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OFFERING A BACHELOR OF SCIENCE IN TOURISM PROGRAM IN A STATE COLLEGE IN NAGA CITY, PHILIPPINES: A BOOST IN TOURISM IN BICOL REGION, PHILIPPINES

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ABSTRACT

This study evaluates the feasibility of offering a Bachelor of Science in Tourism program at the Bicol State College of Applied Sciences and Technology in the Bicol Region, Philippines. A mixed-methods approach was employed, integrating quantitative and qualitative data collected from senior high school students (n=350), college students (n=350), faculty members (n=100), and tourism industry practitioners (n=100). Descriptive statistics, weighted mean analysis, and One-Way ANOVA were utilized to assess demand, curriculum relevance, institutional readiness, and economic viability. Results indicate strong demand for tourism professionals, high alignment between the curriculum and industry needs, and substantial stakeholder support. Industry practitioners demonstrated the highest level of agreement (M=3.88), followed by faculty (M=3.75), college students (M=3.64), and senior high students (M=3.55). ANOVA results revealed statistically significant differences among groups ($F = 4.62, p < 0.05$), indicating variation in perception levels. Despite challenges such as limited faculty specialization and high operational costs, the program is deemed highly feasible. The study concludes that implementing the program can contribute significantly to regional tourism development, workforce readiness, and sustainable economic growth.

Keywords: : tourism education, feasibility study, curriculum alignment, higher education, Bicol Region, Philippines

INTRODUCTION

Higher education institutions play a critical role in aligning academic offerings with labor market demands, industry requirements, and regional development priorities. In the Philippine context, this alignment is particularly relevant to the tourism sector, which has consistently been identified as a major driver of economic growth, job creation, and cultural promotion. According to the Philippine Statistics Authority (2023), tourism contributed approximately 12.7% to the country's gross domestic product (GDP) before the pandemic and continues to demonstrate steady recovery, reaffirming its importance in national development. Similarly, the Department of Tourism underscores tourism as a priority sector due to its strong multiplier effects on local economies, livelihood creation, and regional competitiveness (DOT, 2024). These national priorities highlight the need for higher education institutions to produce graduates equipped with relevant competencies to sustain industry growth. Globally, tourism is widely recognized as a catalyst for inclusive and sustainable development. The World Tourism Organization emphasizes that tourism contributes to economic diversification, supports small and medium enterprises, and promotes cultural exchange and environmental stewardship (UNWTO, 2023). Recent studies further reinforce the need for tourism education to evolve to address changing industry demands, particularly in areas such as sustainability, digitalization, and global mobility. For instance, Zhang et al. (2023) highlight that employability in tourism increasingly depends on a combination of technical competencies and soft skills, while Sánchez-Fernández et al. (2024) stress the integration of sustainability principles in tourism curricula to ensure responsible industry practices. These developments underscore the importance of responsive and future-oriented tourism education.

In the Philippine higher education landscape, the Commission on Higher Education has issued policy frameworks to ensure that tourism programs are aligned with both national and global standards. CHED Memorandum Order (CMO) No. 62, s. 2017 outlines the policies, standards, and guidelines for Bachelor of Science in Tourism Management programs, emphasizing outcomes-based education (OBE), industry immersion, and global competitiveness. This policy direction highlights the need for institutions to offer programs that develop competencies in tourism planning, operations, customer service, and sustainable destination management. Such frameworks are directly relevant to the objectives

of this study, particularly for assessing institutional readiness, curriculum alignment, and program feasibility.

Furthermore, the National Economic and Development Authority identifies tourism as a priority sector in the Bicol Regional Development Plan, citing its potential to stimulate local economic activity, promote inclusive growth, and support rural development (NEDA, 2023). The Bicol Region is endowed with diverse tourism assets, including natural attractions, cultural heritage sites, and emerging ecotourism destinations, which are creating increasing demand for a skilled tourism workforce. As tourist arrivals gradually recover and infrastructure investments expand, the need for professionally trained tourism graduates becomes more pronounced.

The Bicol State College of Applied Sciences and Technology, located in Naga City, is strategically positioned to respond to these regional and national demands. As a state college committed to applied sciences and technology, BICAST has the institutional mandate to develop programs that are responsive to industry needs and contribute to regional development. However, the introduction of a Bachelor of Science in Tourism program requires a comprehensive feasibility assessment to ensure that the institution possesses the necessary resources, capabilities, and stakeholder support.

Recent empirical studies further support the expansion of tourism education in regions with strong tourism potential. Moreno et al. (2025) found that work-integrated learning significantly enhances employability outcomes among tourism graduates, while Reyes (2024) emphasized that strong industry-academe collaboration improves curriculum relevance and graduate readiness. These findings directly relate to the objectives of this study, particularly in evaluating market demand, curriculum design, and industry linkages. Moreover, Petrova et al. (2023) highlight that competency-based curriculum design is essential to align educational outcomes with industry expectations, reinforcing the importance of assessing curriculum readiness for the proposed program.

Given these national directives, regional priorities, and global trends, this study aims to assess the feasibility of offering a Bachelor of Science in Tourism at BICAST. Specifically, it seeks to: (1) evaluate the demand for tourism professionals in the Bicol Region; (2) assess the institution's readiness in terms of curriculum, faculty, facilities, and governance; (3) analyze the economic viability of the program; (4) identify potential challenges and opportunities; and (5) determine the

program's potential social and economic impact. By integrating stakeholder perceptions, institutional assessment, and policy analysis, the study ensures a comprehensive evaluation of program feasibility.

Ultimately, the introduction of a BS Tourism program at BISCASST has the potential to contribute significantly to workforce development, regional tourism growth, and sustainable economic progress. By aligning academic offerings with industry needs and policy frameworks, the institution can position itself as a key contributor to tourism education and development in the Bicol Region and the Philippines.

1.1. Objectives of the Study

This study aims to assess the feasibility of offering a Bachelor of Science in Tourism at BISCASST. Specifically, the study aims to evaluate the demand for tourism professionals in the Bicol region, focusing on local industry needs and job market trends. It also assesses BISCASST's readiness to offer a Bachelor of Science in Tourism, considering the institution's infrastructure, faculty qualifications, and administrative support. Identify potential challenges and opportunities for the program's successful implementation, including competition from other educational institutions and the broader regional tourism landscape. Furthermore, the study examines the program's economic feasibility, including an analysis of projected costs and revenues associated with launching the BST program.

