

An Audit of Tourism and Hospitality-related Qualifications in Universities of Technology in South Africa

Urmilla Bob[✉]

University of KwaZulu-Natal, South Africa, Email, bobu@ukzn.ac.za

**Corresponding Author*

How to cite this article: Bob, U. (2023). An Audit of Tourism and Hospitality-related qualifications in Universities of Technology in South Africa. African Journal of Hospitality, Tourism and Leisure, 12(3):1058-1070. DOI: <https://doi.org/10.46222/ajhtl.19770720.416>

Abstract

A website audit of tourism and hospitality qualifications in Universities of Technology in South Africa is undertaken to examine the extent and nature of tourism and hospitality-related training, including focusing on practical skills and work integrated learning (WIL) components, and integration of research training. The audit of training qualifications/ programmes at the six Universities of Technology (UoTs) in South Africa was undertaken during 2021 and information extracted was analysed thematically. The UoTs offer 60 tourism and hospitality qualifications, ranging from higher certificates to doctoral degrees, with more than 450 modules encompassing themes linked to tourism generally, hospitality management, and specific types of tourism. The UoTs had WIL in some of the qualifications and five had research training. The higher education sector needs to be responsive to the diverse and changing needs and demands of the tourism and hospitality sector, including professional training. Recommendations include undertaking research on student enrolment and graduate trends, and revising curricula and types of training. This study complements existing knowledge on skills and training in this field, given limited research in this area. The focus on UoTs is valuable since these institutions focus on practical/ technological skills that align with the tourism sector's needs.

Keywords: Tourism; hospitality; qualifications; Universities of Technology (UoTs); South Africa

Introduction

The tourism and hospitality sector is a main contributor to the Gross Domestic Product (GDP) in South Africa, which is increasingly focusing on entrepreneurship and innovation considerations, with significant potential to contribute further to economic growth, poverty reduction, job creation and the promotion of social cohesion and interactions (Mitchell, 2019; Statistics South Africa, 2019). This is particularly important in a Coronavirus Disease 2019 (COVID-19) context, where tourism is deemed to be a resilient sector and domestic tourism, in particular, can contribute to economic recovery, as shown by Breier et al. (2021) and Mitchell (2019). The tourism sector traverses elements of specialised skills and training as well as draws on multidisciplinary areas (such as ecology and conservation, economics, social sciences and business studies) to meet changing demands and needs in the sector. Skills and training to meet tourism sector needs also should be responsive to influential external drivers, including technology development, globalisation, climate change and other potential sources of disruptions in the context of the 4th Industrial Revolution. Specifically, the COVID-19 pandemic has been an unparalleled economic disruptor in all economic sectors, including tourism (Dube et al., 2020; Nhamo et al., 2020; Rogerson & Rogerson, 2020). The COVID-19 pandemic has exposed the vulnerabilities that exist within the tourism and related sectors, as well as the capabilities to respond to changes.

Before the COVID-19 pandemic in relation to skills development and training, several concerns about the relevance of current educational qualifications and programmes, as well as their fit-for-purpose in the South African context, were raised (Asmal et al., 2021; De Lannoy et al., 2020; Isaacs, 2020; Swartz et al., 2019). Swartz et al. (2019) state that South African

post-schooling/ tertiary education faces numerous challenges, such as relevance and purpose about meeting societal and economic demands. Effective and relevant educational training and capacity development are key to meeting the aspirations outlined in South Africa's National Development Plan to address socio-economic challenges, including skills gaps, quality and impact of training, the employability of graduates and job creation, as noted by Oxford Analytica (2017) and Van der Berg et al. (2020). Given the current trends as well as the unlocked potential of tourism to contribute to socio-economic development and recovery in the context of the COVID-19 pandemic, there is a need for more attention to be paid to training and research so that the sector can take advantage of existing opportunities and be better equipped to address challenges. The tourism sector also is one that employs a large number of people and has different types and sizes of businesses. Therefore, the sector has the potential for professional and vocational training.

In this context, undertaking an audit of tourism and hospitality qualifications in Universities of Technology (UoTs) in South Africa complements existing knowledge on skills and training in this field, noting that there is limited research in this area that is discussed in the next section that provides a brief overview of pertinent literature. Thereafter, the methodology adopted for this study is outlined. This is followed by the review and analysis of the website audit of tourism and hospitality-related qualifications/ programmes offered by UoTs that was undertaken. The main thematic areas discussed are the qualifications and programmes offered as well as the themes/ content covered, disciplines/ departments that offer the qualifications/ programmes, work integrated learning (WIL)/ internship exposure and the integration of research skills training. Finally, recommendations and conclusions are forwarded.

