

## Mini-Dissertation Titles - Masters in Engineering Management (2006-2010)



Year	Author	Supervisor	Degree	Title
2006	Bonthuys JR	Benade SJ	MEM	The Critical Factors that influence the Implementation of a Successful Product Lifecycle Management System (PLM)
2006	Botes FV	Verhaghe A	MEM	The impact of the Metanational environment on Technology Management in knowledge-base Multinational ICT companies
2006	Botha BM	Pretorius PJ	MEM	The impact of the Preferential Procurement Policy Framework Act, 2000 on tenders awarded to historically disadvantaged individuals
2006	Coates PJQ	Claasen S	MEM	Developing Causal Loop Diagrams And System Archtypes as a Diagnostic Tool for Complex Systems
2006	Conradie DF	Pretorius MW	MEM	Strategic Management of Land Mobility Technologies in the Global Environment
2006	de Swardt AV	van Waveren C	MEM	Effective Performance Appraisal for Small Engineering Organisations
2006	Erasmus P	van Waveren C	MEM	Final Product Quality Control is Crucial in Ensuring effective Design for Manufacture
2006	Fick MP	Buys AJ	MEM	Best practises of the South African Automotive Supplier Industry in the initial stages of their product lifecycle in terms of Technology Management
2006	Gounden J	Visser JK	MEM	The requirements of a Modern day Maintenance Manager in the Sasol Synfuels Secudan Complex
2006	Govender DM	Pretorius MW	MEM	Investigating the relationship between IS enterprise architecture and business strategy in Eskom distribution
2006	Govender S		MEM	Computerised information system: comparison of relative impacts on planned project duration within a multi-project environment
2006	Haffeeje M	Brent AC	MEM	Integrated Life Cycle Asset Management: An Innovative Model for the Water Utility Sector
2006	Holderness E	Steyn HdeV	MEM	Project Management maturity in the Civil Engineering Consulting Industry
2006	Jacobs FA	Amadi-Echendu	MEM	Estimation of project commissioning cost and start-up time
2006	Jordaan TM	Verhaege A	MEM	Exploration of the relationship between Effective Transformational Change Management and successful Project Management in a six Sigma Environment- A Quantitative Approach
2006	Kieser HC	Benade SJ	MEM	A Systems Approach to Enterprise Architecture: Practical guidelines for holistic enterprise architecture
2006	Kleser H	Benade SJ	MEM	A systems approach to enterprise architecture: Practical guidelines for holistic enterprise architecture
2006	Kleynhans A	Amadi-Echendu	MEM	A case study on the use of digital electrical protection relays in Sasol
2006	Lagoudis M	Steyn HdeV	MEM	Successful Implementation of Strategic Objectives in a Multi-Project Enviroment
2006	Lambani NL	Benade SJ	MEM	Customer integrated and systematic product development –processes and implementation
2006	Lessing EFJ	Pretorius PJ	MEM	Simulation study to determine the optimal Line Synchronisation Approach, JIT or TOC, for an Unbalanced Serial Production Line
2006	Lochner T	Amadi-Echendu	MEM	Human Behaviours in Reliability Engineering
2006	Louw AA	Benade S	MEM	The Defence Industry has to manage Engineering Processes in a different Manner to get Products to the Market
2006	Makombe BC	Visser JK	MEM	A comparative analysis of application of risk analysis methods in the construction industry
2006	Marais E	Visser JK	MEM	Quantitative decision making – maintain or replace
2006	Mbanga MA	Kachienga MO	MEM	Evaluation of telehealth centres in the Eastern Cape Province
2006	Meyer AM	Pretorius PJ	MEM	Increasing profit through the application of throughput accounting principles
2006	Mokono F	Pretorius MW	MEM	An Investigation into Debswana Diamond Company's Ability to Implement A Technology transfer Strategy
2006	Mpofu CW	Buys AJ	MEM	Technology evaluation of terrestrial trunk radio (TETRA) for railway communications in South Africa
2006	Muller WJ	Kruger CJ	MEM	Enhancing Knowledge Sharing in the Engineering Environment
2006	Petlane BP	Steyn HdeV	MEM	Assessment of stakeholder project management maturity for the western regional electricity distributor
2006	Pieters JH	Benade SJ	MEM	Enterprise Integration Architecture A Proposed Model Derived from Enterprise Architecture Views
2006	Robertson JG	Amadi-Echendu	MEM	Routine road maintenance condition indicators
2006	Rossouw E	Visser JK	MEM	A Study into the Effectiveness of an Availability Focused Strategy in the Pertochemical Industry