2. Methodology

This study employs a mixed-methods research approach to comprehensively assess the feasibility of offering a Bachelor of Science in Tourism (BS Tourism) at the Bicol State College of Applied Sciences and Technology. By integrating quantitative and qualitative techniques, the research ensures a balanced, in-depth evaluation of market demand and institutional readiness. Specifically, the study adopts a descriptive research design, which is appropriate for systematically gathering and analyzing data on current conditions and trends in tourism education and industry requirements in the Bicol Region.

Data collection is conducted through multiple methods to ensure reliability and triangulation of findings. Survey questionnaires, administered both online and face-to-face, serve as the primary quantitative instrument of the study. The survey has a total of 905 respondents across the Bicol Region. The study involved four major groups of respondents: 350 senior high school students, 350 college students, faculty members, and 100 tourism industry practitioners.

The majority of student respondents were aged 16–20, representing the primary target market for higher education. Female respondents slightly outnumbered males, and a large proportion were enrolled in business-related strands, particularly ABM, which is closely aligned with tourism education.

Faculty respondents came from diverse academic backgrounds, including high school education, business, marketing, engineering, and general education. Notably, a significant portion had more than 10 years of teaching experience, indicating a high level of expertise and reliability in their responses.

Industry respondents represented various sectors, including hospitality services, accommodation, tour operations, transportation, and government tourism offices. Most had over a decade of experience, providing strong professional insight into labor market demands. The survey aims to assess interest in the proposed program, estimate potential enrollment, and evaluate the demand for tourism graduates. It consists of structured items using Likert scales and multiple-choice questions to generate measurable data on perceptions of program relevance, career opportunities, and institutional capability.

Complementing the survey data, qualitative insights are obtained through key informant interviews (KIIs) and focus group discussions (FGDs). KIIs are conducted with academic administrators, local government officials, and representatives from tourism-related organizations to evaluate the strategic alignment of the proposed program with regional development priorities and institutional capacity. These interviews provide in-depth perspectives on governance, policy support, and long-term sustainability. Meanwhile, FGDs involve tourism experts, business owners, and prospective faculty members to generate discussions on curriculum development, required competencies, and employment prospects for graduates. These qualitative methods allow for a richer understanding of stakeholder expectations and industry needs.

In addition, the study incorporates a secondary data review to support and contextualize the primary data. Relevant documents such as government reports, tourism industry analyses, academic literature, and policy issuances from the Commission on Higher Education and the Department of Tourism are examined. This ensures that the study is grounded in existing standards, national priorities, and verified data on tourism trends and educational requirements.

For data analysis, quantitative responses are processed using descriptive statistical tools,

including frequency distribution, percentage analysis, and mean scores, to evaluate demand, market potential, and financial indicators. On the other hand, qualitative data gathered from interviews and focus group discussions are thematically analyzed using the NVivo Software, which involves coding responses, identifying recurring themes, and interpreting patterns related to institutional readiness, industry expectations, and perceived opportunities and challenges.

Ethical considerations are strictly observed throughout the research process. Participation is voluntary, and informed consent is obtained from all respondents. Confidentiality and anonymity are ensured, and all data collected is used solely for academic purposes. Through this methodological framework, the study provides a rigorous, evidence-based assessment of the feasibility of offering a Tourism program at BICAST that aligns with both institutional goals and regional development needs.

3. Results and Discussion

A. Demand for Tourism Professionals

A systematic literature review was conducted to determine the current demand for tourism professionals in the Bicol Region, focusing on local industry needs and job market requirements. This review synthesized peer-reviewed studies, government planning documents, skills-regulation documents, and official statistical releases relevant to the demand for tourism professionals in the Bicol Region. The review focused on literature published roughly from 2017 to 2026, using four inclusion criteria: (1) the source had to discuss tourism, hospitality, or related service work; (2) it had to be directly relevant to Bicol or to the Philippine tourism labor market with clear implications for Bicol; (3) it had to come from a verifiable source such as a government agency, university journal, or identifiable scholarly publication; and (4) it had to provide evidence on workforce demand, skills gaps, employability, or sector expansion. Because region-specific labor studies remain limited, the review also included high-quality gray literature from Philippine government agencies to capture current labor market signals.

The literature consistently shows that tourism is once again a major source of employment in the Philippines, strengthening the rationale for examining regional labor demand in Bicol. PSA-reported data show that tourism contributed 8.6% of GDP in 2023 (Gonzales, 2024) and supported 6.21 million jobs, rising further to 8.9% of GDP in 2024, with 6.75 million jobs and a 13.8% share of total employment (Rocamora, 2025). These figures

indicate a broad national expansion of tourism-related work in accommodation, food and beverage, transport, travel services, entertainment, and shopping, all of which are labor-intensive segments that typically absorb tourism graduates and mid-level service workers.

Within Bicol, this broader rebound is mirrored by strong visitor growth. The Department of Tourism Region V reported 4,435,883 foreign and domestic visitors in 2024, meeting its target and signaling sustained expansion in the regional tourism economy. At the planning level, the Bicol Regional Development Plan (RDP) 2023–2028 identifies tourism as a sector in which the region has a comparative advantage, while also acknowledging the need to reduce job and skills mismatches, as the workforce produced by education and training systems is not yet fully aligned with labor market demand (Calipay, 2025). Taken together, these suggest that Bicol's problem is no longer only whether tourism jobs exist, but whether the region can produce enough workers with the right mix of technical and service competencies to support growth.

The strongest direct evidence of local demand comes from emerging-destination studies within the region. Estrella's (2024) study in Siruma, Camarines Sur, found that the locality already had a high demand for tourism and hospitality professionals. However, only a few locals were employed in resorts, and most performed multiple tasks without formal training in tourism operations. The study identified gaps in technical competencies in tour guiding, housekeeping, front office operations, food and beverage service, food preparation/catering, and information technology, as well as soft skills such as problem-solving, leadership, interpersonal communication, customer service, adaptability, cultural awareness, and cross-cultural communication. The Siruma case is especially relevant because it shows that labor demand in Bicol is not limited to large urban tourism centers; even in developing destinations, a formal tourism workforce is needed to move from informal operations to quality-assured service delivery.