Literature review: Contextualising tourism and hospitality training

A Google Scholar search indicates that limited published research focuses on skills and training for the tourism and hospitality sector in the context of post-schooling qualifications/ programmes. For example, Zwane et al. (2017) focus on education and skills in relation to the tourism sector. Baum (2002) addresses skills and training for the hospitality sector, noting the challenge of accommodating the 'low skills job' associated with the sector, especially in the context of the alternative economy. Although close to two decades old, Baum identifies four main areas debated in terms of skills development that are relevant today: the nature of work and skills required, de-skilling (now an increasing focus on re-skilling) within the workplace, the technical versus generic skills debate and skills, and the education/ training process. Booyens (2020) is one of the few publications focusing on education and skills in tourism in South Africa, particularly on implications for youth employment. Booyens (2020) asserts that while tourism is regarded as a key sector that contributes to employment growth in the country, there is insufficient attention being paid to the nature of employment as well as the state of education and skills training in the sector. Booyens (2020) further notes that there is a mismatch between the outcomes of education and skills training in tourism and the industry requirements that need to be addressed. Goryushkina et al. (2019) examine entrepreneurial education for the hospitality industry. They consider theoretical aspects of education, identifying characteristic features of entrepreneurship in the context of services rendering in the hospitality industry.

Du Preez (2017) outlines a skills development framework for sports tourism in South Africa, with lessons for the tourism sector more generally. Du Preez (2017) noted an apparent gap in the availability of higher-level graduates in sports and tourism and that there were no devoted sport tourism management degrees, diplomas, or certificates in South Africa. This is evident in relation to other types of tourism sub-sectors as well, such as ecotourism, cultural

tourism and events tourism. Furthermore, Du Preez (2017) underscores the importance of internship opportunities to expose students/ future graduates to work in the sports tourism sector. Generally, Fleming et al. (2009) underscore the importance of internship/ (WIL) experiences for identifying and improving graduate competencies for employability, with du Pre (2006) specifically noting the focus of UoTs on experiential learning linked to WIL. In terms of training, Du Preez (2017) also highlights the need to focus on volunteer training. The Culture, Arts, Tourism, Hospitality and Sport Sector Education and Training Authority (CATHSSETA, 2013) also highlights the importance of volunteer training for the sector. Bilslund et al. (2020) highlight the changing patterns of internships and WIL in a COVID-19 world, especially the influence of virtual interactions. They note the prominence of virtual training and internships in tourism and hospitality, raising questions about whether these approaches can satisfy tourism and hospitality industry requirements in post-COVID-19 environments. Furthermore, they present a framework with respect to training as a result of changes triggered by the pandemic and implications for WIL and internship placements for future generations of students, graduates and industry professionals.

Reddy et al. (2018) identify the tourism sector as one of the occupations in high demand in South Africa. Reddy et al. (2018) define occupations in high demand as those that show relatively strong employment growth or are experiencing shortages in the labour market. In terms of tourism, the former is evident. This correlates with earlier assertions that the tourism and hospitality sector is well-positioned to contribute to socio-economic development and job creation. Reddy et al. (2018) specifically note that in relation to tourism, there is an underproduction of new graduate teachers. They also assert that the need for tourism-related skills appears in national, provincial and municipal plans. In relation to skills development and training, the following are identified in the literature as being important to consider (Booyens, 2020; Walker, 2018):

- The number of persons accessing and benefitting from training and capacity development initiatives/ programmes
- The levels of qualifications and content covered in the post-schooling sector
- The competencies of lecturers/ facilitators/ trainers and researchers
- Being responsive to the challenges and opportunities in relation to technological advancements in specific sectors
- The diverse skills and competencies of the different parts of the specific sectors and sub-sectors should be met
- The costs and resources associated with the training

Opportunities for online and blended/ hybrid (combining physical contact and online) training and capacity development have increased considerably in response to the restrictions imposed by responses to deal with the COVID-19 pandemic. This presents new opportunities (and challenges in terms of who benefits and what type of training can be conducted, such as limiting WIL opportunities) for skills development and training for the tourism and hospitality sector. Online learning, where the infrastructure and connectivity permit, also allows for greater flexibility and cost reductions. Technological advancements have also necessitated the need to focus on digital skills in the tourism and hospitality sector, as noted by Carlisle et al. (2023). Ivanov (2020) specifically examines the impacts of automation on tourism and hospitality jobs, arguing for an increased focus on technical skills development in this area.

