# Analyzing Satisfaction Levels of Recent Information Technology Graduates from Queensland University of Technology

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## Abstract

This research paper investigates the satisfaction levels of recent IT graduates from Queensland University of Technology (QUT) and identifies the key factors influencing their perceptions of educational quality and career readiness. A mixed-methods approach was employed, utilizing both quantitative surveys and qualitative data analysis to assess graduates' overall satisfaction and the specific elements that contribute to their experiences. Findings indicate that while a majority of graduates express satisfaction with their technical skill development, significant gaps remain in soft skills and practical experiences, particularly among students without prior IT backgrounds. The study highlights the importance of tailored support and robust internship opportunities in enhancing career readiness. Additionally, perceptions of career prospects reveal a notable concern, with many graduates feeling unprepared to enter a competitive job market. This research contributes to the existing literature by emphasizing the need for curriculum alignment with industry expectations and providing actionable recommendations for improving IT programs at QUT. The insights gained aim to inform educational practices that better equip graduates for successful transitions into the workforce.

## 1. Introduction

In an era of rapid technological advancement, higher education plays a crucial role in equipping graduates with the skills needed for the workforce. This research paper investigates the satisfaction levels of recent IT graduates from the Queensland University of Technology (QUT), focusing on their educational experiences and perceptions of career readiness. It aims to assess how effectively QUT’s IT master's programs prepare students for the challenges of a competitive job market, contributing to the broader discourse on educational efficacy in Information Technology.

Understanding the evolving IT industry context is essential, as employers increasingly seek graduates with both technical and soft skills for collaboration, communication, and adaptability. This shift has prompted educational institutions to reassess their curricula and support services. For instance, QUT conducts end-of-semester surveys to gauge student satisfaction with various courses. However, these surveys often focus on course content and

teaching effectiveness, leaving a gap in understanding students' broader experiences as they approach graduation.

Despite these surveys, comprehensive research examining the overall satisfaction of IT graduates transitioning into the workforce remains limited. This study seeks to address this gap by exploring graduates' satisfaction with the curriculum and the additional support they feel they need as they near graduation. It also aims to identify crucial skills for employability and whether these perceived needs differ based on students' backgrounds, specifically between those with and without prior IT experience. Answering these questions is vital for enhancing educational offerings at institutions like QUT.

The research has three primary objectives: first, to assess the overall satisfaction levels of recent IT graduates from QUT regarding their learning experiences; second, to identify key factors contributing to their satisfaction, such as course content quality, practical experiences, and support services; and third, to examine how graduates perceive their career prospects as they approach graduation. By delineating these objectives, this study provides a comprehensive overview of elements affecting student satisfaction and career readiness within QUT’s IT programs.

To achieve these objectives, a mixed-methods approach will be employed, combining quantitative surveys with qualitative data analysis. The surveys will assess various dimensions of student satisfaction, including technical skills development, soft skills acquisition, and overall educational experience. Qualitative feedback will also be analyzed to identify recurring themes and provide a deeper understanding of student perceptions.

The anticipated outcomes are significant, as findings are expected to reveal critical insights into the satisfaction levels of recent IT graduates, particularly highlighting gaps in soft skills and practical experience. The study aims to emphasize the importance of tailored support and robust internship opportunities, especially for students without prior IT backgrounds. Addressing these gaps will contribute to ongoing discussions on curriculum development and career readiness in higher education, offering actionable recommendations for enhancing QUT's IT programs.

This paper is structured as follows: following this introduction, the literature review will overview existing research on student satisfaction and the skills gap in IT education. The

methodology section will outline the specific methods used to collect and analyze data. The results will present the key findings, followed by a discussion that contextualizes these findings within the existing literature. Finally, the conclusion will summarize the implications of the research and propose directions for future study.

In conclusion, this research seeks to illuminate the experiences of recent IT graduates from QUT, providing a comprehensive understanding of their satisfaction levels and perceptions of career readiness. By addressing gaps in current knowledge and highlighting specific support needs, this study aims to contribute meaningfully to the enhancement of educational practices and the overall success of future graduates.

## 2. Literature Review

The purpose of this literature review is to explore the factors influencing the career development and employability of Information and Communication Technology (ICT) graduates, focusing on employer satisfaction, challenges faced by new graduates, the significance of work-integrated learning (WIL), and the alignment between career aspirations and skills development. This review synthesizes existing research to identify gaps between academic programs and industry expectations and explores how tailored strategies can enhance graduates' career readiness.

### 2.1 Employer Satisfaction with ICT Graduates and Its Influencing Factors

The 2001 survey reported in "Employer Satisfaction with ICT Graduates" reveals a mixed perspective on the readiness of ICT graduates for the workforce. While 64% of employers express satisfaction with the graduates, key areas for improvement, particularly practical experience, are consistently highlighted. Approximately 30% of respondents recommend that universities increase opportunities for work placements, which are seen as the most effective form of training. A respondent succinctly states, "Work experience is the best training," reflecting the broader industry sentiment that hands-on, real-world experience is essential for graduate readiness. This underscores the need for universities to adjust their programs to better align with the skills and competencies demanded by the industry (Hagan, 2004).