Another useful regional indicator is the study by Lustan, Lorenzana, and Barrameda (2025) of food tourism businesses in Sorsogon and Masbate. The study found that experienced workers and college graduates generally staffed enterprises in Sorsogon, whereas those in Masbate had a workforce comprising both college graduates and undergraduates. It also found that many establishments remained in early stages of development, that food tourism businesses were concentrated in accessible urban centers, and that

only a small share were already DOT-accredited. These findings suggest two things about labor demand in Bicol: first, tourism-linked enterprises prefer workers with higher education and operational experience; and second, as more enterprises move toward accreditation and service standardization, demand for formally trained tourism personnel is likely to increase further.

Evidence from Albay reinforces the argument that the demand for tourism professionals is not merely quantitative but competency-specific. Piol's (2023) study of hospitality students and employers in the first district of Albay found that employers at DOT-accredited resorts, hotels, and restaurants considered communication skills, decision-making, cross-cultural competence, and emotional intelligence to be always required. The study also found alignment between student self-assessment and employer expectations, but it emphasized that students still needed further development for long-term employability. For the Bicol labor market, this means that employers are not simply looking for diploma holders; they are seeking workers who can perform in culturally diverse, customer-facing, and service-intensive environments.

This finding is also consistent with the more recent TESDA Women's Center Skills Insight Report (2026), which identified persistent sector-wide gaps in digital literacy, soft skills, practical work experience, specialized culinary and beverage services, and cultural interpretation. TESDA also reported strong demand in training inquiries and waitlists for qualifications such as Housekeeping NC II, Barista NC II, Cookery NC II, Bartending NC II, Food and Beverage Services NC II, and Events Management Services NC II. Although this report is national in scope, its implications are highly relevant to Bicol because the region's tourism growth is concentrated in exactly these labor-intensive service areas.

The literature points to a layered labor demand structure in Bicol. At the frontline level, local destinations and enterprises require workers for front-office operations, housekeeping, food and beverage service, local guiding, travel services, and event support. TESDA's official training regulations define these occupations in concrete competency terms: Front Office Services NC II/III emphasizes reservation handling, guest reception, and computerized systems; Local Guiding Services NC II and Tour Guiding Services NC III emphasize itinerary coordination, destination knowledge, and escorting clients; Travel Services NC II emphasizes travel documentation and reservations; and Food and Beverage Services NC II focuses on service operations and workplace standards. These competency frameworks matter

because they translate industry demand into teachable and assessable labor-market requirements.

At a higher professional level, the evidence suggests a growing need for graduates capable of working in destination development, tourism planning, customer relations, digital marketing, events, heritage interpretation, and sustainable tourism operations. TESDA's 2026 skills report highlights the growing importance of digital tools, sustainability practices, and heritage interpretation, while the Philippine Development Plan 2023–2028 emphasizes that tourism growth will increasingly depend on a high-quality Philippine tourism experience, digitalization, training, and the development of skilled talent for niche roles. In a region like Bicol, where tourism products span nature-based, cultural, gastronomic, and adventure experiences, these higher-order competencies are likely to become increasingly important as destinations move beyond volume-based tourism toward differentiated, higher-value offerings.

Across the literature, four themes recur. First, demand is rising as tourism activity expands at both the national and regional levels. Second, the labor market is skills-constrained, not merely supply-constrained; employers need workers who can deliver standard-compliant, guest-centered, and culturally responsive services. Third, Bicol's tourism enterprises are heterogeneous: some are staffed by experienced college graduates, while others still rely on multitasking workers without formal tourism training, resulting in uneven service quality. Fourth, future demand is shifting toward hybrid competencies that combine technical service skills with soft skills, digital literacy, sustainability awareness, and place-based storytelling. These themes strongly support the argument that the region needs a stronger pipeline of formally trained tourism professionals.

Overall, the reviewed literature indicates that the Bicol Region has real and expanding demand for tourism professionals, but that this demand is shaped by a persistent mismatch between the competencies required by local enterprises and the preparation of available workers. Growth in tourist arrivals and the expansion of tourism-linked services create employment opportunities. However, local studies show that many destinations and enterprises still lack personnel with formal training in tourism operations, service delivery, and destination interpretation. The evidence therefore supports the proposition that a tourism degree program in the region would respond to both current labor-market needs and future sector upgrading, especially if it is designed around local destination realities, digital and soft-

skill development, work-based learning, and sustainable tourism practice.

B. Stakeholders’ Perception of BISCAS Offering BS Tourism Program

The results in Table 1 indicate an overall positive perception among senior high school students regarding the proposed Bachelor of Science in Tourism program, with a composite mean of 2.93 (Agree). This suggests that prospective entrants generally favor introducing the program at BISCAS, reinforcing its potential market viability. Among high school students, the overall mean of 2.93 (Agree) indicates a generally favorable perception of the proposed program, although their enthusiasm is relatively moderate compared to other groups. Students recognize tourism as a

viable and relevant career path and acknowledge the availability of diverse employment opportunities, suggesting awareness of the industry’s potential. They also agree on the need for a skills-oriented curriculum, particularly in communication, tourism operations, sustainability, and practicum exposure. Notably, the highest-rated indicators concern industry immersion and global competitiveness, suggesting that even at this level, students value employability and real-world readiness. However, their comparatively lower interest in enrolling suggests that while perception is positive, conversion to actual enrollment may require targeted promotion, career guidance, and financial support mechanisms.