2006	Rylands MN	van Waveren C	MEM	A procurement decision making framework model for Metrorail Rolling Stock
2006	Sibisi M	van Waveren C	MEM	A process framework for customising software quality models
2006	Slabbert JA	Buys AJ	MEM	A comparison of commercial broadband technologies available to SME and SO HO users in South Africa
2006	Snyman BJ	Brent AC	MEM	Aligning environmental and regulatory procedures with a holistic project management approach for mine residue deposits
2006	Swanepoel DJ	Steyn HdeV	MEM	Project management maturity: Developing a project management maturity model and identifying the industry benchmark in public funded road infrastructure projects
2006	Swart PJ	Bekker MC	MEM	Development of a Project Methodology for a High Technology Development Environment
2006	van der Westhuizen	Amadi-Echendu	MEM	An investigation into the commercialisation of paint pigment technology
2006	van Eck L	Steyn HdeV	MEM	Project Management Maturity in a New System Development Company
2006	van Gerve AD	Steyn JL	MEM	Prevalence and Success of Portfolio Management Systems in South African New Product Development Companies
2006	van Heerden FJ	Pretorius PJ	MEM	Determining the capacity constraint resource in an underground coal production section
2006	van Zyl B	Visser JK	MEM	A strategic approach for the effective implementation oaf reliability improvement and management programme
2006	Venter JP	van Waveren C	MEM	New product development with dynamic decision support
2006	Vermeulen JP	Pretorius PJ	MEM	Creating an operations management system that is based on the principles of the theory of constraints (TOC) to generate valid build schedules for Behr Pta
2006	Zieleniewski MI	Brent AC	MEM	Selection and deployment of a method to evaluate the echievable benefits of extending technologies for uneconomical coul resources in South Africa
2007	Bhula Prema B	Bekker MC	MEM	A critical review of the supplier selection process within Nokia Siemens networks
2007	Bisschoff H	Benade SJ	MEM	Partnering on information management projects in South Africa
2007	Brijmohan Y	Visser JK	MEM	The effectiveness and financial viability of the condition based monitoring practice (oil sampling-dissolved gas analysis) for failure prediction on power transformers within distribution
2007	Brits RJC	Buys AJ	MEM	Reducing risk through a diverse product portfolio
2007	Britz JH	Steyn JL	MEM	An investigation into the effect of the MIDP on the competitiveness of the South African automotive industry
2007	Burger I	Pretorius P	MEM	Development of an enhanced production readiness review checklist
2007	Dax AB	Van Waveren C	MEM	Development of a toll road framework for Namibia
2007	Dersley NN	Walwyn D	MEM	The effect of new product development and portfolio management processes on new product success rates in certain large South African food companies
2007	Fisher DW	Visser JK	MEM	The effect of procedures, systems and training on variation of results when using risk principles for making decisions
2007	Grobbelaar E	Amand-Echendu	MEM	Factors that influence the process of adoption of SMART instrumentation in conventional process plants

2007	Grover HK	Pretorius MW	MEM	The technology assessment of demand side bidding within the South African context
2007	Hollhumer H	Visser JK	MEM	Qualitative Measurement of Maintenance Performance in the Mining Industry
2007	Jansen v Vuuren M	le Roux B	MEM	Applying TOC to the procurement process in a South African public funded company
2007	Kempff GC	Benade SJ	MEM	Software process management in the South African telecommunications sector
2007	Mabohe SN	Kachienga MO	MEM	Power transmission expansion: A new financial evaluation framework for SA
2007	Mahunonyane KE	van Waveren C	MEM	A roadmap for aligning an electricity distribution business unit's maintenance strategic plan to the corporate strategic plan of the organization: A case study of Eskom Distribution
2007	Mangena J	Köster MJF	MEM	Investigating the availability of resources for nuclear power plants in South Africa
2007	Mathebula ME	Walwyn D	MEM	The effects of outsourcing research and development within Eskom's research and innovation department
2007	Mathibe SP	Bekker MC	MEM	Investigation the need to centralise project management in a non-projects orientated enterprise
