

## College of Accounting Sciences

### Research focus areas for 2023: Department of Financial Intelligence

#### RESEARCH FOCUS AREA:

#### THE FOURTH INDUSTRIAL REVOLUTION (4IR) AND DEVELOPMENT FINANCE

The 4IR has had a significant impact on South Africa, Africa as well as internationally. It has impacted a broad spectrum of companies, industries and financial markets. It is also anticipated to have an even greater impact on various sectors, entities and financial markets in South Africa and globally. Cryptocurrencies have also had an impact on investments and financial services. However, cryptocurrencies are expected to significantly impact banks, particularly central banks.

*This focus area **excludes** public administration entities (national, provincial and local) and State Owned Entities (SOEs).*

Potential areas for investigation are *inter alia*:

- The diversification advantages of cryptocurrencies within African countries (excluding South Africa)
- The anticipated impact of blockchain on the financial services companies
- The anticipated impact of blockchain on financial markets
- The impact of cryptocurrencies on financial markets
- The anticipated impact of cryptocurrencies on banks
- The utilisation of the 4IR to enhance the financial performance of companies
- The financial implications of cyber security breaches on companies
- The consequences of automation on financial performance
- The consequences of the 4IR on financial performance

#### Recommended reading list:

Brynjolfsson, E., & McAfee, A. 2017. The business of artificial intelligence. *Harvard Business Review*, 1-20.

Campbell, T., Williams, C., Ivanova, O., & Garrett, B. 2011. Could 3D printing change the world. Technologies, Potential, and Implications of Additive Manufacturing, Atlantic Council, Washington, DC, 3.

Li, S., Da Xu, L., & Zhao, S. 2015. The internet of things: a survey. *Information Systems Frontiers*, 17(2), 243-259.

Piekarski, W., Gunther, B., & Thomas, B. 1999. Integrating virtual and augmented realities in an outdoor application. In Proceedings 2nd IEEE and ACM International Workshop on Augmented Reality (IWAR'99), 45-54. IEEE.

Walczak, S. 2016. Artificial neural networks and other AI applications for business management decision support. *International Journal of Sociotechnology and Knowledge Development (IJSKD)*, 8(4), 1-20.

Westerman, G. McAfee, A. 2012. The Digital Advantage: How Digital Leaders Outperform Their Peers in Every Industry. MIT Sloan School of Management. <https://doi.org/10.1097/01.HJ.0000293820.91405.31>

Zhou, Y. 2018. Announcement effect of Blockchain investment on stock prices for Financial Companies. Retrieved from <http://essay.utwente.nl/75429/>

STAFF MEMBER	Current supervision allocation	Number of available positions for 2023
<p><b>Ms S Mofokeng</b> Senzi Mofokeng is the chair of the Department of Financial Intelligence. Her MBA study was on strategies implemented for enterprise development in corporate South Africa. She also completed a Master's in Digital Business Management at Wits Business school and her thesis was titled "The effect of digital assets investments on the performance of the company". She is currently registered for her PhD. Senzi holds the following professional qualifications: MBA, CA (SA).</p>	2 MPhil Master's students (co-supervision)	None
<p><b>Ms L Letho</b> Lehlohonolo Letho is a senior lecturer in the Department of Financial Governance. She is a CA(SA) and a CDFA. She holds a MCom in Development Finance from the University of Cape Town Graduate School of Business. Her master's study was assessing the attractiveness of cryptocurrencies in relation to traditional investments in South Africa.</p>	None	None

<b>Model of supervision</b>	Candidates will be allocated to a supervisor but will be required to work independently within the requirements of higher degree studies. Each department in the College of Accounting Sciences has various research focus areas, which may change over time. With regards to this research focus area, the supervisors in the Department of Financial Intelligence and some supervisors from the Department of Financial Governance work together as their interests are linked to this focus areas.
<p><b>Selection criteria:</b> <b>M Compt (Accounting Sciences)</b> <b>MPhil (Accounting Sciences) and PhD (Accounting Sciences)</b></p>	<p>In addition to the minimum admission criteria on the application website, and in terms of par. 3.3 in the <i>Procedures for Master's and Doctoral Degrees</i>, the acceptance of potential students is based on the following criteria:</p> <ul style="list-style-type: none"> <li>• <b>Adequate supervisory <u>capacity</u> and <u>research expertise</u> in the discipline or department;</b></li> <li>• Academic record and background of student;</li> <li>• Language competency of student;</li> <li>• Suitability and viability of the intended research;</li> <li>• An approved selection procedure, which is in line with Unisa's policies on equality and diversity in the discipline or department.</li> </ul> <p><b><u>It is compulsory for all applicants to prepare a five-page expression of intent essay.</u></b> The quality of the essay will be used to rank the applications based on the criteria stated above. The expression of intent essay must include the following compulsory elements:</p> <ul style="list-style-type: none"> <li>• Personal motivation to pursue studies in this topic (maximum 60 words)</li> <li>• Topic</li> </ul>