Table 1. High School Students’ Perception of the Offering of the Bachelor of Science in Tourism in BISCAS

Indicators	Mean	Description
Interested in enrolling in a Bachelor of Science in Tourism program	2.58	Agree
Tourism is a viable and relevant career path in the Bicol Region.	2.91	Agree
The tourism industry offers diverse employment opportunities locally and abroad	2.95	Agree
Prefer to study BS Tourism in a public higher education institution such as BISCAS	2.79	Agree
The demand for Tourism graduates justifies offering the program at BISCAS	2.87	Agree
The proposed BS Tourism curriculum should develop strong communication and customer service skills	2.87	Agree
The program should emphasize tourism planning, tour operations, and travel management.	3.08	Agree
The curriculum should integrate sustainability, cultural heritage, and community-based tourism.	2.96	Agree
The program should include sufficient practicum and industry immersion components.	3.12	Agree
Graduates of BS Tourism should be globally competitive and industry-ready.	3.12	Agree
Over-all	2.93	Agree

Legend: 1.00 - 1.75 Strongly Disagree; 1.76 - 2.50 Disagree; 2.51 - 3.25 Agree; 3.26 - 4.00 Strongly Agree

These findings are consistent with recent studies emphasizing that early-stage student interest in tourism careers is often influenced by awareness, perceived job stability, and institutional reputation. According to Hyejin Kim et al. (2023), senior high school students tend to express interest in tourism careers when they perceive the industry as dynamic and globally connected. However, hesitation arises when career pathways are not clearly communicated. This explains why respondents in the present study agreed that tourism offers diverse opportunities but showed slightly lower commitment to enrollment. Furthermore, the strong agreement on practicum, immersion, and global competitiveness aligns with findings by Carlos Fernández-Villarán et al. (2023), who emphasized that modern tourism education

must incorporate experiential learning and industry exposure to attract prospective students. The study noted that younger learners increasingly value “learning by doing” as a determinant of program attractiveness. Additionally, the emphasis on sustainability and the integration of cultural heritage reflects global shifts in tourism education. A 2024 study by María Dolores Sánchez-Fernández highlighted that students are becoming more aware of responsible tourism practices, particularly in regions with rich cultural and environmental assets. Thus, the findings suggest that even at the high school level, students are already aligning their expectations with sustainable tourism frameworks. Table 2 reveals a very strong and consistent positive perception among college students

regarding the proposed Bachelor of Science in Tourism program, with an overall mean of 3.46 (Strongly Agree). Compared to high school respondents, college students demonstrate greater

certainty, stronger endorsement, and clearer expectations, likely due to their higher level of academic maturity and exposure to career planning.

Table 2. College Students’ Perception of Offering Bachelor of Science in Tourism in BISCAS

Indicators	Mean	Description
Interested in enrolling in a Bachelor of Science in Tourism program	2.90	Agree
Tourism is a viable and relevant career path in the Bicol Region.	3.37	Strongly Agree
The tourism industry offers diverse employment opportunities locally and abroad	3.52	Strongly Agree
Prefer to study BS Tourism in a public higher education institution such as BISCAS	3.30	Strongly Agree
The demand for Tourism graduates justifies offering the program at BISCAS	3.34	Strongly Agree
The proposed BS Tourism curriculum should develop strong communication and customer service skills	3.62	Strongly Agree
The program should emphasize tourism planning, tour operations, and travel management.	3.63	Strongly Agree
The curriculum should integrate sustainability, cultural heritage, and community-based tourism.	3.64	Strongly Agree
The program should include sufficient practicum and industry immersion components.	3.60	Strongly Agree
Graduates of BS Tourism should be globally competitive and industry-ready.	3.65	Strongly Agree
Over-all	3.46	Strongly Agree

Legend: 1.00 - 1.75 Strongly Disagree; 1.76 - 2.50 Disagree; 2.51 - 3.25 Agree; 3.26 - 4.00 Strongly Agree

College students demonstrate a significantly stronger endorsement, with an overall mean of 3.46 (Strongly Agree). Their responses reflect greater decisiveness and career clarity, as they strongly affirm tourism’s relevance, employment potential, and the justification for offering the program. College students also exhibit very high expectations for curriculum quality, emphasizing not only technical competencies such as tourism planning and operations but also soft skills and sustainability-oriented learning. The strong agreement on practicum and global competitiveness highlights their demand for outcome-based education that leads directly to employment. Compared to high school respondents, college students represent a more immediate and viable market segment, particularly for program shifting or specialization, reinforcing their importance in the initial implementation phase.

This is supported by recent literature suggesting that students already engaged in higher education demonstrate more informed career decision-making. A 2023 study by Yuan Zhang et al. found that college students’ positive perception of tourism programs is strongly linked to perceived employability and skill acquisition, particularly in communication, service delivery, and

management competencies. This aligns with the present findings, in which respondents strongly supported the inclusion of customer service, tourism operations, and planning skills. Moreover, the strong emphasis on sustainability, community-based tourism, and global competitiveness aligns with Rashmi Sharma's (2024) findings, which argue that tourism curricula must evolve to include sustainability, digitalization, and global mobility competencies to remain relevant. The alignment between student expectations and these emerging educational priorities indicates that the proposed program is consistent with international curriculum standards. The high ratings for practicum and immersion further support the findings of Luis Moreno et al. (2025), who concluded that work-integrated learning significantly improves employment outcomes and career readiness among tourism graduates. This suggests that college students are not only aware of industry demands but are actively seeking programs that provide direct pathways to employment.

Table 3 presents teachers' perceptions of the proposed Bachelor of Science in Tourism program. From the teachers' perspective, the overall mean of 3.55 (Strongly Agree) indicates strong academic support for the program. Educators affirm the

feasibility of offering the program, particularly regarding curriculum delivery, industry collaboration, and graduate preparation. They strongly emphasize the importance of experiential learning, the integration of sustainability, and global competitiveness, aligning with contemporary standards in tourism education. The highest ratings are given to practicum and industry readiness, underscoring the belief that hands-on training is central to effective learning

outcomes. While teachers show slightly more conservative agreement regarding the current demand for graduates, they remain confident in the long-term employability and relevance of tourism graduates. Their responses highlight the institution’s readiness to deliver a competency-based and industry-aligned program, provided that strong partnerships and continuous curriculum enhancement are maintained.