## 2.2 Career Development and Challenges for IT Students and New Graduates

In the study *Understanding the Career Development and Employability of Information Technology Students*, the application of Social Cognitive Career Theory (SCCT) sheds light on the reliance of IT students on academic performance and experiential learning for their career development. The study emphasizes that IT students primarily focus on academic achievements and hands-on experience to guide their career paths, often neglecting career resources designed to enhance employability. This approach may lead to challenges upon entering the workforce, as students may lack the broader career development strategies needed to navigate the job market effectively (McKenzie et al., 2018).

The study *Struggles of New College Graduates in their First Software Development Job* reveals the challenges encountered by new graduates in software development roles, particularly at large firms like Microsoft. These include difficulties in communication, collaboration, and adjusting to the technical demands of the workplace. The findings suggest that academic preparation is often insufficient for addressing the complex dynamics of professional environments, with graduates struggling to adapt to the real-world pressures of collaboration and problem-solving (Begel & Simon, 2008). As the study concludes, the transition from academia to the workplace requires more than technical knowledge; it necessitates soft skills, adaptability, and the ability to work within a team.

Similarly, *Differences in Perception of IS Knowledge and Skills Between Academia and Industry: Findings from Taiwan* highlights the ongoing gap between academic training and industry expectations. While academic institutions tend to emphasize theoretical knowledge, the industry requires graduates who possess practical skills and are capable of applying their knowledge in real-world contexts. The study illustrates that this disparity can lead to dissatisfaction among both graduates and employers, with graduates feeling underprepared and employers perceiving a lack of readiness for the demands of the industry (Yen et al., 2003).

Further, in *Fostering Information Technology Students' Internship Program*, the authors uncover significant differences in how IT industry leaders and interns value various skills. Industry leaders prioritize soft skills such as integrity and the ability to learn new skills, while students focus more on technical competencies like programming and database management. This disparity suggests a need for academic programs to emphasize a balance between

technical expertise and soft skills, ensuring that graduates are better equipped to meet the multifaceted demands of the ICT sector (AlGhamdi, 2019).

## 2.3 The Role and Value of Work-Integrated Learning in ICT Education

The critical role of work-integrated learning (WIL) in ICT education is well-documented in the literature. *The Case for ICT Work-Integrated Learning from Graduates in the Workplace* underscores the importance of integrating academic programs with industry practice. Graduates who have gained workplace experience advocate strongly for more industry-relevant learning, noting that engagement in real-world activities significantly enhances their employability. The study calls for academic curricula to incorporate practical applications and up-to-date teaching methodologies to better align with the current demands of the ICT industry (Koppi et al., 2010).

Additionally, in *What Our ICT Graduates Really Need from Us: A Perspective from the Workplace*, the authors emphasize the value of participating in industry-relevant projects during one's education. Graduates report that practical projects, which develop problem-solving and teamwork skills, are crucial for preparing them for the workforce. This study highlights the gap between university offerings and industry requirements, advocating for more active collaboration between universities and employers to foster practical, hands-on learning (Koppi et al., 2009).

Moreover, *Using Collaboration to Provide Students with an Internship Experience in an Information Systems Course* further illustrates the effectiveness of integrating internships into academic programs. The study reports that students gain valuable work experience while fulfilling institutional staffing needs, with more than 75% of participants expressing high satisfaction with their internships. This reinforces the significance of internships in preparing students for post-graduate employment, equipping them with practical skills that align with the needs of the ICT industry (Wallace, 2007).

## 2.4 Career Aspirations and Skill Development Action Plans of IT Students

The alignment between career aspirations and skills development is another critical area of focus in the literature. The study *Informing the Career Development of IT Students by Understanding Their Career Aspirations and Skill Development Action Plans* emphasizes the

need for educational programs to tailor career development strategies to the specific goals and skill aspirations of IT students. By identifying students' career ambitions early on and integrating them with skill development plans, universities can create more effective pathways for students to achieve their professional objectives. This approach fosters greater alignment between academic experiences and industry requirements, ensuring that graduates possess both the technical and soft skills needed to succeed in their chosen fields (McKenzie et al., 2017).

Furthermore, *Career Aspirations and Skills Expectations of Undergraduate IT Students: Are They Realistic?* highlights the importance of self-efficacy in achieving career aspirations. The study finds that while IT students often have clear career goals, they lack the necessary strategies to pursue these ambitions. The authors advocate for increased focus on building students' confidence and providing more practical learning opportunities to help them navigate the job market successfully (McKenzie et al., 2017).

## 2.5 Conclusion

The reviewed literature highlights a gap between the competencies developed in academic IT programs and the skills expected by the industry. While employers show moderate satisfaction with IT graduates, practical experience, soft skills, and adaptability require improvement. Work-integrated learning (WIL) and internships are vital for providing the real-world experience necessary for career success. Additionally, aligning students' career aspirations with tailored skill development strategies and fostering both technical and soft skills is essential for enhancing employability. These insights emphasize the need for academic programs to focus not only on technical expertise but also on preparing students for the collaborative nature of modern IT workplaces. Future educational efforts should adopt a holistic approach that integrates industry collaboration and personalized support to meet the evolving demands of the IT sector.