	<ul style="list-style-type: none"> <li>• Short literature review (<i>with in-text references using Harvard referencing style</i>). Please refer to the section on Recommended Reading – the research process and methodology, on <b>how to buy a Unisa Library membership in order to access full text</b> research articles (not all articles are Open Access). The literature review should demonstrate, as a minimum that you have at least read the recommended articles for the specific focus area under which you are applying. Consulting free webpages (e.g. Wikipedia) and textbooks alone does not constitute an academic literature review. The literature review should also speak to your topic and the broad focus area that you are applying to.</li> <li>• Potential <b>contribution</b> of the study answering the question “<b>What</b> do you want to research?” For PhD applications, please note that replication studies are not acceptable, i.e. investigating a phenomenon in Country/Province/Exchange X, when it has already been investigated in multiple domains, is not a theoretical contribution.</li> <li>• Research problem / research question/ research objective/ research aim answering the question “<b>Why</b> do you want to do research on the topic?”</li> <li>• Proposed methodology answering the question “<b>How</b> are you going to achieve the above?”</li> </ul> <p>List of references (use <b>Harvard</b> Referencing method). There are multiple free sources on how to apply Harvard Referencing. Please show that you are serious about academic research by following this instruction.</p>
<p><b>Selection procedure</b></p>	<ol style="list-style-type: none"> <li>1. <a href="#">Apply for a student number.</a></li> <li>2. Apply during the prescribed application period for a space in the <i>Department of Financial Intelligence</i> research focus areas. Ensure that you <a href="#">apply online</a>, and attach your essay of intent and other requested documentation.</li> <li>3. Staff members from the relevant registration support department will verify that you have provided the required information and that your qualifications meet the criteria for admission to the degree. Only complete and qualifying applications are sent to the academic department for consideration.</li> <li>4. The selection process firstly ranks the applications of the candidates within each specific focus area based on the criteria stated above. Therefore, the content and quality of the expression of intent essay is important as students are competing for a limited number of supervision openings. The specific focus areas indicate the expertise in the department. The highest ranked applications are then reviewed for equality and diversity. The applications are therefore ranked to match the applications with the available supervision capacity and expertise, while taking equality and diversity into account. Where adequate <i>supervision capacity remains</i>, applications beyond the specific focus areas will be considered, especially where a high quality essay of intent indicates a suitable and viable topic and a supervisor with the expertise is available.</li> </ol> <p>Generally, you should be notified of the outcome of your application during January. The notification will be done by staff from the relevant registration support department.</p>
<p><b>Documents to support the application in addition to the Expression of intent essay</b></p>	<p>One-page abbreviated CV including:</p> <ul style="list-style-type: none"> <li>• Academic qualifications</li> <li>• Work experience</li> <li>• Contact details</li> <li>• Previous research (if any)</li> </ul>