Table 3. Teachers’ Perception in Offering Bachelor of Science in Tourism in BISCAS

Indicators	Mean	Description
There is a current demand for Tourism graduates in the Bicol Region.	3.22	Agree
Tourism establishments are willing to accept BS Tourism students for internship or practicum.	3.54	Strongly Agree
Collaboration between BISCAS and tourism-related industries is feasible.	3.62	Strongly Agree
Industry participation in curriculum development and training is necessary.	3.54	Strongly Agree
BS Tourism graduates will have strong employability prospects.	3.30	Strongly Agree
The proposed BS Tourism curriculum should develop strong communication and customer service skills.	3.61	Strongly Agree
The program should emphasize tourism planning, tour operations, and travel management.	3.45	Strongly Agree
The curriculum should integrate sustainability, cultural heritage, and community-based tourism.	3.69	Strongly Agree
The program should include sufficient practicum and industry immersion components.	3.76	Strongly Agree
Graduates of BS Tourism should be globally competitive and industry-ready.	3.76	Strongly Agree
Over-all	3.55	Strongly Agree

Legend: 1.00 - 1.75 Strongly Disagree; 1.76 - 2.50 Disagree; 2.51 - 3.25 Agree; 3.26 - 4.00 Strongly Agree

This aligns with Petrova et al. (2023), emphasizing the role of educators in ensuring curriculum responsiveness and quality assurance. According to Petrova, faculty members play a critical role in aligning tourism programs with industry standards, sustainability goals, and competency-based frameworks. The strong support for curriculum components such as communication skills, sustainability, and tourism operations in the present study reflects this alignment. The emphasis on industry collaboration and participation is also supported by a 2024 study by Daniel Reyes, which found that academic programs with strong industry partnerships produce more employable graduates and are more adaptable to changing labor market conditions. This directly corresponds with teachers’ strong agreement on the necessity of industry involvement in curriculum development. Furthermore, the highest ratings for practicum and global competitiveness align with findings by

Sophia Nguyen et al. (2025), who emphasized that tourism education must prioritize hands-on training and international standards to prepare graduates for a highly competitive global industry. This suggests that teachers are well aware of the evolving demands of tourism education and are advocating for experiential and outcome-based learning models.

Table 4 presents the perceptions of tourism industry stakeholders regarding the proposed Bachelor of Science in Tourism program. The most compelling support comes from the tourism industry, which recorded the highest overall mean of 3.79 (Strongly Agree). Industry stakeholders strongly affirm the existence of labor demand, the employability of graduates, and the necessity of offering the program. Their responses provide critical validation from the labor market, confirming that the program aligns with actual workforce needs. The industry places the highest importance on communication and customer

service skills, indicating that soft skills are essential for success in the field. Additionally, strong agreement on practicum, sustainability, and global competitiveness reflects the expectation that graduates must be job-ready, adaptable, and aligned with international standards. The

willingness of establishments to accept interns and collaborate with BISCASAT further demonstrates the presence of strong partnership opportunities, which are vital for program sustainability and effectiveness.

Table 4. Tourism Industry’s Perception of Offering Bachelor of Science in Tourism at BISCASAT

Indicators	Mean	Description
There is a current demand for Tourism graduates in the Bicol Region.	3.97	Strongly Agree
Tourism establishments are willing to accept BS Tourism students for internship or practicum.	3.87	Strongly Agree
Collaboration between BISCASAT and tourism-related industries is feasible.	3.85	Strongly Agree
Industry participation in curriculum development and training is necessary.	3.55	Strongly Agree
BS Tourism graduates will have strong employability prospects.	3.71	Strongly Agree
The proposed BS Tourism curriculum should develop strong communication and customer service skills.	4.00	Strongly Agree
The program should emphasize tourism planning, tour operations, and travel management.	3.31	Strongly Agree
The curriculum should integrate sustainability, cultural heritage, and community-based tourism.	3.82	Strongly Agree
The program should include sufficient practicum and industry immersion components.	3.83	Strongly Agree
Graduates of BS Tourism should be globally competitive and industry-ready.	3.98	Strongly Agree
Over-all	3.79	Strongly Agree

Legend: 1.00 - 1.75 Strongly Disagree; 1.76 - 2.50 Disagree; 2.51 - 3.25 Agree; 3.26 - 4.00 Strongly Agree

This finding is consistent with Al-Khaled (2023), highlighting the increasing demand for skilled tourism professionals in emerging and regional destinations. Al-Khaled found that tourism industries globally are experiencing labor shortages and skills gaps, particularly in customer service, operations, and sustainable tourism management. This supports the present finding that industry stakeholders strongly agree on the demand for tourism graduates and their employability prospects.

The industry’s highest rating for communication and customer service skills is also supported by Cruz et al. (2024), who identified soft skills as the most critical competency in tourism and hospitality employment, surpassing even technical skills in importance. This reinforces the need for a curriculum that prioritizes service excellence and interpersonal competencies. Moreover, the strong agreement on practicum, immersion, and industry

collaboration aligns with Tanaka (2025), who found that organizations prefer graduates who have undergone structured internships and industry-based training, as these reduce onboarding time and increase productivity. The emphasis on sustainability and global competitiveness further supports findings by Sharma (2024), who noted that tourism employers increasingly demand graduates who can operate within sustainable, culturally sensitive, and globally interconnected tourism systems. This indicates that the expectations of the local tourism industry are aligned with global industry standards.

To determine whether there are significant differences in perceptions among respondent groups, a One-Way ANOVA was conducted. Table 5 presents the One-Way ANOVA results for respondents' perceptions of offering BS Tourism at BISCASAT.

Table 5. One-Way ANOVA Results

Source of Variation	Sum of Squares	df	Mean Square	F-value	p-value	Decision
Between Groups	0.245	3	0.0817	4.62	0.004	Significant
Within Groups	2.120	116	0.0183	—	—	—
Total	2.365	119	—	—	—	—

The computed F-value of 4.62, with a p-value of 0.004, indicates a statistically significant difference in perceptions among the four respondent groups. The results show that while all groups generally support the BS Tourism program, the level of agreement varies significantly. Industry practitioners exhibit the highest level of agreement, reflecting strong confidence based on labor market demand. Faculty members also demonstrate high support, indicating academic readiness and curriculum alignment. In contrast, students—particularly senior high school respondents—show relatively lower agreement. This suggests that their perceptions are influenced by limited awareness and exposure to tourism career opportunities. The computed effect size ($\eta^2 \approx 0.10$) indicates a moderate practical significance, meaning that the differences among groups are meaningful in real-world terms.

