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| **Department** | Operations Management | | |
| **Discipline** | Operations Management, Work study | | |
| **Broad Research Focus Area** | Operations Management, Quality Management, Project Management, Supply Chain Management, Work study, Productivity, Method study, Work Measurement, Ergonomics, Efficiency, Lean Manufacturing. | | |
| **Total 2024 RFA Capacity** | Total: 2 Master’s and 2 PhD | | |
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| **Supervision Team details:** | **Academic Profile** | | **Capacity** |
| **Prof B. SOOKDEO**  **[[1]](#footnote-1)(Contact person for this focus area)**  Office: NSR Building, 4-44, Main Campus, Pretoria  Email: bsookdeo@unisa.ac.za  ORCID: ORCID: 0000-0002-2562-6486  Institutional repository link | **Prof Barnes Sookdeo** is a Senior Lecturer in the Department of Operations Management at UNISA.  His research focus areas include Work-study, Lean Manufacturing, Productivity, Ergonomics, Quality and Operational Management. Prior to joining academia, Barnes spent 16 years in the textile industry specialising in the field of Work Study and Industrial Engineering. He was involved in major projects with the aim to improve organisational effectiveness, improve efficiencies, improve layouts and overall, to enhance productivity. He started his academic career in 1999, by completing a National Diploma in Work Study. He followed this up with a National Higher Diploma in Operations Management. In 2007, he completed his Master’s Degree in Operations Management at the University of Johannesburg. Further to this, in 2016, he completed his Doctoral Degree (PhD) in Operational Research at NWU.  He has authored books, published articles in accredited journals and has presented various papers at national and international conferences. He is also an external examiner of theses and dissertations at various universities. His professional memberships include:  - Productivity South Africa (PSA): He has been a judge on the adjudication panel for the past 10 years and a member of the Experts Committee (Workplace Challenge Programme).  - World Academy of Productivity Sciences: He is a Fellow of this academy. His contribution for improving productivity in South Africa.  - South African Institute of Industrial Engineering (SAIIE).  - Southern African Institute for Management Services (SAIMAS).  - Peer Reviewer: He is the Chairperson of the Peer Review Assessor Committee at the Tshwane University of Technology (TUT), Durban University of Technology (DUT) and a panel member for the University of Johannesburg (UJ). | | 2 Master’s and  2 Doctoral students |
| **Model of supervision** | Candidates will be allocated to a supervisor but will be required to work independently within the requirements of higher degree studies.  Additionally, the candidate will have to present his/her work to a panel of academics at colloquia. | | |
| **Selection criteria: Master’s/Doctorate** | Refer to the qualification website for selection criteria. | | |
| **Selection Procedure** | Refer to the qualification website for selection procedure. | | |
| **Research scope** | Operations Management, Quality Management, Project Management, Supply Chain Management, Work study, Productivity, Method study, Work Measurement, Ergonomics, Efficiency, Lean Manufacturing.  **Method study**  Preliminary surveys, Flow process charts, Flow diagrams, Film technique, Report writing, Ergonomics, Good house-keeping, Quality management and Business process reengineering. Determining improved methods.  **Work Measurement**  Time study, Activity sampling, Synthesis Analytical estimating, Benchmarking, Predetermined motioned time system (PMTS) Incentives, Labour control  Measurement of indirect work, Form design, Restricted and unrestricted work  Division and analysis of work. Compiling standard times. Developing efficiency reporting systems.  **Productivity**  Productivity measurement. Productivity calculations. Macro productivity (Productivity within a country), Micro productivity (Productivity within an organisation), Specific resource productivity, Total/multifactor productivity. Productivity calculations.  **Ergonomics**  Ergonomic interventions in the workplace. Redesigning operations to make it user-friendly and an easy-fit for the worker. Lean manufacturing – concentrating on eliminating waste. Operations Management and Quality Management | | |
| **Reading:**  **Subject Field** | **This is a selection of articles and/or recent books in this research focus area. ‎Further reading over and above these is essential:**   1. Currie, R.M. 1977. *Work Study*. 4th Edition. Pitman. London. 2. Freivalds, A. & Niebel, B.W. 2014. *Methods, standards and Work Design*. 13th edition. McGraw-Hill. New York. 3. Kanawaty, G. (ed.). 1992. *Introduction to Work-study*. 4th edition. International Labour Office. Geneva. 4. Krajewski, L.J, Ritzman LP. & Malhotra, MK. 11th Ed. 2016. Operations Management: Processes and Supply Chains. Pearson Education: England 5. Slack, N. Brandon-Jones, A. Johnston, R. Singh, H. & Phihlela, K. 2017. Operations Management: Global and Southern African Perspectives. 3rd edition. Pearson South Africa: Cape Town 6. Stevenson, WJ. 2012. Operations Management: Theory and Practice. 11th edition. Mcgraw Hill Irwin: United Kingdom 7. Van Niekerk, W.P. 1986. Productivity and Work study. 2nd Edition. Butterworths Publishers. Durban. 8. Access research papers on the specific research topic from: [Directory of Open Access Journals (DOAJ)](https://doaj.org/) and [African Journals Online (AJOL)](http://www.ajol.info/). Specific recommended journals include the “Journal of Productivity Analysis”, “International Journal of Productivity and Performance Management”, “Journal of Industrial Engineering International” and “South African Journal of Industrial Engineering”. | | |