The devastating disruptions to the tourism sector associated with the COVID-19 pandemic pose challenges and provide opportunities to rethink training and skills development, especially with most tertiary institutions globally radically assessing their qualifications, modes of teaching and learning, and research focus areas. Like other sectors, tourism is also reflecting

on how the pandemic has irreversibly changed demand-side and supply-side dynamics, re-evaluating business models (including rethinking strategies to improve competitiveness), and orientating to recovery and increased resiliency to be agile and adaptive to address future disruptions. Thus, there is a need to revise training programmes, consider new training qualifications/ programmes, and reassess how and who to train. The current contexts, while challenging, create opportunities to catalyse relooking critically at tourism training qualifications/ programmes to assist the sector to be resilient and sustainable, and higher education institutions to be relevant and responsive. Re-examining the higher education sector tourism qualifications and training programmes as well as research trends are timely to respond to the changing demands and needs of the tourism sector. The focus mainly on UoTs is a valuable contribution, given the focus on practical and technological skills that align with the needs of the tourism sector.

Given the above context, this research undertakes an audit of tourism qualifications in South African UoTs to contribute to rethinking the training of competent and relevant graduates to meet the needs and demands of the tourism and hospitality sector, identify practical skills training for the tourism and hospitality sector in relation to current and future qualifications/ programmes, examine internship/ WIL components that align to on-the-job and practical training that exposes students to career opportunities in the tourism and hospitality sector, and assess research skills development.

Methodology

Background to UoTs in South Africa

The UoTs in South Africa were the case studies of the research. UoTs (also known as polytechnic universities or technical universities in other parts of the world) play a critical role among the range of training service providers in higher education by focusing mainly on applied and technical sciences. UoTs are well positioned to offer specialised practical-orientated qualifications/ programmes that focus more on hands-on/ experiential learning so that students gain in-depth training in a specific field, aligning more closely to being prepared for careers in specific sectors/ industries, unlike traditional universities that are more theoretically-orientated (du Pre, 2006; Otache, 2022; Radko et al., 2023). In the South African context, as noted by du Pre (2006), the emergence of UoTs in post-apartheid South Africa was linked to the reclassification of higher education institutions in the country and mission redefinition to ensure diversity and increased relevance. The criteria then, as articulated by du Pre (2006: 2), remain valid today: “relevance of knowledge and applicability of skills are increasingly becoming important determinants of employability” together with the need for “ongoing training of staff”. The types of training provided by UoTs align with the skills needs in the tourism and hospitality sector, as discussed in the previous section. Thus, focusing on UoTs in South Africa as the case studies were purposively selected given their specific orientation to tourism and hospitality training.

Method

In relation to the methodological approach adopted, a website audit of training qualifications/ programmes at the six UoTs was undertaken during 2021. Information that was extracted was captured in an Excel spreadsheet in relation to the following aspects: name of institution, the title of qualification, faculty and discipline where qualification is administered, National Qualifications Framework (NQF) level of qualification and total credits, name and level of modules, if WIL and research training components are evident, and thematic/ area focus. The Technological Higher Education Network South Africa (THENSA) supported the research. All

the UoTs in South Africa are affiliated with THENSA. The focus was on examining tourism-related qualifications and programmes (including modules and module content).

Results and discussion: Review and analysis of website audit of tourism and hospitality-related qualifications/ programmes

Qualifications, programmes and content audit

The Table below summarises the number of qualifications and modules in different categories for the UoTs. Table 1 presents the number of qualifications per institution together with the number of modules offered. The Table shows that in relation to qualifications, the following totals were evident: 4 Higher Certificates (HC); 18 Diplomas (D); 13 Advanced Diplomas (AD); 8 Postgraduate Diplomas (PD); 10 master’s degrees (M); 7 Doctor of Philosophy (PhD)/ Doctoral degrees

Table 1: Number of qualifications and programmes (and modules) per institution

Institution	Number of qualifications/ programmes							Number of modules
	HC	D	AD	PD	M	PhD	TOTAL	
CPUT	-	5	5	1	1	1	13	> 55
CUT	-	1	1	1	1	1	5	> 35
DUT	4	4	3	2	3	3	19	> 150
MUT	-	1	1	1	1	-	4	> 40
TUT	-	4	1	1	1	1	8	> 90
VUT	-	3	2	2	3	1	11	> 100
TOTAL	4	18	13	8	10	7	60	

CPUT: Cape Peninsula University of Technology; CUT: Central University of Technology; DUT: Durban University of Technology; MUT: Mangosuthu University of Technology; TUT: Tshwane University of Technology; VUT: Vaal University of Technology

In total, 60 qualifications were offered among the six UoTs. The highest numbers were in relation to Diplomas (18) followed by Advanced Diplomas (13), Masters (10) and Postgraduate Diplomas (8). Four Higher Certificates are on offer, all at DUT, as well as 7 PhD qualifications. All the UoTs offer or plan to offer Masters (11) and Doctoral (8) degrees. The introduction of Masters and Doctoral programmes is recent. Furthermore, the introduction of Diplomas at different levels and the Masters programmes at the UoTs are also linked to the discontinuation of former Bachelor of Technologiae (BTech), Master of Technologiae (MTech) and Doctor of Technologiae (DTech) degrees/ qualifications and the introduction of the Diplomas, Advanced Diplomas, Postgraduate Diplomas, Masters and Doctoral qualifications to align with the new Higher Education Qualification Sub-Framework (HEQSF) requirements. It is also important to note that most of the qualifications were introduced, reviewed, and revised in the last 5 years.