<p><b>Recommended reading – the research process and methodology</b></p>	<p>You will be required to write an essay of intent on your own. Normally when you decided to do a Master’s or PhD study, you have an idea in mind or a topic that is of interest to you. The expression of intent essay is therefore your initial documentation of the idea, which has been developed into a rough topic in the chosen field of study.</p> <p>You therefore need to take the idea and review recent literature on the area of interest to establish what has already been done and whether the research problem is topical and sufficient sources exist. <b>Please ensure that you refer to the reading list of the Focus Area that you intend to apply in.</b> As part of the research process, you have to find a research problem/question. What you intend doing in your study to address the research problem or answer the question (the objectives) will be the focus of your proposed study.</p> <p>You will note that when you search articles on Google Scholar, an abstract appears. To access the full text, an access fee of approximately \$40 per article is payable, which you may not be able to afford. As a prospective student, you may contact the Unisa library to apply for special library membership. Click on the following link for details: <a href="http://libguides.unisa.ac.za/ask/LibraryMembership">http://libguides.unisa.ac.za/ask/LibraryMembership</a></p> <p>The following reading list will help you understand the research process and methodologies better:</p> <p><b>The research process:</b></p> <p>Biggam, J. 2018. <i>Succeeding with your Master’s Dissertation: a step by step handbook. Fourth Edition.</i> Berkshire, England: Open University Press.</p> <p>Hofstee, E. 2006. <i>Constructing a good dissertation: a practical guide to finishing a Master’s, MBA or PhD on schedule.</i> Johannesburg: EPE. (Available from the following website: <a href="http://www.exactica.co.za/book.php">http://www.exactica.co.za/book.php</a>).</p> <p>Mouton, J. 2001. <i>How to succeed in your Master’s and Doctoral studies.</i> Pretoria: Van Schaiks.</p> <p>Trafford, V &amp; Leshem, S. 2008. <i>Stepping stones to achieving your Doctorate: By focusing on your viva from the start.</i> Berkshire, England: Open University Press.</p> <p><b>The research methodology:</b></p> <p>Leedy, P.D. and Ormrod, J.E. 2016. <i>Practical research: planning and Design.</i> 11<sup>th</sup> edition. New Jersey: Pearson Education, Inc.</p> <p>Ryan, B, Scapens, RW &amp; Theobald, M. 2002. <i>Research method and methodology in finance and accounting.</i> 2nd edition. London: Thomson.</p> <p>Salkind, MJ. 2016. <i>Exploring research.</i> 9<sup>th</sup> Edition. Upper Saddle River, NJ: Pearson Education International.</p> <p>Smith, M. 2020. <i>Research Methods in Accounting.</i> 5<sup>th</sup> Edition. London: SAGE publications Ltd.</p>
<p><b>Recommended reading – search tools</b></p>	<p><b>Search tools:</b></p> <p>Google Scholar is a helpful tool to search for information relating to your research topic. If you have a student number, you can use the facilities of the University.</p>

	<p>A link to Library guides on Unisa’s Library home page is another source of information. You can consult the completed Theses and dissertations portal under the institutional repository in the Library to familiarise yourself with what is required to complete your qualification. You can also search the aspects of the research process you would probably like to know more about on YouTube, for example: how to develop a good research topic; the literature review; academic writing; research methodology; etc. You will note that many of these YouTube videos are from academics at universities. The videos will obviously not replace the more detailed reading that you will need to do if your application is successful, but they provide a fair source of background information on the research process, which should assist you both in the writing of the required essay and in continuing with the study if your application is successful.</p>
<p><b>Difference between a Master’s and a PhD study</b></p>	<p>In a PhD study, the student must demonstrate that they are contributing to the <b>advancement of the theory in the discipline</b>. Investigating something purely because it has not been done before, or prior results are inconclusive is not sufficient. Please review the NQF level descriptors on the SAQA website <a href="http://www.saqa.org.za/docs/misc/2012/level_descriptors.pdf">http://www.saqa.org.za/docs/misc/2012/level_descriptors.pdf</a> to differentiate between what is expected at NQF level 9 for a Master’s study and level 10 for a PhD study.</p> <p>The following blogs (in the field of education, but the principles are still universal) may also be helpful:</p> <ul style="list-style-type: none"> <li>• <a href="https://sites.google.com/site/johannescronje/">https://sites.google.com/site/johannescronje/</a></li> <li>• <a href="https://patthomson.net/2018/04/02/thesis-knowhow-how-the-contribution-can-create-coherence/">https://patthomson.net/2018/04/02/thesis-knowhow-how-the-contribution-can-create-coherence/</a></li> <li>• <a href="https://thesiswhisperer.com/">https://thesiswhisperer.com/</a></li> </ul>

**Other Research Focus Areas in the Department of Financial Intelligence (refer to separate documents)**

**Research focus area:**

**Stakeholder communications by stock exchange listed-companies**

**Research focus area:**

**Management Accounting, Financial Management and Control**