploitation of technology

PROJECT MANAGEMENT

- Project lifecycles, phases and initiation
- Work definition, scope planning and work breakdown structures
- Scheduling and network techniques, resource planning
- Managing multiple projects and cost estimating and project budgets
- Project control (including the earned value approach)
- Benefits and shortcomings of information systems

SYSTEM DEVELOPMENT

- System engineering within the enterprise
- System engineering process
- System design and requirements
- Information management in SE environment
- Programme planning and evaluation
- Benefits and shortcomings of information systems

OPERATIONS MANAGEMENT

- Fundamental operations management principles
- Operational process choices
- The changing environment
- The goal, measurement and decision-making within operations

MAINTENANCE MANAGEMENT

- Frameworks for maintenance management
- Reliability, availability and maintainability
- Planning maintenance activities and tasks
- Organising the maintenance resources
- Controlling maintenance performance
- Maintenance approaches (RCM, TPM and BCM)

FINANCIAL MANAGEMENT

- Financial information
- Cost allocation
- Just-in-time management philosophy
- Job and process costing
- Management accounting concepts
- Cost-volume-profit analysis
- Budgets and profit planning

PEOPLE MANAGEMENT

- Organisational context
- Defining people management
- A systems approach to people management
- The human resource management process
- Labour legislation
- The Occupational and Health Safety Act (OHSA)

QUALITY MANAGEMENT

- Evolution of quality
- Total Quality Management (TQM)
- International standards (ISO 9000 and ISO 14000)
- Quality awards: Malcolm Baldrige
- Test and evaluation

PRESENTERS

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|---------------------|---------------------|
| • Prof MW Pretorius | • Prof JK Visser |
| • Dr PJ Pretorius | • Mr CC Van Waveren |
| • Prof H Wolmarans | • Prof Y Du Plessis |
| • Dr SJ Benade | • Mr C Venter |

COURSE FEE (CE at UP IS EXEMPT FROM VAT)

The all-inclusive programme fee is R27 650 per delegate. This includes:

- A personal Whole Brain Dominance Assessment using the internationally recognised Hermann Brain Dominance Instrument (HBDI™)
- Financial/business calculator
- Refreshments and lunch
- Text book plus extensive course notes for each module

The full fee should be paid at least two weeks before commencement of class.

REGISTRATION & ENQUIRIES

To enrol online, visit www.ceatup.com or complete the enrolment form and fax it to us. For more information contact:

Customer Service Centre
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ENQUIRIES REGARDING CONTENT

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