2007	Mbokazi TPB	Pretorius MW	MEM	Barriers and challenges that South African R&D companies face in technology commercialization process: The Sasol R&D case study
2007	Michael M	Ellis HJP	MEM	Development of a simplified maintenance performance standard incorporating speed, quality and cost parameters
2007	Moggee H	Petorius P	MEM	Outsourcing of refractory functions in the steel industry
2007	Mostert JN	Buyis AJ	MEM	The science in technology transfer
2007	Mpesi B	Barry ML	MEM	An investigation into the reasons why recent engineering graduates decide to become managers
2007	Mthimkhulu M	Visser JK	MEM	Integrated maintenance performance measurement model for the electrical distributors
2007	Mtsweni DM	Kachienga OM	MEM	An analysis of the impact of interoperability towards 3G technology diffusion in the South African mobile communication industry
2007	Mukunyangela M	Pretorius MW	MEM	A strategy for commercialisation of technology based services in Cell C
2007	Naidoo R	Lalk J	MEM	Integration of project management and system engineering in PBMR
2007	Ndaba AP	Steyn JL	MEM	Success factors and efficient processes for derivative development: A case study on a successful military vehicle prototype development
2007	Nell H	Visser JK	MEM	The development of maintenance performance indicators for an alloy processing plant
2007	Pathar K	Amand-Echendu	MEM	Technology and skills mismatch: A Transnet freight rail case study
2007	Ramdhani SR	Ellis HJP	MEM	The development of a maintenance framework for an Eskom peaking open cycle gas turbine plant in a high demand environment
2007	Ruder K	Pretorius MW	MEM	A technology selection framework for the telecommunications industry in developing countries using the example of Wimax and UMTS
2007	Singh K	Kachienga MO	MEM	Development of strategic power transmission expansion for Kwa-Zulu Natal (KZN) in 2010
2007	Tiheli TM	Pretorius MW	MEM	The differential impacts of external vs. internal technology acquisition on a firm's performance
2007	van der Watt AJ	Pretorius MW	MEM	Diffusion of technology in the South African private healthcare market
2007	van Deventer JPC	Bekker G	MEM	A study to investigate if a high performance culture can be sustained at Tshikondeni mine
2007	van Niekerk HJ	Kruger MC	MEM	Industrial information technology: Managing the "making or breaking" of a modern manufacturing company
2008	Beukman EA	Steyn HdeV	MEM	The use of a phased approach to manage technology transfer projects for socio-economic development
2008	Chiliza TSM	Bekker MC	MEM	Quality improvement: A systematic tool for customer satisfaction through meeting service level targets in a corporate helpdesk
2008	Coetzee S	Pretorius MW	MEM	Government financial support for high technology, high risk new ventures
2008	de Beer WA	le Roux B	MEM	Theory of constraints unleashes the coal production potential
2008	du Toit JCF	Pretorius L	MEM	Lowering the electrical net system demand of Eskom in South Africa, utilising multiple time zones as a tool
2008	Jacobs MJ	Buyis AJ	MEM	An evaluation of the absorptive capacity of the military for advanced technology
2008	Jansen van Rensburg	Benade SJ	MEM	A performance analysis of total project quality management in Africa
2008	Lephauphau O	Amadi-Echendu	MEM	Technology roadmapping for coal mining: A South African case study
2008	Maphalala N	Köster MJF	MEM	Assessment of project management implications for outsourcing design engineering services at Sasol Technology
2008	Maswanganyi NM	Amadi-Echendu	MEM	Identification of requirements for technology improvements in underground mining
2008	Mdunge OZ	Buyis AJ	MEM	Technology integration: The influence of technology on organizational strategy
2008	Mokgohloa MF	Brent AC	MEM	Environmental management systems as cooperative governance tools to promote sustainable development in South African metropolitan cities
2008	Moleki PS	Visser JK	MEM	Effective management of maintenance technology
2008	Mudau R	Pretorius L	MEM	Project control and risk management for project success: A case study
2008	Naude R	Pretorius MW	MEM	Analysing the impact of femtocells on the converging ICT and media industry value works
2008	Nortje AR	Visser JK	MEM	The effect of human error on maintenance performance in a technology organisation