There are substantial differences in relation to the number of programmes/ qualifications offered by UoTs in South Africa that are linked to tourism and hospitality-related degrees ranging from 4 qualifications at MUT to 19 at DUT. The institutions that offer 5 or more qualifications were VUT (11), CPUT (13), TUT (8) and CUT (5). While beyond the scope of this audit, future research should examine if tourism and hospitality-related content are offered in other qualifications, given the multidisciplinary orientation of tourism in particular. In terms of the number of modules associated with the programmes/ qualifications per institution, there was generally a strong correlation between the number of modules and the number of degrees on offer. DUT had the most modules (more than 150), followed by VUT (more than 100) and TUT (more than 90) as well as CPUT with more than 55. MUT offered more than 40 modules.

The levels of the modules on offer align with the NQF for the respective qualifications, specifically from NQF4 to NQF10 (from certificate to doctoral level). Furthermore, as noted earlier, most of the programmes have been aligned with the new HEQSF. Additionally,

qualifications were usually in the Faculties of Business and Management Sciences and, where indicated, in the Department of Tourism Management (Table 2). Thus, the strong association of tourism and hospitality studies being linked with the business and management field is clearly evident in the UoTs, reflecting a critical niche as well as a focus on the more practical aspects of the qualifications on offer that are likely to be better aligned to industry/ market needs, as noted by Bilsland et al. (2020), Breier et al. (2021), Goryushkina et al. (2019) and Reddy et al. (2018).

Table 2: Faculty/ Department offering programmes

	Faculty/ Department
CPUT	Faculty of Business and Management Science, Department of Tourism and Event Management
CUT	Faculty of Management Sciences, Department of Tourism and Event Management
DUT	Faculty of Management Sciences
MUT	Faculty of Natural Sciences
TUT	Faculty of Management Science, Department of Tourism Management
VUT	Faculty of Human Sciences, Department of Tourism and Integrated Communication

As noted earlier, information was extracted in relation to the key themes/ content per institution, covered in the content description of the modules offered. The main tourism and hospitality-related modules are related to themes linked to tourism generally, hospitality management, and specific types of tourism (notably events, adventure and ecotourism). The following are the main themes in relation to the content covered (although not at all institutions):

- Tourism (all institutions): Tourism management; Tourism financial management/ economics/ entrepreneurship; Tourism development; Tourism service; Quality management; Tourism media and communications; Tourism planning; Tourism geography; Travel and tourism operations; Destinations; Tourism leadership; Tourism and destination marketing; Tourism law; Technological applications for tourism; Crisis and disaster management in tourism.
- Hospitality (CPUT, DUT and VUT): Hospitality management; Hospitality operations; Hospitality business management and economics; Hospitality innovations; Hospitality leadership; Hospitality sustainability; Hospitality health and safety; Hospitality Corporate Social Responsibility; Hospitality service and customer management; Restaurant operations; Culinary studies; Hospitality Law; Food service and management; Accommodation management.
- Events (CPUT and TUT): Events management; Events planning; Events business and marketing/ finance; Events operations; Event planning and practice; Event project management; Risk management for events; Events law.
- Ecotourism and environmental management (DUT, TUT, VUT and MUT): Ecotourism management; Ecotourism marketing; Ecotourism operations; Ecotourism economics/ financial management; Ecotourism planning and development; E-tourism and technology; Guiding; Sustainability/ responsible tourism; Environmental management; Ecotourism entrepreneurship; Ecotourism geography; Wildlife tourism; Game ranch management; Nature conservation.
- Adventure tourism (TUT): Adventure management; Adventure operations; Adventure activities and destinations; Adventure finance/ economics; Adventure marketing; Adventure risk management; Adventure tourism law.