# 3. Methodology

The purpose of this research is to assess the satisfaction levels of recent Information Technology (IT) graduates from the Queensland University of Technology (QUT) and to identify the key factors influencing their perceptions of educational quality and career readiness. The specific objectives include evaluating graduates' satisfaction with their

learning experiences, identifying areas for improvement in curriculum and support services, and understanding the relationship between skill development and career prospects. This study employs a data-oriented methodology that integrates a mixed-methods approach, combining quantitative surveys with qualitative data analysis. This dual approach has been adopted to provide a comprehensive understanding of graduates' experiences, allowing for the identification of broad patterns while also capturing nuanced insights that reflect the diverse perspectives of respondents. By leveraging both quantitative and qualitative data, the methodology aims to ensure robust findings that can inform improvements in educational practices and enhance the overall effectiveness of IT programs at QUT.

## 3.1 Research Design and Development

The research design employed a survey-based approach, utilizing Qualtrics to develop a structured questionnaire. This questionnaire consists of 26 questions, integrating multiple-choice formats for quantitative analysis and open-ended questions for qualitative insights. The survey aims to gather data on various dimensions of student satisfaction, including technical and soft skills development, career preparation, and overall learning experiences. The quantitative data will reveal overall satisfaction levels and trends, while the qualitative responses will explore specific factors influencing satisfaction, ensuring a thorough understanding of graduates' experiences.

The survey was administered electronically to enhance accessibility and convenience for participants. It targeted recent graduates from the Master of Information Technology program at QUT, focusing on individuals who completed their studies within the last two years. This approach ensured that the feedback gathered was relevant and reflective of current graduate experiences.

## 3.2 Data Collection Methods and Materials

Data collection involved the structured questionnaire distributed via Qualtrics, utilizing multiple channels for distribution, including direct sharing by the research supervisor, fellow IFN712 students, and QUT's social media platforms. This strategy aimed to enhance participant diversity and maximize response rates.

The survey was designed to gather comprehensive information across several domains:

- **Background Information:** Questions related to respondents' major and the current semester of study.
- **Technical and Soft Skills Development:** Multiple-choice questions assessing skill importance and self-assessment, along with open-ended feedback.
- **Career Preparation:** Questions addressing perceived industry readiness, job prospects, and opportunities for further education.
- **Overall Learning Experience and Satisfaction:** Questions gauging overall satisfaction levels and open-ended inquiries into factors influencing satisfaction and suggestions for improvement.

The primary data source consists of the responses collected from the Qualtrics survey. A total of 33 valid responses were received, with a representative sample selected to capture diverse experiences and perspectives. Responses from non-final-year students were excluded, and incomplete responses were discarded to ensure data integrity.

### 3.3 Data Analysis Techniques

The analysis of the collected data involved both quantitative and qualitative techniques. Quantitative data were analyzed using Qualtrics' built-in reporting features, generating descriptive statistics, and charts  to explore relationships between variables and uncover trends. This analysis focused on overall satisfaction levels and identified significant patterns within the data.

For qualitative data, a robust coding framework was established to analyze the open-ended responses. The analysis involved the following steps:

- **Keyword Extraction:** Key terms were extracted from each respondent's answers, representing their views on essential skills and experiences.
- **Keyword Classification:** Extracted keywords were categorized based on similarity, allowing for the identification of common themes.
- **Frequency Counting:** The frequency of each skill was tallied to understand market demand and highlight the skills most prevalent among respondents.

- **Word Cloud Generation:** The word cloud feature in MAXQDA was utilized to visualize the keywords, providing an intuitive representation of common skills and themes within the feedback.

This mixed-methods approach allowed for a comprehensive analysis of the graduates' experiences, integrating both quantitative findings and qualitative insights to inform conclusions and recommendations.

### 3.4 Validation and Limitations of the Methodology

To ensure the validity and reliability of the findings, several steps were taken throughout the research process. Firstly, the design of the survey was approached with careful consideration of the respondents' needs and backgrounds. This focus aimed to ensure that the questions accurately reflected their satisfaction levels and experiences, thus enhancing the validity of the collected data by providing a more authentic representation of graduates' perspectives.

Secondly, the survey underwent a rigorous pre-testing phase to refine the questions for clarity and relevance before distribution. This process not only improved the reliability of the survey by ensuring that questions were easily understood but also minimized the potential for erroneous data stemming from ambiguities in the questions.

Additionally, data collection was conducted through various channels to enhance the representativeness of the sample. The dual approach of utilizing both quantitative and qualitative data further strengthened the findings by allowing for a multifaceted exploration of graduate satisfaction.

However, this study is not without limitations. The sample size of 33 respondents may not fully represent the broader population of IT graduates from QUT. Moreover, the reliance on self-reported data may introduce biases in participants' perceptions of their skills and satisfaction levels. Future research could benefit from larger sample sizes and longitudinal studies to assess changes over time.

In summary, this methodology provides a structured approach to understanding the satisfaction levels of recent IT graduates from QUT, contributing valuable insights into the factors influencing their perceptions of educational quality and career readiness.

## 4. Results

This section presents the findings of the research regarding the satisfaction levels of recent IT graduates from QUT, focusing on their learning experience and career readiness. The analysis addresses three key research questions:

1. What is the overall satisfaction level of recent IT graduates from QUT regarding their learning experience and career readiness?
2. What specific factors related to course quality, practical experiences, and support services influence their satisfaction?
3. How do recent IT graduates perceive their career prospects?