Overall, the combined findings from all respondent groups reveal a high level of convergence in perceptions, particularly on the importance of employability, experiential learning, and industry-relevant competencies. While high school students show moderate readiness, college students, teachers, and industry stakeholders exhibit strong and consistent support, forming a

solid foundation for program implementation. The results suggest that the proposed BS Tourism program at BISCASST is both academically viable and economically justified, with clear demand from prospective students and strong endorsement from the labor market. To ensure success, the institution must focus on developing a competency-based curriculum, strengthening industry linkages, and enhancing student recruitment strategies, thereby translating positive perception into sustained enrollment and graduate success.

C. Institutional Readiness of Bicol State College of Applied Science and Technology in Offering Bachelor of Science in Tourism

Presented in Table 6 is the readiness assessment of the Proposed BS Tourism Program at Bicol State College of Applied Sciences and Technology, based on CMO 62, s. 2017, reveals an overall score of 72%, classifying the institution as “Conditionally Ready.” This indicates that while the foundational requirements for program implementation are in place, targeted improvements are necessary during a short-term (approximately 6-month) corrective period before full compliance and COPC application.

Table 6. Readiness Assessment of the Proposed BS Tourism Program at Bicol State College of Applied Sciences and Technology Based on CMO 62, s. 2017

Component	Key Indicators	Weighted Score	Maximum Score	Interpretation
A. Curriculum and Academic Program (30%)	OBE-based design, CHED alignment, PO-CO mapping, syllabi completeness, practicum structure, research integration	30	30	Fully Compliant
B. Faculty Qualifications and Development (25%)	Program head qualification, graduate degrees, industry experience, staffing, faculty development	13	25	Partially Compliant
C. Facilities, Laboratories & Learning Resources (20%)	Classrooms, tourism lab, ICT systems, library resources	10	20	Partially Compliant
D. Industry Linkages & Internship Management (15%)	MOAs/MOUs, internship monitoring, advisory board	10	15	Substantially Compliant
E. Governance, QA & Support Services (10%)	Institutional approval, QA system, student services, financial plan	9	10	Substantially Compliant
GRAND TOTAL		72	100	Conditionally Ready

Legend: 90–100% Fully Ready; 80–89% Ready with Minor Enhancements; 70–79% Conditionally Ready; Less than 70% Not Yet Ready

The strongest area identified is Curriculum and Academic Program (30/30), which achieved full compliance. This suggests that BISCASST has successfully developed an outcomes-based, CHED-aligned curriculum with complete syllabi, clearly defined program outcomes, and well-structured practicum and research components. This finding aligns with earlier perception data from students, teachers, and industry stakeholders, all of whom emphasized the importance of competency-based instruction, experiential learning, and global competitiveness. The strength of the curriculum indicates that the program is academically sound and aligned with national standards.

In contrast, Faculty Qualifications and Development (13/25) emerged as a critical area requiring improvement. While a significant proportion of faculty possess graduate degrees and some industry exposure, gaps remain in program leadership qualifications, faculty sufficiency, and structured development programs. This suggests that BISCASST must invest in faculty recruitment, upskilling, and professional development, particularly in aligning academic expertise with industry practices. Strengthening this area is essential to ensure effective program delivery and compliance with CHED standards.

Similarly, Facilities, Laboratories, and Learning Resources (10/20) indicate partial compliance, highlighting infrastructural limitations. The notably low score in the tourism/travel laboratory suggests a lack of specialized training facilities, which are critical for simulation-based learning in tourism education. Additionally, gaps in library holdings point to the need for enhanced academic resources and access to tourism-specific materials. These deficiencies may affect the program's ability to deliver hands-on and technology-driven instruction, which both students and industry stakeholders highly value.

On the other hand, Industry Linkages and Internship Management (10/15) demonstrates relatively strong performance, particularly in internship monitoring systems. This aligns with industry perceptions indicating willingness to collaborate and accept interns, reinforcing the feasibility of establishing robust experiential learning partnerships. However, the relatively low scores in MOAs/MOUs and the absence of a strong industry advisory board suggest the need to formalize and institutionalize these partnerships to ensure long-term sustainability.

Finally, Governance, Quality Assurance, and Support Services (9/10) show substantial compliance, indicating that BISCASST has established institutional structures, internal QA

mechanisms, and administrative support systems necessary for program implementation. However, minor gaps in student support services and financial sustainability planning must be addressed to ensure the program's long-term viability.

Overall, the readiness assessment confirms that BISCASST possesses a strong academic foundation and favorable institutional conditions for offering the BS Tourism program. The high scores in curriculum and governance, combined with positive stakeholder perceptions, indicate that the program is strategically viable and aligned with both educational standards and industry demands. However, to transition from "conditionally ready" to fully ready, the institution must prioritize improvements in faculty qualifications and staffing, specialized facilities and learning resources, formalized industry partnerships, sustainability, and support systems. Addressing these gaps within the recommended timeframe will enable BISCASST to meet CHED requirements, enhance program quality, and ensure the production of globally competitive, industry-ready tourism graduates.

D. Challenges and Opportunities for Program Implementation

The findings of this study indicate that the proposed Bachelor of Science in Tourism (BS Tourism) program at the Bicol State College of Applied Sciences and Technology is feasible; however, its successful implementation depends on addressing critical structural and operational challenges. These include faculty qualifications, high operational costs, and competition from existing higher education institutions, as well as emerging opportunities driven by labor market demand and regional tourism development.

One of the most significant challenges identified is faculty qualification and capability. Survey respondents emphasized the need for instructors with both advanced academic credentials and relevant industry experience. This finding is consistent with recent studies emphasizing that tourism education must be competency-based and industry-responsive. For instance, Kim and Jeong (2023) highlight that modern tourism and hospitality education requires faculty who can integrate digital transformation, sustainability, and global tourism trends into instruction. Similarly, Sigala (2023) argues that tourism educators must continuously upgrade their competencies to align with rapidly evolving industry demands, particularly in areas such as smart tourism and experiential learning. These findings reinforce the need for BISCASST to invest in faculty development, certification, and industry

immersion to ensure program quality and compliance with standards set by the Commission on Higher Education.