It was also evident that many of the programmes build on skills/ topics from level 1 modules to advanced offerings. This was notable in relation to tourism and event management,

marketing and planning modules in particular. Noticeably, there are specific institutions that focus on specialised training such as hospitality (CPUT, DUT and VUT), food service management (VUT and CPUT), events (CPUT and TUT), ecotourism (DUT, TUT and VUT) and adventure tourism (TUT) qualifications. This suggests that some institutions are carving niche focus areas in terms of training and responding to specific needs in the sector. Of concern is that key types of tourism in South Africa such as sports tourism and cultural tourism do not have specific qualifications. These may in part be covered under events tourism, although none of the modules refer to sports tourism and only in two instances is cultural tourism mentioned in this audit. Institutions may want to consider responding to regional tourism needs such as wine tourism in the Western Cape and coastal and marine tourism in the coastal provinces. It is also important to note that the qualification at MUT is more aligned with nature conservation. This is an important aspect in Southern Africa given that the main form of tourism (especially attracting international tourists) is nature-based or ecotourism.

A key observation is that many programmes include modules that cover issues that are broader and not directly linked to tourism and hospitality-related theoretical or technical skills, including: Human resource management, Project administration/ management, Strategic management, Business/ financial management, Customer service, Numeracy/ basic mathematics skills, English literacy, Digital/ information and communication/ computer literacy skills, Computer and technology applications (which are critically important given the context of the 4th Industrial Revolution), Academic literacy, Communication, Innovation and entrepreneurship, Leadership, Law/ legal considerations, Ethics and Cultural aspects (including languages – focus tends to be on European languages).

This indicates that students enrolled in tourism and hospitality-related qualifications are being exposed to a range of broader skills, particularly the importance of technological, business and entrepreneurial skills that were noted in the literature. The audit reveals that there is a range of tourism and hospitality-related qualifications on offer and content covered in UoTs. These are aligned to areas of skills training that need to be integrated into training programmes to unlock the potential of the tourism and hospitality sector. This audit did not, however, include an assessment of the number of students applying for the specific programmes, the number enrolled per qualification, the number who graduate and the number who are applied in fields that they are trained in. This is important to track to understand whether there is a need or demand for these qualifications. Including tracer studies that track the employment patterns of graduates will also assist in establishing the relevance of the qualifications in meeting sector needs and equipping students for work in the tourism and hospitality sector.

WIL/ internship exposure

The programmes that require WIL or internship exposure are:

- CPUT (5 of the 13 qualifications – undergraduate levels): the Diploma in Tourism Management and the Diploma in Event Management include WIL/ internship components to expose students to areas within the tourism and events industries, respectively, and permit experiential learning to take place. A 6-month WIL/ internship at a tourism or events company or equivalent is required in year 3. A coordinator in partnership with an industry mentor guides the student. In the Diploma in Hospitality and Food and Beverage Management, WIL takes place 4 months at the beginning of year 2 and 4 months at the end of year 2, whereas the Diploma in Hospitality and Professional Cookery integrates WIL 4 months at the beginning of year 2 and again for 6 months at the end of year 3.

- CUT (1 of the 5 qualifications – undergraduate): WIL takes place in the 2nd semester of the 3rd year in the Diploma in Tourism Management for 6 months. The purpose is to gain industry exposure and put theoretical knowledge into practice.
- DUT (4 of the 19 qualifications – undergraduate): the Diploma in Tourism, Diploma in Hospitality Management, Diploma in Ecotourism and Diploma in Catering Food Service have WIL, workplace preparedness and work-based learning. These are generally during the last 6 months of the programme in the 3rd year.
- MUT (1 of the 4 qualifications – undergraduate): the Diploma in Nature Conservation has a WIL component that has to be taken over two semesters once the first two years of the Diploma has been completed.
- TUT (4 of the 8 qualifications – undergraduate): the Diploma in Tourism Management, Diploma in Adventure Tourism, Diploma in Ecotourism Management and Diploma in Event Management have WIL components for the duration of 6 months in the general tourism, adventure tourism, ecotourism and events industries, respectively.
- VUT: the Diplomas in Ecotourism Management and Food Service Management have WIL components for the duration of 6 months.

WIL/ internship programmes expose students to work experience and practical skills, which are important for sufficiently equipping students to be employed in the tourism and hospitality sector, as noted in the literature review. All the institutions had some form of WIL integration which reflects the preparedness of universities that are technologically orientated to implement WIL/ internship programmes.