| **Reading:**  **Research Methodology** | **This is a selection books on methodology. Further reading over and above these is essential:**   1. Cooper, D.R. & Schindler, P.S. 2014. Business research methods. 12th edition. McGraw-Hill: New York. 2. Creswell, J.W. 2014. Research design: qualitative, quantitative and mixed methods approaches. 4th edition. Sage Publications: Thousand Oaks, California. 3. Hofstee, H. 2006. Constructing a Good Dissertation. EPE: Johannesburg, South Africa. 4. Howitt, D. & Cramer, D. 2014. Introduction to Research Methods in Psychology. Pearson Education Limited: Edinburgh Gate. 5. Leedy, P.D. & Ormrod, J.E. 2015. Practical research. Planning and Design. 11th edition. Pearson Education: Edinburgh Gate, Harlow, UK. 6. Salkind, N.J. 2012. Exploring research. 8th edition. Pearson Education: Upper Saddle River, NJ 7. Saunders M., Lewis P. & Thornhill A. 2016. Research methods for business students. 7th edition. Pearson Education: Edinburgh Gate, Harlow, UK. 8. Denicolo, P. & Becker, L. (2012). *Developing research proposals.* SAGE: London. 9. Hair, [J. F. Jr.](https://www.amazon.com/s/ref=dp_byline_sr_book_1?ie=UTF8&text=Joe+F.+Hair+Jr.&search-alias=books&field-author=Joe+F.+Hair+Jr.&sort=relevancerank), [Celsi](https://www.amazon.com/s/ref=dp_byline_sr_book_2?ie=UTF8&text=Mary+Celsi&search-alias=books&field-author=Mary+Celsi&sort=relevancerank), M., [Money](https://www.amazon.com/s/ref=dp_byline_sr_book_3?ie=UTF8&text=Arthur+Money&search-alias=books&field-author=Arthur+Money&sort=relevancerank), A.,  [Samouel](https://www.amazon.com/s/ref=dp_byline_sr_book_4?ie=UTF8&text=Phillip+Samouel&search-alias=books&field-author=Phillip+Samouel&sort=relevancerank), P., &   [Page](https://www.amazon.com/s/ref=dp_byline_sr_book_5?ie=UTF8&text=Michael+Page&search-alias=books&field-author=Michael+Page&sort=relevancerank)  M. (2016). *The Essentials of Business Research Methods.* 3rd Edition. Routledge: New York, New York. 10. Henning, E., Gravett, S., & Van Rensburg, W. (2005). *Finding your way in academic writing*. 2nd ed. Van Schaik: Pretoria. 11. Mouton, J. (2001). *How to succeed in your master's and doctoral studies: A South African guide and resource book*. Van Schaik: Pretoria. 12. Layder, D. (2012). *Doing excellent small-scale research*. Sage: Thousand Oaks, Ca. | | |
| **Resources: Scholar community** | BMI (Business Monitor International)  CIPD (Chartered Institute of Personnel and Development)  EbscoHost  Emerald  ILO (International Labor Organization)  UN (United Nations)  Resbank (South African Reserve Bank)  Stassa (Statistics South Africa)  WEF (World Economic Forum)  WHO (World Health Organization)  Wiley  WTO (World Trade Organization) | | |
| **Potential M&D research focus area for M&D research projects** | | | |
| **Unit of Analysis** | | **Research Focus** | |
| **In general** | | Individuals, teams, manufacturing organisations and institutions, collectives e.g. industries and countries; processes; scientific methods and techniques; body of scientific knowledge/literature.  Production and Operations Management/Work study focus, Literature relating the specified research focus areas, Technical presentations and Good writing skills.  Method study investigations to determine efficient methods of working.  Work measurement investigations to determine durations of operations and subsequent compilation of standard times. Removing ineffective times in work processes.  Development and implementation of efficiency reporting systems to monitor hourly/daily outputs. Assistance with management decision-making.  Productivity measurement in the workplace and the subsequent improvement thereof.  Ergonomic interventions in the workplace to fit the worker to the job. | |
| **Very specific** | | Overall organisational effectiveness.  Continuous productivity measurement for effectiveness and sustainability of organisations.  Method study investigations to determine efficient methods of working.  Work measurement investigations to determine durations of operations and subsequent compilation of standard times.  Removing ineffective times in work processes.  Development and implementation of efficiency reporting systems to monitor hourly/daily outputs.  Assistance with management decision-making.  Perceptions and experiences of individuals/groups about their interactions in the workplace (manufacturing and services) and its attribution to competitive advantage and organisational effectiveness.  Were the improvement interventions implemented as planned; and was it monitored to ensure organisational effectiveness. | |

1. Please note that consulting the research focus area leader is no assurance that your application will be approved. If, however, your application is approved, it is also not a guarantee that he/she will be allocated as your supervisor. [↑](#footnote-ref-1)