### 4.1 Key Findings Related to Research Questions

The following highlights the most important results that directly answer the key research questions.

1. **Satisfaction with Learning Experience and Career Readiness**
   The first research question aimed to determine the overall satisfaction level of recent IT graduates with their learning experience and career readiness. Figure 1 indicates that 70% of respondents were satisfied with their overall learning experience at QUT, with 9% expressing high satisfaction. However, in terms of career readiness, as illustrated in Figure 2, only 18% of respondents felt well-prepared for the IT field, and none felt very well-prepared. This gap between academic satisfaction and career preparedness is noteworthy, suggesting a potential disconnect between educational experiences and professional readiness.

**Figure 1: Overall Learning Experience Satisfaction**

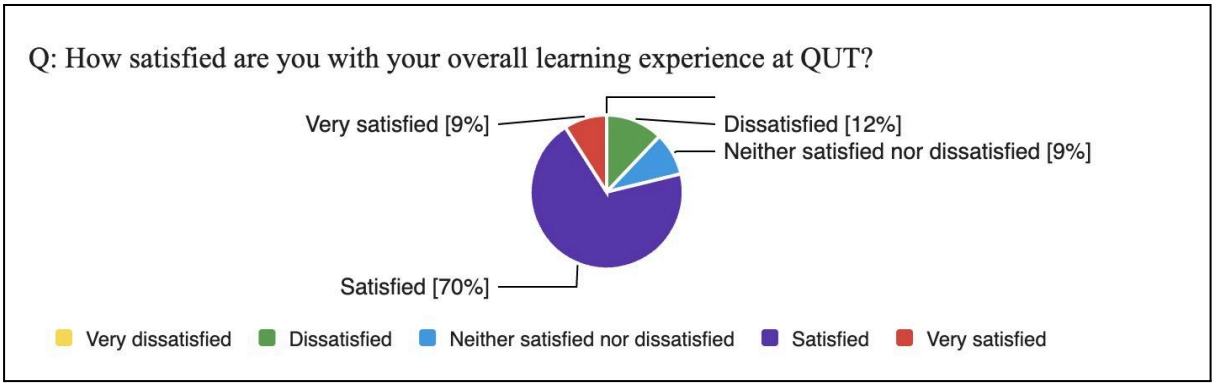
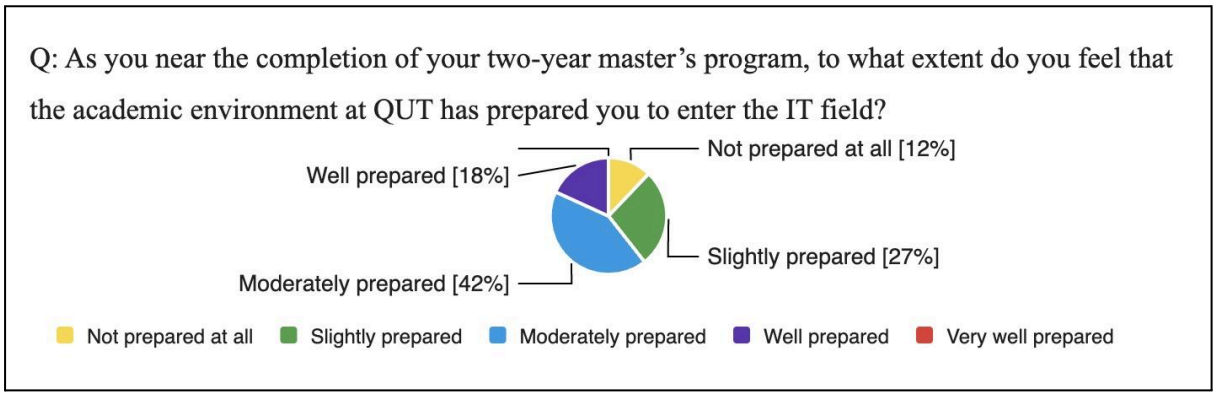


**Figure 2: Preparedness for IT Field**




2. **Factors Influencing Satisfaction Levels**

   To address the second research question—identifying specific factors influencing satisfaction—the study found that course content and teaching quality were the most important factors, cited by 36% of respondents (Figure 3). Other significant factors include practical opportunities and skill development (21%), as well as internship availability (15%). Table 1 shows that the IT Industry Project and Web Development courses were most aligned with career needs, reinforcing the importance of applied, practical learning. Additionally, Table 2 outlines the technical skills considered essential by respondents, with Programming identified as the most important. However, many rated their proficiency as beginner level, indicating a gap between perceived importance and actual skill level.