Integration of research skills training

Table 1 indicates that all the UoTs offer Masters and/ or doctoral programmes. Most of the Masters and doctoral programmes are by research. The Master of Nature Conservation is a coursework programme with a mini-dissertation. The descriptors for Masters research provided indicate a focus on writing a proposal (including ensuring research ethical compliance), planning and managing the research project, conducting a literature review, applying research methods for data collection, analysis and data interpretation, drawing conclusions and presenting research results, and applying the requisite levels of problem-solving abilities related to the research project. The descriptors for doctoral research provided indicate a focus on higher-level skills in terms of developing a research proposal, independently planning and managing the doctoral research project, compiling a comprehensive and scholarly review of the relevant literature, selecting an appropriate research design and specific methods for data collection that comply with research ethics protocols, analysis and interpretation, undertaking research in an ethical and professional manner, communicating and publishing findings in academically-recognised outputs, engaging with theoretical and/ or applied problems linked to the field of study, and demonstrating accountability and ability to work independently. Information was not provided that indicates who is responsible for or provides the training. Typically, in South African universities, the traditional supervisor model is used where students generally work on their research projects almost exclusively with their supervisor/s on specific topics/ areas of research with limited opportunities for exposure to other researchers in the field or exposure to formal research training. There is some external training provided linked to the University Capacity Development Grant or other development programmes at the institutions. Research training at undergraduate and postgraduate levels is also noted, specifically:

- CUT: in the Diploma in Tourism Management, there are research components included in some of the modules in the form of an assignment, although it is not mandatory for the lecturer to give any assessment in a research format. The Advanced Diploma in

Tourism Management has a research methodology module where students are expected to write a research protocol that they present to a panel of judges for assessment. The Postgraduate Diploma in Tourism Management has an Applied Research and Statistical Analysis module. Students are expected to write up a protocol, conduct research on a small-scale and then present the results in poster format to a panel of judges for assessment.

- DUT: the Higher Certificate in Hospitality Management, Diploma in Catering Food Services for Tourism, Advanced Diploma in Tourism, Advanced Diploma in Hospitality Management, Advanced Diploma in Ecotourism, Postgraduate Diploma in Tourism, Postgraduate Diploma in Hospitality Management and Postgraduate Diploma in Ecotourism have research training components in some of the modules as well as dedicated research modules such as Research Project, Research Methods and Design, Research Methodology, Applied Business Research and Advanced Research Methods. The Diploma in Tourism Management and the Diploma in Event Management have research training which is integrated into a 1st year Information Literacy module, which includes how to reference, source scholarly materials and utilising academic journals, and academic writing. Furthermore, the Advanced Diplomas in Tourism Management, Hospitality Management, Catering Management, Ecotourism Management and the Advanced Diploma in Event Management have a required research module.
- MUT: all the Nature Conservation undergraduate programmes (Diploma, Advanced Diploma and Postgraduate Diploma) have research components, including research methodology training, research proposal skills, research project and ecological sampling techniques. Additionally, the Diploma in Nature Conservation has an introduction to research in various modules that covers the basic conceptualisation of a given topic, planning, implementation and reporting.
- TUT: the Advanced Diploma in Tourism Management and Postgraduate Diploma in Tourism Management have a research methodology and advanced research methodology module, respectively.
- VUT: the Diploma in Ecotourism Management includes assignments in different modules where students are required to conduct research and write reports or do presentations. The Diploma in Food Service Management has an applied basic research methodology component and the Advanced Diplomas in Tourism Management and Food Service Management have research methodology courses.

Research is particularly important to generate knowledge that drives innovation and development in a particular field. Pertinent and updated information/ knowledge is also important for relevant content in teaching and learning programmes as well as providing stakeholders with evidence for informed decision-making.

Recommendations and conclusion

The tourism and hospitality sector is a key contributor to South Africa's GDP, with substantial potential to contribute further socio-economically, especially when the COVID-19 pandemic that has had and continues to have devastating impacts on the sector is brought under control and tourism travel resumes. To address socio-economic challenges facing South Africa, it is important to critically examine higher education skills and training, including WIL integration and research. This study focuses on UoTs. The diverse qualifications on offer among the UoTs and content covered in relation to tourism and hospitality indicate that students in South Africa are being exposed to a variety of qualifications. The different thematic areas covered are also indicative that the tourism and hospitality sector is multidisciplinary in orientation. There is a need to transition from the quantity of the number of qualifications on offer to examine the

quality and impact of the training being undertaken on the tourism and hospitality sector in relation to aspects such as readiness for jobs in the sector/ responding to demand, whether areas of training align to the needs in the sector, and the extent to which qualifications and curricula are revised/ changed to be relevant. The research aspects (especially the postgraduate training) should also be assessed to examine alignment with challenges facing the tourism and hospitality sector, policy and programme development needs, use by professionals and practitioners, and the integration of innovation and technology development. The limited, albeit growing, research training within the institutions also should be addressed. Research training is important to develop critical skills and can encourage students to be innovative and problem-solving orientated to address the challenges experienced in the tourism and hospitality sector.