2008	Pretorius C	Visser JK	MEM	Equipment maintenance strategies: The link between strategy compliance and emergency work
2008	Sewsanker P	Amadi-Echendu	MEM	Investigation into technology trends and skills in the power generation environment
2008	Sibanda S	Amadi-Echendu	MEM	Benchmarking engineering asset management in oil refining
2008	Swanepoel JH	Buyis A	MEM	The programme management office as innovation enabler in the hetero-technological railway environment
2008	Tlilima M	Walwyn D	MEM	The return on investment in new product development in the telecommunications industry: A case of Vodacom Lesotho
2008	van der Westhuizen	Benade SJ	MEM	The effect of project management maturity on portfolio project management software tool adoption
2008	Wilkinson WT	Amadi-Echendu	MEM	Management of electrical switchgear in petro-chemical plants
2009	Abboo TI	Brent AC	MEM	An investigation into the effectiveness of formalised environmental management systems in the South African metallurgical industry
2009	Benade AR	Pretorius L	MEM	The decay in welding skills on construction projects required for economical growth in South Africa
2009	Coetzee G	Pretorius MW	MEM	A technology readiness assessment model for the process industry: The gas to liquids (GTL) case study
2009	Darko OK	Walwyn D	MEM	Valuation of intellectual property: investigation into the validity of valuation models for petrochemical, chemical and mining companies in South Africa
2009	de Beer AN	Pretorius MW	MEM	A cost/benefit model for collaboration applications delivered as an utility
2009	Dreyer DK	Visser JK	MEM	A structured approach for the classification of components in the design of a new generation nuclear plant
2009	Fourie JR	Brent AC	MEM	Development of a model to assess flotation as a technology for the beneficiation of slurry in the South African coal mining industry
2009	Fuzile PA	Pretorius MW	MEM	Technology evaluation for selection and implementation in petrochemical industry
2009	Heera V	Buyis AJ	MEM	Investment criteria for high-technology new ventures
2009	Human DT	Brent AC	MEM	Development of a appropriate framework for the selection of sustainable sewage purification processes in South Africa
2009	Kenamile M	Pretorius MW	MEM	Successful transfer of technology in a downstream affiliate of multinational petroleum company

2009	Kgole MM	Verhaeghe A	MEM	Assessment of the effectiveness of the initiatives to address the engineering skills shortages in Eskom
2009	Klopper S	Pretorius L	MEM	Assessment of the methods applied by mining companies in South Africa to minimise the cost of the support life cycle of large dump truck fleets
2009	Lamola LJ	Barry ML	MEM	Risk management methodology during feasibility, conceptual design and detailed design stages of engineering projects within Eskom enterprises
2009	Lara TG	Bekker MC	MEM	Post project evaluation: the case of Nova Vida Housing, Angola
2009	Makhubele NC	van Waveren C	MEM	Factors affecting the implementation of reliability centred maintenance in water utilities in South Africa
2009	Malaka SM	Verhaeghe AE	MEM	Managing intellectual property in the defence environment: the South African perspective
2009	Masina MB	Pretorius L	MEM	Application of the Eindhoven University of Technology Maintenance Model to develop a maintenance strategy for newly acquired technology
2009	Maskell PG	Pretorius MW	MEM	The development of a competency measurement tool for use in a mechanical engineering working environment using technology management tools
2009	Mathebula ET	van Waveren C	MEM	Factors enhancing management of intellectual capital for competitive advantage in the construction industry of South Africa
2009	Miranda JA	Barry ML	MEM	The criteria for managing diversity in South African-based engineering construction organisations operating internationally
2009	Mollo SW	Pretorius L	MEM	Outsourcing maintenance functions for service level improvement: a case within South African manufacturing industries
2009	Mpati SA	Amadi-Echendu	MEM	Identification of failures in MV and LV switchgear – a case study of industrial complex
2009	Mphahlele PC	Köster MJF	MEM	Effect of run of mine ore and plant efficiency on carats recovery at CTP: Case study
2009	Mphefu G	Buys AJ	MEM	Outsourcing management of radio access network planning and operations for mobile telecommunication operators in Sub-Saharan Africa