**Figure 3: Factors Affecting Overall Satisfaction**

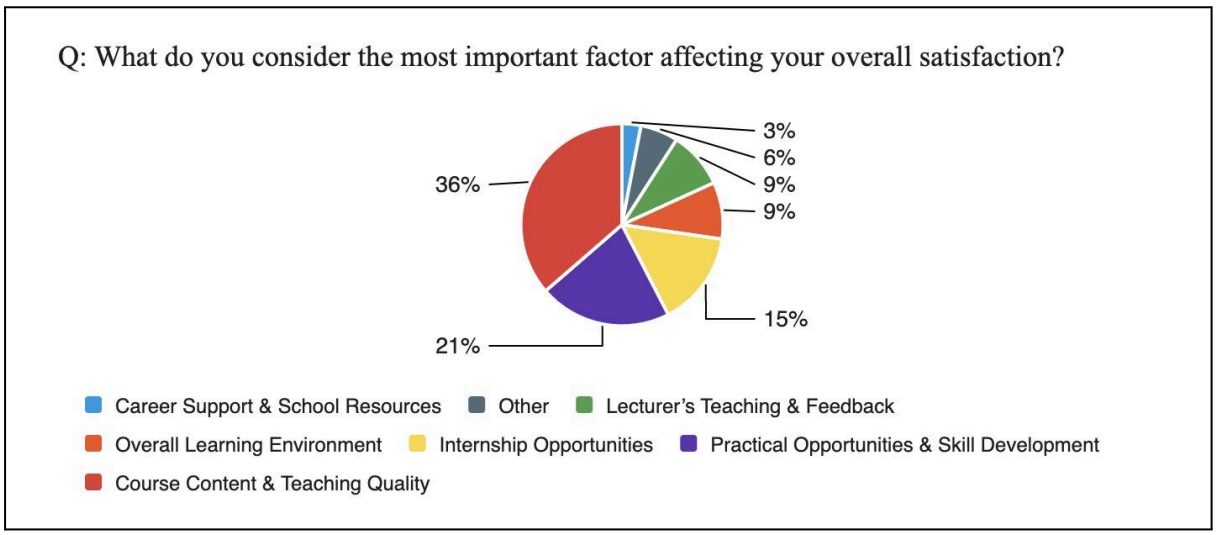


**Table 1: Courses Identified as Best Aligning with Career Needs**

| Course Category | Frequency |
|---|---|
| IT Industry Project | 13 |
| Web Development (IFN666, IFN557) | 12 |
| Cloud Computing | 3 |
| Programming (IFN555, intro to programming, Object-Oriented Programming, etc.) | 6 |
| Data Science & Analytics | 4 |
| Network & Security (Cybersecurity, Network Systems) | 5 |
| Governance & Management | 3 |
| Others | 5 |

**Table 2: Important Technical Skills and Self-Proficiency**

| Technical Skill | Count | Self-Assessment |
|---|---|---|
| Programming | 9 | Advanced (2), Intermediate (2), Beginner (5) |
| Cybersecurity | 5 | Advanced (0), Intermediate (1), Beginner (4) |
| Database Management | 5 | Advanced (0), Intermediate (0), Beginner (5) |
| Web Development | 5 | Advanced (0), Intermediate (1), Beginner (4) |
| Cloud Computing | 5 | Advanced (0), Intermediate (1), Beginner (4) |
| Project Management | 2 | Advanced (2), Intermediate (0), Beginner (0) |
| Risk Management | 2 | Advanced (0), Intermediate (0), Beginner (2) |
| Machine Learning | 1 | Advanced (0), Intermediate (0), Beginner (1) |
| Problem Solving | 1 | Advanced (0), Intermediate (0), Beginner (1) |
| Configuring Network Systems | 1 | Advanced (0), Intermediate (0), Beginner (1) |

3. **Career Prospects Perception**

   The third research question explored how recent IT graduates perceive their career prospects. Figure 4 shows mixed results: 39% of respondents expressed optimism about their career prospects, while 48% indicated pessimism. Table 3 elaborates on concerns related to skill gaps, increased competition, and uncertainty about career paths. These results underline the challenges recent graduates face in transitioning from academia to the IT workforce.