As indicated earlier, the number of students enrolled in the various programmes/ qualifications on offer in the UoTs was not examined in this study. Enrolment trends, drop-out and throughput rates, and tracking employability among graduates in tourism and hospitality-related programmes are central to understanding the demand and relevance of the training provided. This type of analysis would assist in understanding better whether the higher education sector is meeting the needs of the tourism and hospitality sector.

The analysis of tourism and hospitality-related themes/ topics in the programmes in relation to specific modules indicates that several areas are covered, including management, development, planning, marketing, destinations, service orientation, legal aspects and technological applications. Specific types of tourism (notably events, adventure and ecotourism) are also being focused on, with some institutions offering specialised qualifications. This is an important trend to develop niche training areas for the sector. However, it is recommended that regional demands should also be looked at and responded to, such as wine tourism in the Western Cape. Additionally, broader aspects are being included in the programmes in relation to topics such as human resource management, business/ financial management, project administration, communication, customer service, digital/ computer/ technological issues, numerical and academic literacy, leadership and ethics.

The low number of certificate qualifications on offer is of concern since these types of courses often respond to the needs for professionalised and/ or specialised training for the sector. This could be an untapped opportunity that institutions should pay attention to since they can be a major source of income stream as well as respond to the demands of the sector. The number of WIL components is laudable and attests to the preparedness of universities that focus more on technological/ practical training to engage with industry players to expose students to career opportunities in the sector and develop practical skills. The limited WIL and internship programmes, however, can be enhanced since they are restricted to some of the qualifications and institutions.

Additional research needs to be undertaken to examine whether the existing programmes and skills covered sufficiently address the needs of the tourism and hospitality sector. Research focusing on the perceptions and concerns of the tourism and hospitality sector stakeholders in both the private and public spheres is needed to assess the extent to which current qualifications and specific modules are adequate in providing the skills and competencies needed, gaps in training that need to be addressed, whether graduates are adequately prepared for the workplace, and willing to participate in WIL/ internship programmes.

The tourism and hospitality sector needs to work closely with the higher education sector to review programmes/ qualifications and curricula and develop new qualifications as needed, including areas that need to be professionalised, targeted skills development and training that are customised to meet industry needs. As indicated repeatedly, tourism and hospitality is a multidisciplinary field. It is, therefore, imperative that other relevant

programmes/ qualifications and modules are looked at to examine opportunities to integrate tourism and hospitality-related training into these qualifications. Some pertinent areas are business management, education, economics, geography, environmental sciences and biological sciences. The higher education sector needs to be responsive to the diverse and changing needs and demands of the tourism and hospitality sector. Given the current and substantial potential of the tourism and hospitality sector to contribute to socio-economic development and job creation, more attention needs to be paid to training and research. This will assist the sector to take advantage of existing opportunities and unlocking the sector's full potential. This is particularly important to inform decisions and interventions as the sector recovers from the COVID-19 pandemic impacts and orientates to deal with persistent disruptions such as extreme weather events associated with climate change and technological advancements.

Acknowledgement

The research was supported by THENSA.

References

- Asmal, Z., Bhorat, H., Hill, R., Oosthuizen, M. & Rooney, C. (2021). *Employment Creation Potential, Labour Skills Requirements, and Skill Gaps for Young People: A South African Case Study*. Available at <https://africaportal.org/publication/employment-creation-potential-labor-skills-requirements-and-skill-gaps-young-people-south-african-case-study/>. [Retrieved September 13 2023].
- Baum, T. (2002). Skills and Training for the Hospitality Sector: A Review of Issues. *Journal of Vocational Education and Training*, 54 (3), 343-364.
- Bilsland, C., Nagy, H. & Smith, P. (2020). Virtual Internships and Work-Integrated Learning in Hospitality and Tourism in a Post-COVID-19 World. *International Journal of Work-Integrated Learning*, 21 (4), 425-437.
- Booyens, I. (2020). Education and Skills in Tourism: Implications for Youth Employment in South Africa. *Development Southern Africa*, 37 (5), 825-839.
- Breier, M., Kallmuenzer, A., Clauss, T., Gast, J., Kraus, S. & Tiberius, V. (2021). The Role of Business Model Innovation in the Hospitality Industry during the COVID-19 Crisis. *International Journal of Hospitality Management*, 92, 1-10.
- Carlisle, S., Ivanov, S. & Dijkmans, C. (2023). The Digital Skills Divide: Evidence from the European Tourism Industry. *Journal of Tourism Futures*, 9 (2), 240-266.
- Culture, Arts, Tourism, Hospitality and Sport Sector Education and Training Authority (CATHSSETA). (2015). CATHSSETA Sector Skills Plan 2015/2016 - 2016/2017. Available at https://cathsseta.org.za/wp-content/uploads/2018/12/Sector-Skills-Plan-2015_16.compressed.pdf. [Retrieved September 13 2023].
- De Lannoy, A., Graham, L., Patel, L. & Leibbrandt, M. (2020). Why is Youth Unemployment so Intractable in South Africa? A Synthesis of Evidence at the Micro-level. *Journal of Applied Youth Studies*, 3 (2), 115-131.
- Dube, P. (2020). South Africa: Domestic Tourism Resumes in the Country, AllAfrica. Available at <https://allafrica.com/stories/202006090305.html>. [Retrieved February 4 2021].