2009	Munzhelele M	Pretorius MW	MEM	Technology acquisition decision process for coal mining: a Sasol mining case study
2009	Naidoo P	Heunis C	MEM	A comprehensive model on resource allocation in the maintenance departments at Sasol Synfuels
2009	Nethathe JM	van Waveren C	MEM	Factors influencing the success of multiple projects (Transnet Freight Rail)
2009	Nkoane ST	Pretorius MW	MEM	Technology licensing: is it still a solution for Natrex's new technological challenges?
2009	Oosthuizen BD	Pretorius L	MEM	Proposed generic framework for optimal maintenance management
2009	Rademeyer GF	Pretorius L	MEM	Assessment of mining asset optimisation at Sishen Iron Ore mine, South Africa
2009	Ramanyimi TM	Amadi-Echendu	MEM	Functionality assessment for service delivery: a case study of court infrastructure
2009	Sayanna S	Benade SJ	MEM	Defining success factors for implementing SAP in the South African environment
2009	Seoli MA	Mugabe JO	MEM	The use of technological roadmapping by firms in Africa: a case study of Econet Telecom Lesotho
2009	Shabangu BJ	Buys AJ	MEM	The adoption of new technology and user readiness: the case of South African mobile telephone users
2009	Stewart C	Steyn HdeV	MEM	The benefits of critical chain project management (CCPM) as perceived by consultants and practitioners
2009	Stijger RMR	Steyn JL	MEM	Contribution of support schemes to innovativeness in the South African automotive component industry
2009	Stolting H	Brent AC	MEM	Effects of environmental impact assessments on the timely finalisation of investment projects in the South African ferro-alloy industry
2009	Strangfeld V	Steyn HdeV	MEM	Factors that are perceived to result in projects finishing late and over budget in a South African mining project
2009	Tshepe T	Brent AC	MEM	Selecting strategies for the decommissioning of nuclear facilities
2009	van Niekerk SP	Brent AC	MEM	The carbon emissions of cellular concrete bricks compared to normal concrete bricks for building in Gauteng
2009	Veale RV	Walwyn DR	MEM	Appropriateness of R & D investment decision making in the South African electronics industry during the 2008/2009 economic downturn
2009	Venter SC	Pretorius MW	MEM	Technology roadmapping: the case of a systems integration organisation in South Africa
2009	Venter T	Pretorius MW	MEM	Technology assessment: the case of a systems integration organisation in South Africa
2009	Weber WH	Pretorius L	MEM	A comparative study for an effective inventory strategy for mechanical seals in a petrochemical environment
2010	Awase E	Venter JP	MEM	TQM performance criteria for the electricity supply industry in Namibia
2010	Boglo AP	Amadi-Achendu	MEM	Implementing managed information and communication services
2010	Dlamini TZ	Visser JK	MEM	An integrated approach to maintenance strategy and planning for a research and development facility
2010	Endrejat CG	Amadi-Achendu	MEM	An investigation into user requirement specifications for control systems
2010	Fourie W	Barry ML	MEM	Trade-off between job-based assessments or competency based career ladders for project managers in a large research & development organisation
2010	Gopaul KG	Buys AJ	MEM	An analysis of the integrated logistics support concept employed by the SA Air Force on new aircraft acquisitions
2010	Ibok SW	Pretorius L	MEM	Factors that influence the outcome of the application of value engineering on projects in Sasol
2010	Jones CE	Visser JK	MEM	Implementation of maintenance approaches in order to improve maintenance performance
2010	Keyser AC	Barry ML	MEM	Towards determining the important managerial concepts to develop technician competency for the instrumentation and control discipline in a petro-chemical environment
2010	Lamusse D	Bekker MC	MEM	Project scope management in Sasol technology projects
2010	Lekalake T	Benade SJ	MEM	Development of an infrastructure implementation process for Bus Rapid Transit projects
2010	Lengoasa FW	Weeks RV	MEM	Skills profile analysis: A South African electrical engineering consultancy industry perspective
2010	Masikhwa AD	Amadi-Achendu	MEM	Technology planning and forecasting in power generation: A case study
2010	Mlambo SR	Visser JK	MEM	Failure of safety systems in the petro-chemicals industry
2010	Mouton PJ	Bekker MC	MEM	The application of knowledge management in Sasol's project execution environment
2010	Ntombela M	van Waveren C	MEM	An investigation into the behaviours in and performances of an engineering department
2010	Pool JHJ	Amadi-Achendu	MEM	Technology roadmaps for control and automation systems
2010	Ramkhelawan T	Barry ML	MEM	Leading a technical organisation through change: A focus on the key drivers affecting communication
2010	Ramparsad A	Pretorius MW	MEM	The service requirements of the mobile telecommunications industry: A South African case study
2010	Ramparsad N	Barry ML	MEM	The needs and challenges of rural communities in South Africa for the implementation of information and communication technologies
2010	Schulze S	Pretorius L	MEM	Requirements engineering and management practices of a South African systems engineering and defence company
2010	Skele BH	van Waveren C	MEM	Implementation of the reliability centred maintenance in the explosives manufacturing company: A case study
2010	Smit L	Walwyn DR	MEM	Research output in South Africa is limited by a lack of skills
2010	Wanicki IA	Bekker MC	MEM	Factors affecting successful implementation of value improving practices during project execution
2010	Wessels W	Benade SJ	MEM	A systems approach to optimising underground coal mining
2010	Xulu NT	Amadi-Achendu	MEM	Condition assessment of civil engineering assets in a petrochemical environment: A case study of Sasol 1 (Sasolburg)
2009	Kotzé RLM	Visser JK	MEM	Maintenance performance indicators (MPIs): an analysis of the South African Mining Industry
2007	Mutisya MK	Steyn JL	MEM	Concurrent Engineering and the automotive supplier industry in South Africa

2007	Nair T	Van Waveren C	MEM	The impact of human factors on the operational phase of asset life cycle management in a petrochemical company
2008	Maphumulo TN	Visser JK	MEM	A framework for the outsourcing of electrical maintenance functions