**Figure 4: Evaluation of Career Prospects in the IT Industry**

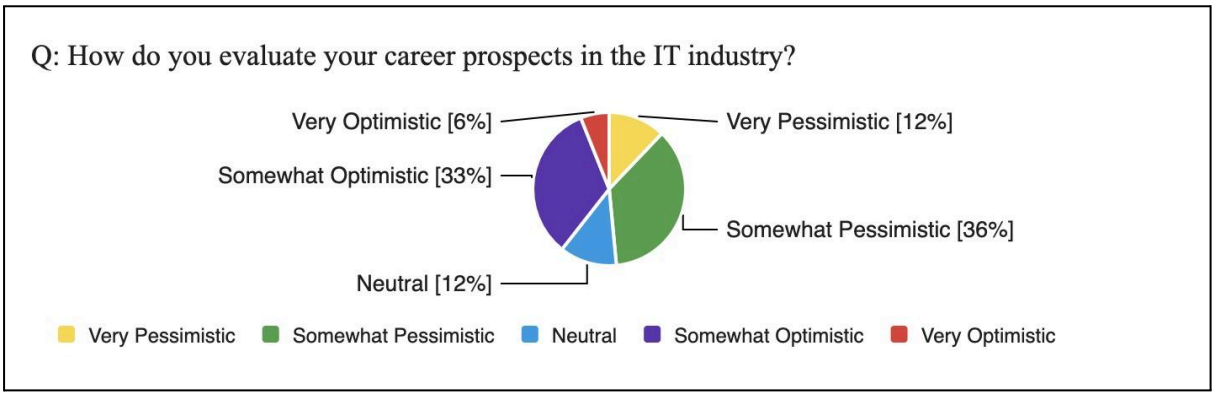



**Table 3: Views on Career Prospects in the IT Industry**

| Theme | Description | Participant Quotes |
|---|---|---|
| **Concerns about Skill Gaps** | Worries about emerging technologies, lack of practical experience, and specific skill areas (e.g., programming, data analytics). | "I'm concerned about skill gaps, especially in emerging technologies, and the high competition for jobs." |
| **Job Market Competition** | Anxiety about the increasing number of graduates and the rapid evolution of industry needs making it harder to stand out. | "I'm concerned that the job market is becoming saturated with graduates, making it increasingly difficult to stand out." |
| **Career Uncertainty** | Unclear career goals and the unpredictable nature of the job market cause anxiety and hesitation in career choices. | "Uncertain career goals, need to clarify my path." |
| **Plans for Skill Enhancement** | Intentions to pursue continuous learning and seek internships to bridge skill gaps and improve employability. | "I plan to enhance my skills through online courses, seek internships for practical experience." |
| **Anxiety and Self-Doubt** | General feelings of anxiety and self-doubt about preparedness for the competitive job market. | "Feeling anxious about my career prospects in the IT industry." |

## 4.2 Secondary Findings

In addition to the primary results, several secondary findings emerged that, while not directly addressing the research questions, provide valuable insights.

1. **Satisfaction with Support Services**

   Although not central to the research questions, respondents' satisfaction with QUT's career support services and resources was captured in Figures 5 and 6. Only 36% of respondents reported being satisfied with career support services, with a significant proportion (24%) expressing dissatisfaction. This suggests that support services may need to improve in areas such as personalized career guidance and internship placements, which could enhance graduates' preparedness for entering the workforce.

**Figure 5: Satisfaction with Career Support Services**

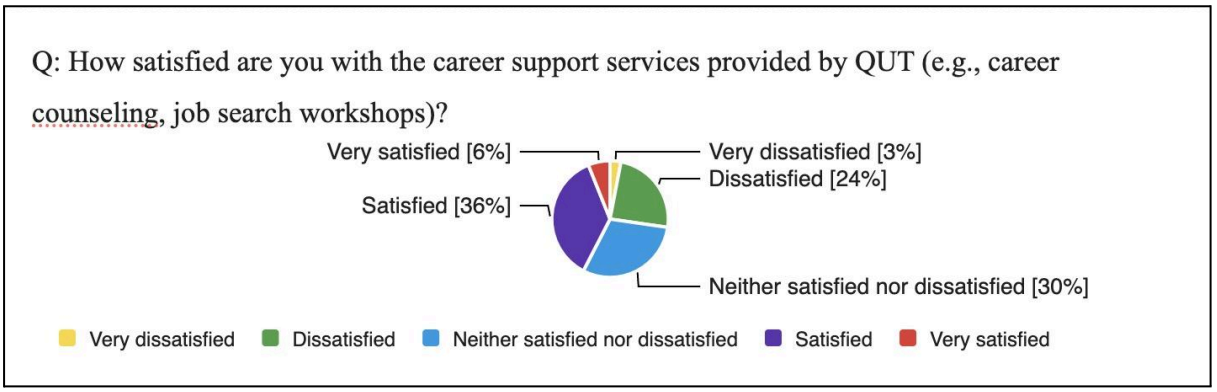
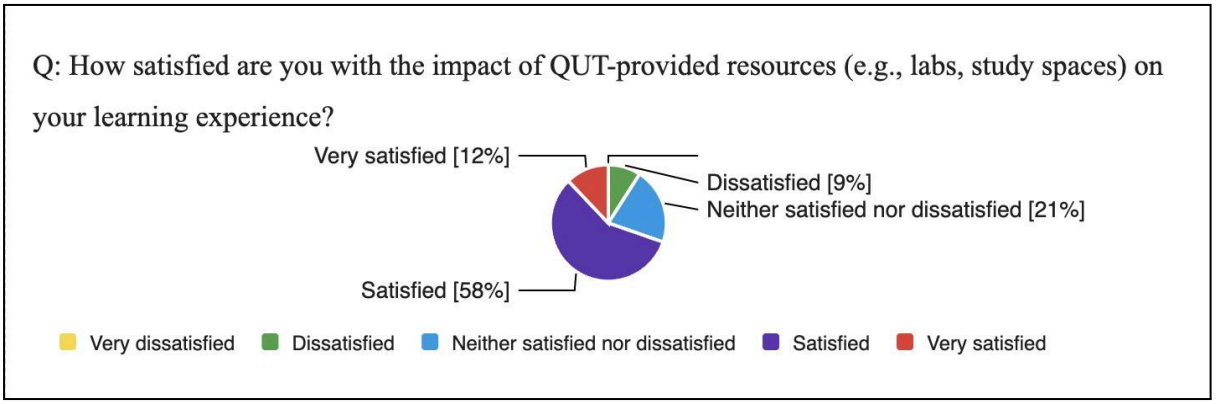



**Figure 6: Satisfaction with QUT-Provided Resources**




2. **Importance of Internship Experience**

   Figure 7 reveals that 70% of respondents rated internship experience as extremely important for entering the IT industry. While internships were not a direct focus of the research questions, this finding underscores the perceived value of practical, hands-on experience for career readiness, reinforcing the need for greater internship opportunities as noted in Table 4. Limited availability of internships has been noted as a key challenge, which contributes to graduates' feelings of under-preparation.