- du Pre, R. (2006). The Philosophy of a University of Technology in South Africa: An Introduction. *Kagisano: Council on Higher Education*, 5, 2-23.
- Du Preez, E.A. (2017). A Skills Development Framework for Sports Tourism: The Case of South Africa. *African Journal for Physical Activity and Health Sciences (AJPHES)*, 23 (Supplement 1), 146-169.
- Fleming, J., Martin, A.J., Hughes, H. & Zinn, C. (2009). Maximising Work-Integrated Learning Experiences through Identifying Graduate Competencies for Employability: A Case Study of Sport Studies in Higher Education. *International Journal of Work-Integrated Learning*, 10 (3), 189-201.
- Goryushkina, N., Voinova, N., Voronkova, O., Sitnov, A., Shichiyakh, R. & Gordeyeva, O. (2019). Theoretical Aspects of Entrepreneurial Education for Hospitality Industry. *Journal of Environmental Management and Tourism*, 10 (4(36)), 835-841.
- Ivanov, S. (2020). The Impact of Automation on Tourism and Hospitality Jobs. *Information Technology and Tourism*, 22, 205-215.
- Isaacs, S. (2020). South Africa's (Unequal) Digital Learning Journey: A Critical Review. In C-K. Looi, H. Zhang, Y. Gao & L. Wu (Eds.) *ICT in Education and Implications for the Belt and Road Initiative*, (pp. 187-211). Cham: Springer.
- Mitchell, J.G.B. (2019). Value Chain Analysis in Pro-poor Tourism: Towards a Critical Understanding of the Contribution of Tourism to Poverty Reduction (Doctoral dissertation, University of Brighton).
- Nhamo, G., Dube, K. & Chikodzi, D. (2020). Tourism Economic Stimulus Packages as a Response to COVID-19. In G. Nhamo, K. Dube & D. Chikodzi (Eds.) *Counting the Cost of COVID-19 on the Global Tourism Industry* (pp. 353-374). Cham: Springer.
- Otache, I. (2022). Enhancing Graduates' Employability through Polytechnic-Industry Collaboration. *Industry and Higher Education*, 36 (5), 604-614.
- Oxford Analytica. (2017). Skills Gap will Hinder South African Growth Plans. Emerald Expert Briefings, Available at <https://www.emerald.com/insight/content/doi/10.1108/OXAN-DB218411/full/html>. [Retrieved September 11 2023].
- Radko, N., Belitski, M. & Kalyuzhnova, Y. (2023). Conceptualising the Entrepreneurial University: The Stakeholder Approach. *The Journal of Technology Transfer*, 48 (3), 955-1044.
- Reddy, V., Rogan, M., Mncwango, B. & Chabane, S. (2018). Occupations in High Demand in South Africa: A HSRC Technical Report. Available at <https://repository.hsrb.ac.za/bitstream/handle/20.500.11910/13752/10843.pdf?sequence=1&isAllowed=y>. [Retrieved August 15 2021].
- Rogerson, C.M. & Rogerson, J.M. (2020). COVID-19 and Tourism Spaces of Vulnerability in South Africa. *African Journal of Hospitality, Tourism and Leisure*, 9 (4), 382-401.
- Statistics South Africa, (2019). SA's Tourism Trade Balance Edges Lower, Available at <http://www.statssa.gov.za/?p=12805>. [Retrieved February 15 2021].
- Swartz, R., Ivancheva, M., Czerniewicz, L. & Morris, N.P. (2019). Between a Rock and a Hard Place: Dilemmas Regarding the Purpose of Public Universities in South Africa. *Higher Education*, 77 (4), 567-583.



- Van der Berg, S., Gustafsson, M. & Malindi, K. (2020). *Education and Skills for the Economy and Links to Labour Markets in South Africa*. Pretoria: National Planning Commission.
- Walker, M. (2018). Dimensions of Higher Education and the Public Good in South Africa. *Higher Education*, 76 (3), 555-569.
- Zwane, F.N., Du Plessis, E. & Slabbert, E. (2017). Learners' and Employers' Perceptions of Vocational Training in the South African Tourism Industry. *African Journal for Physical Activity and Health Sciences (AJPHEs)*, 23(1.1), 90-116.