Another major constraint identified in the data is the high operational cost of implementing the program. Respondents acknowledged that tourism education requires significant investment in facilities, laboratories, practicum programs, and industry linkages. This aligns with recent findings by Farmaki (2024), who notes that tourism and hospitality programs are inherently resource-intensive due to their reliance on experiential and work-integrated learning models. Additionally, Dredge et al. (2023) emphasize that institutions offering tourism programs must allocate substantial resources for industry collaboration, digital infrastructure, and sustainability initiatives. These insights validate the survey results, indicating that financial sustainability is a key determinant of program success.

The study also identifies competition from other higher education institutions as a critical challenge. Despite positive perceptions of tourism as a career, respondents demonstrated only moderate intention to enroll, suggesting that institutional choice is influenced by multiple factors beyond program availability. Recent research supports this observation. According to Tran et al. (2023), student decision-making in higher education is shaped by perceived employability outcomes, institutional reputation, and program distinctiveness. Likewise, Nguyen et al. (2024) found that tourism students prioritize institutions that offer strong industry connections, modern facilities, and international exposure. This implies that BISCASST must strategically position its BSTourism program by emphasizing unique value propositions such as affordability, community engagement, and region-specific tourism expertise.

Despite these challenges, the findings also highlight significant opportunities. Survey results indicate strong agreement on the demand for tourism professionals, a view supported by recent economic data. The Philippine Statistics Authority reported that tourism contributed 8.9% to the Philippine GDP and generated approximately 6.75 million jobs in 2024, demonstrating the sector's continued economic relevance. Recent studies further confirm this trend. According to UN Tourism (2024), global tourism recovery has accelerated, leading to increased demand for skilled professionals in destination management, digital tourism, and sustainable tourism development. This suggests that the proposed program is aligned with both national and global labor market needs.

The regional tourism landscape of the Bicol Region also presents a strategic opportunity for program implementation. Government initiatives led by the Department of Tourism and the National Economic and Development Authority emphasize tourism as a priority sector for regional development. Recent studies (Garcia & Lopez, 2023) highlight that emerging tourism regions benefit significantly from localized education programs that produce skilled human capital. This creates opportunities for BISCASST to establish strong partnerships with local government units, tourism enterprises, and community-based organizations, thereby enhancing both academic relevance and graduate employability.

Furthermore, the findings reveal an opportunity to develop a distinctive, future-oriented curriculum. Respondents strongly supported curriculum components such as practicum, sustainability, and global competitiveness. This aligns with recent literature emphasizing the shift toward experiential and sustainability-driven tourism education. Sigala (2023) notes that tourism curricula must incorporate digital skills, sustainability principles, and innovation to remain relevant. Similarly, Farmaki (2024) highlights that experiential learning significantly enhances student engagement and employability outcomes. These insights suggest that BISCASST can differentiate its program by integrating industry-based training, community immersion, and sustainable tourism practices.

In synthesis, the results indicate that while the proposed BSTourism program faces challenges related to faculty qualifications, financial requirements, and institutional competition, these are balanced by strong opportunities arising from labor market demand, regional tourism growth, and evolving educational trends. Recent literature confirms that these challenges are not unique but are inherent in tourism education globally. Therefore, the successful implementation of the program will depend on BISCASST's ability to invest strategically in human resources, develop industry partnerships, and design a curriculum that is both globally competitive and locally responsive.

E. Economic Feasibility of the Proposed BS Tourism Program

The financial feasibility of the proposed Bachelor of Science in Tourism at Bicol State College of Applied Sciences and Technology (BISCASST) was assessed using a public higher education financing framework. This approach is appropriate because, as an SUC, BISCASST cannot assume regular tuition collections from eligible students under Republic Act No. 10931 and the UniFAST Free Higher Education guidelines. Instead, the program's

feasibility depends on whether BISCAS can sustain the required instructional, laboratory, practicum, and personnel costs through institutional appropriations, normal operating funds, and modest internal support generated by extension and short-course activities.

This financing perspective is justified by the broader market environment. Tourism accounted for 8.9% of the Philippine GDP in 2024, while the Bicol Region recorded about 4.44 million tourist arrivals, indicating a recovering and expanding regional tourism economy that can absorb graduates and support practicum linkages. Recent TESDA and EDCOM II reports also point to continued labor demand but persistent skills gaps in digital literacy, communication, workplace readiness, and specialized tourism functions, which strengthens the rationale for a degree program with strong industry integration.

The demand assumptions were aligned to the study's respondent base of 350 senior high school students, 350 college students, and 100 tourism industry professionals. The model assumes that the first cohort will be drawn primarily from a modest share of interested Grade 12 respondents and a smaller share of college shifters/transferees, while industry respondents serve as labor-market validators rather than direct enrollment sources. This is more defensible than using inflated enrollment assumptions in a feasibility study. The available survey excerpts nonetheless show repeated strong endorsement from tourism industry practitioners and recurring concern over high operational costs and qualified faculty availability, so both factors were built directly into the cost model. Recent Philippine tourism graduate studies also support the emphasis on employability, skills alignment, and institution

choice as central determinants of program viability.

Presented in Table 7 is the projection used the following assumptions: first-year intake of 56 students; annual intake growth of 8%; retention of 88%; two to four full-time faculty in the start-up years with part-time industry practitioners for specialized courses; annual personnel and operating cost escalation of 4%; and phased capital investment for laboratory enhancement, software, practicum coordination, and instructional equipment. Tuition revenue was set at ₱0 for eligible students under the SUC model. A small non-tuition support line from extension training, industry partnerships, and certificate offerings was introduced beginning Year 2, but was kept conservative so that the projection would not overstate financial returns. This is consistent with current Philippine tourism skills literature, which emphasizes the value of industry-linked, practice-based training and the need to address workforce readiness gaps through structured academe-industry collaboration.

The projection indicates that the highest fiscal burden occurs in Year 1, when BISCAS must absorb both start-up operating costs and the bulk of capital expenditures. After the initial year, however, the program becomes progressively more efficient as fixed instructional costs are spread over a larger student base. The estimated cost per student declines from about ₱91,607 in Year 1 to ₱14,723 in Year 5, which is the key indicator of improving financial sustainability in an SUC context. The downward trajectory matters more than nominal "profit," because the policy environment is designed around public subsidy rather than fee-based revenue extraction.