**Figure 7: Importance of Internship Experience for Entering the IT Industry**

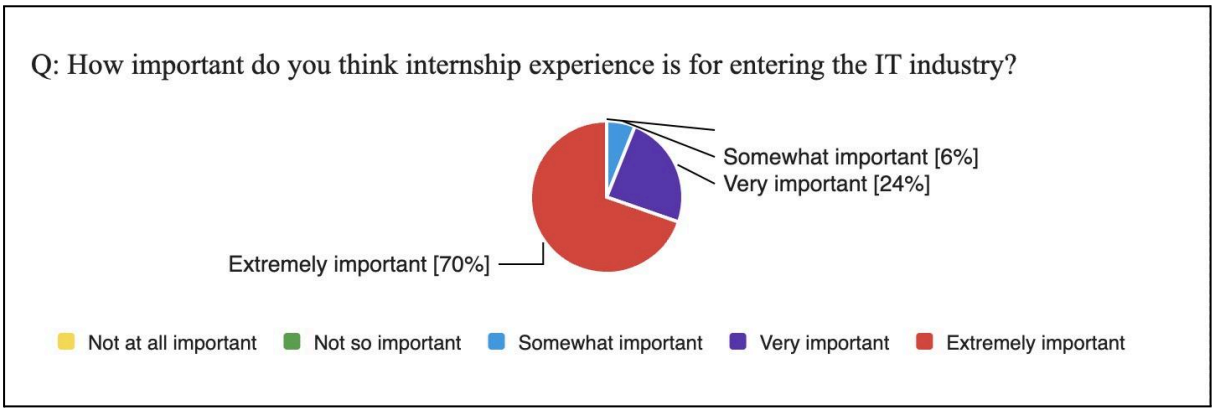



**Table 4: Impact of Limited Internship Opportunities on Graduate Career Readiness**

| Key Theme | Description | Participant Quotes |
|---|---|---|
| **Lack of Practical Experience** | Many respondents felt the absence of internships hindered their ability to gain hands-on experience, which is essential for applying theoretical knowledge in real-world scenarios. | "I lack practical skills that could have been developed during an internship."<br>"I feel underprepared for the challenges of the IT industry." |
| **Challenges in Demonstrating Skills** | Participants expressed concerns about showcasing their skills during job applications without practical experience, making it harder to stand out. | "It's harder to demonstrate my skills to potential employers and reduces my confidence in applying for jobs." |
| **Reduced Career Confidence** | Respondents noted that the lack of internships affected their confidence in the job market, making them feel less competitive. | "Without internships, my resume won't stand out to potential employers." |
| **Limited Networking Opportunities** | The absence of internships was seen as a barrier to building industry connections, which are crucial for job placement. | "Limited networking means fewer opportunities." |
| **Individual Circumstances** | A few respondents cited personal factors, such as already having a job in the industry or visa policy changes, which influenced their job search more than the lack of internships. | "Visa changes have had a bigger impact on my job search than the lack of internships." |

3. **Soft Skills Development**

   Soft skills, though secondary to the technical focus of the curriculum, emerged as an important area of graduate feedback. Figure 8 shows that 48% of respondents were satisfied with the development of soft skills, such as teamwork and communication (Table 5). While these skills were not the primary research focus, the findings suggest that enhancing soft skills training could improve overall satisfaction and career preparedness.