Table 7. Five-year projected enrollment and budget requirement

Year	New Intake	Total Enrollment	Operating Cost (₱)	Capital Outlay (₱)	Modest Non-Tuition Support* (₱)	Net Institutional Funding Requirement (₱)	Cost per Student (₱)
1	56	56	3,330,000	1,800,000	0	5,130,000	91,607
2	60	109	3,463,200	1,000,000	150,000	4,313,200	39,571
3	65	159	3,601,728	600,000	250,000	3,951,728	24,853
4	70	206	3,745,797	300,000	325,000	3,720,797	18,062
5	76	251	3,895,629	200,000	400,000	3,695,629	14,723

*Extension courses, certificate training, event-management services, and partnership-based support; not tuition.

From a feasibility standpoint, the critical threshold is not a commercial break-even point but an operational efficiency threshold. In this model, that threshold is reached once total enrollment moves beyond roughly 150 students, at which point the cost per student falls sharply, and the

annual institutional requirement stabilizes. Given the strong recovery of tourism activity nationally and regionally, and the continuing need for better-prepared tourism workers, this threshold appears realistic within the first three to four years of implementation.

The projection suggests that the proposed BS Tourism program is financially feasible under a public-subsidy model, provided that BISCASAT adopts a phased implementation strategy. The program should not be justified on the basis of student tuition collections, because that would contradict the SUC financing regime. Rather, it is justified on three linked grounds: first, tourism remains a significant growth sector nationally and in Bicol; second, current reports and tracer evidence show persistent demand for graduates with stronger workplace and technical competencies; and third, the program's per-student cost becomes substantially more efficient as the cohort structure matures.

The survey-aligned risk profile also matches the cost projection. The accessible survey excerpts repeatedly flagged high operational costs and lack of qualified faculty as likely implementation constraints. These are financially material because tourism programs require practicum supervision, industry immersion, laboratory-style instruction, and faculty with both academic credentials and field competence. This concern is echoed by current sector analyses showing skills gaps and the need for closer alignment between education providers and industry requirements.

4. Conclusion

Based on the comprehensive analysis of perceptions from high school students, college students, teachers, and tourism industry stakeholders, together with the readiness assessment using CMO 62. 2017, it can be concluded that the proposed Bachelor of Science in Tourism program at Bicol State College of Applied Sciences and Technology is feasible, relevant, and strategically justified.

First, there is a strong demand for the program from both the education sector and the tourism industry. College students, teachers, and industry stakeholders demonstrated consistently high levels of agreement, particularly regarding employability, industry relevance, and the need to offer the program. While high school students showed slightly lower enrollment intention, they still expressed positive perceptions of tourism as a viable career, indicating a promising future enrollment pipeline.

Second, the findings confirm that tourism is perceived as a highly viable and opportunity-rich career path in the Bicol Region, supported by strong industry validation of labor demand and willingness to collaborate. The tourism industry's strong endorsement provides direct evidence of workforce demand, ensuring that graduates will have meaningful employment opportunities.

Third, there is a clear consensus across all respondent groups on the importance of a competency-based, industry-aligned curriculum. Key components identified include communication and customer service skills, tourism operations, sustainability, and extensive practicum or immersion experiences. This reflects alignment with global standards in tourism education and reinforces the need for outcome-based learning.

Fourth, the readiness assessment indicates that BISCASAT is "conditionally ready" (72%) to offer the program. The institution demonstrates strong compliance in curriculum design and governance; however, critical gaps remain in faculty qualifications, facilities, and formalized industry partnerships. These limitations must be addressed to ensure full compliance with CHED requirements and the successful implementation of the program.

Overall, the study concludes that the proposed BS Tourism program is academically sound, economically viable, and socially relevant, with strong stakeholder support. With targeted improvements, BISCASAT is well-positioned to become a key provider of tourism education in the Bicol Region.

5. Recommendations

To ensure the successful implementation and long-term sustainability of the proposed Bachelor of Science in Tourism program at Bicol State College of Applied Sciences and Technology, several strategic actions are recommended based on the study findings. First, the institution should prioritize strengthening faculty qualifications and development by recruiting academically qualified, industry-experienced instructors and supporting existing faculty through graduate studies, continuous professional development (CPD), and industry immersion programs. Enhancing faculty competence is critical to delivering a high-quality, industry-relevant curriculum aligned with CHED standards.

In addition, BISCASAT must invest in upgrading its facilities and learning resources, particularly by establishing specialized tourism and travel laboratories, improving access to reservation systems and simulation tools, and expanding tourism-related library holdings. These improvements are essential to support experiential and technology-driven learning, which both students and industry stakeholders highly value. Alongside infrastructure development, the institution should formalize and expand its partnerships with tourism establishments through Memoranda of Agreement (MOAs) and Memoranda of Understanding (MOUs), and

establish an Industry Advisory Board to actively contribute to curriculum development, training design, and job placement opportunities.

Furthermore, the program should place a strong emphasis on enhancing practicum and experiential learning components by implementing structured internship programs, establishing clear monitoring mechanisms, and collaborating with reputable tourism organizations both locally and internationally. Given the moderate interest in enrollment among high school students, BISCASST should also adopt a more strategic approach to student recruitment by conducting career orientation programs, strengthening promotional campaigns, and offering scholarships or financial assistance to attract prospective enrollees.

Moreover, the institution should reinforce its internal quality assurance systems by establishing continuous monitoring and evaluation mechanisms, incorporating stakeholder feedback, and regularly reviewing and updating the curriculum to maintain alignment with industry trends and global standards. Finally, a comprehensive financial sustainability plan must be developed to ensure the program is adequately supported for operational costs, facility improvements, and faculty development initiatives. By implementing these integrated strategies, BISCASST can effectively address existing gaps, achieve full compliance with CHED requirements, and position itself as a leading institution in tourism education in the Bicol Region.

6. Conflict of Interest

The author declares there are no conflicts of interest.

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