**Figure 8: Satisfaction with Soft Skills Development**

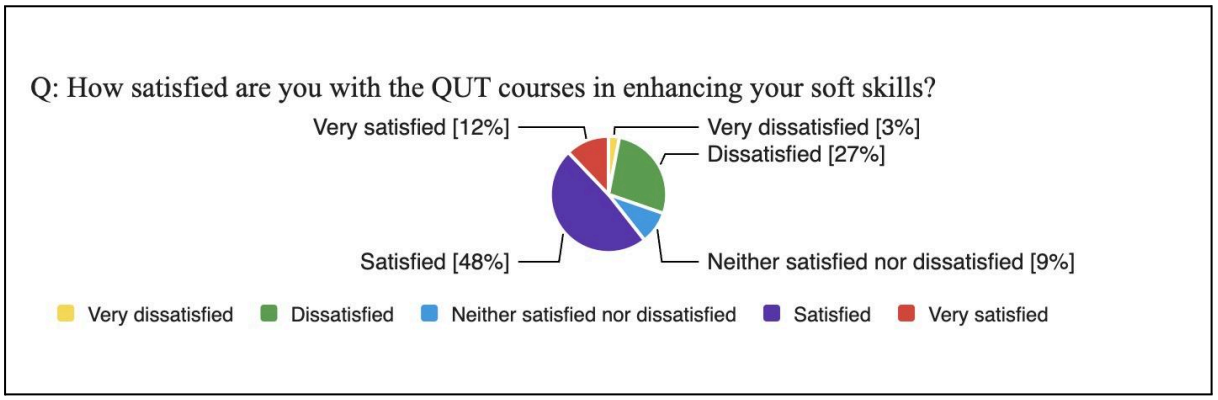



**Table 5: Important Soft Skills and Self-Proficiency**

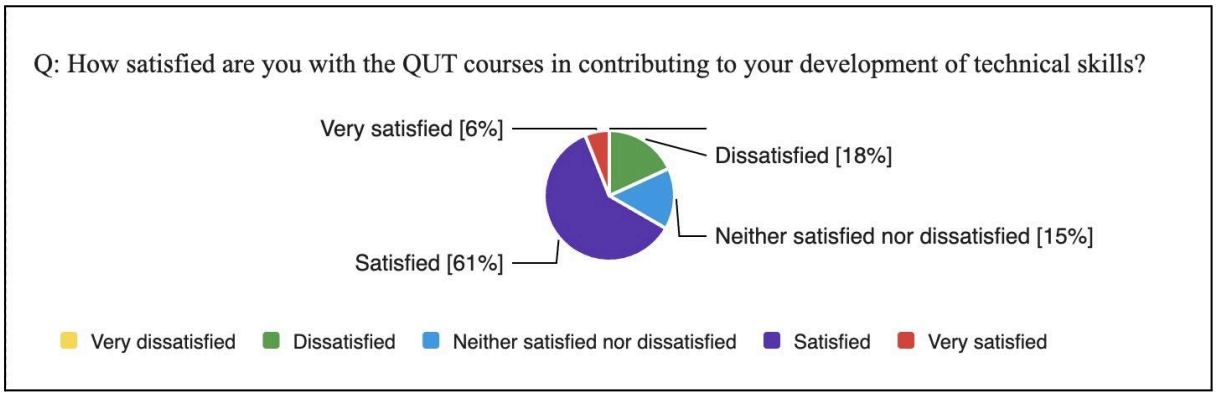
| Soft Skills | Count | Self-Assessment |
|---|---|---|
| Teamwork | 14 | Good (5), Average (3), Poor (1), Unknown (5) |
| Communication | 12 | Good (6), Average (4), Poor (1), Unknown (1) |
| Problem-Solving | 5 | Good (3), Average (2), Poor (0) |
| Time Management | 3 | Good (1), Average (1), Poor (1) |
| Critical Thinking | 1 | Good (1) |
| Adaptability | 1 | Good (1) |
| Cultural Awareness | 1 | Unknown (1) |
| Collaboration | 2 | Good (1), Unknown (1) |
| Language Ability | 1 | Good (1) |

## 4.3 Anomalous Results and Contradictions

The research uncovered a few unexpected results that contradict the initial hypothesis and warrant further exploration.

1. **Discrepancy Between Technical Skill Development and Career Readiness**
   A significant anomaly lies in the discrepancy between respondents' high satisfaction with technical skill development (Figure 9) and their lack of confidence in career readiness (Figure 2). While 61% of respondents were satisfied with the development of their technical skills, only 18% felt well-prepared for the IT industry. This contradiction suggests that despite receiving adequate technical training, students may not perceive these skills as directly transferable to real-world IT roles.

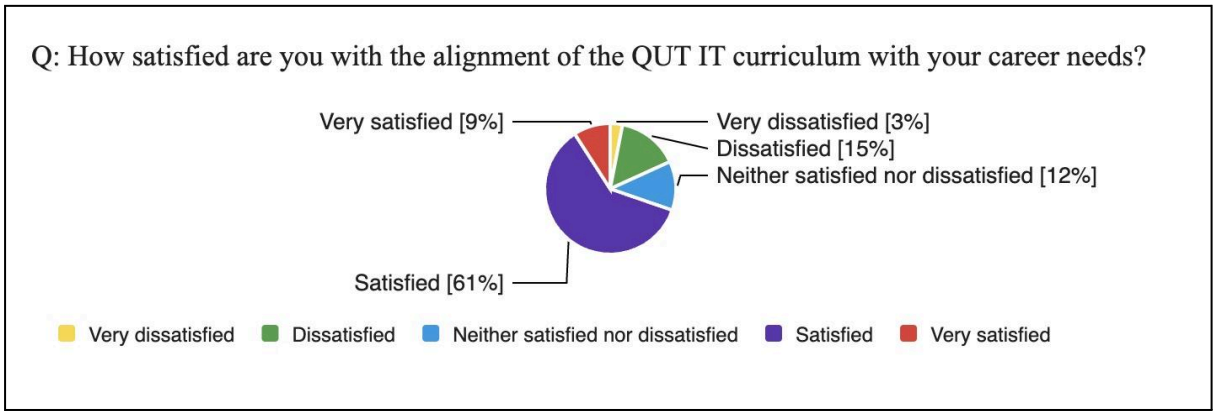
**Figure 9: Satisfaction with Technical Skills Development**




2. **Over-Optimism in Course Relevance**

   Another unexpected result is the high satisfaction with the alignment of QUT courses with career needs (Figure 10), contrasted with the mixed evaluations of career prospects (Figure 4). Despite 61% of respondents expressing satisfaction with the curriculum's alignment to career demands, nearly half (48%) were pessimistic about their career prospects. This finding suggests that although the curriculum is viewed favorably, external factors such as the competitive job market, industry trends, or personal uncertainties may be influencing career outlooks, which were not anticipated in the initial hypothesis.

**Figure 10: Satisfaction with Curriculum Alignment**



## 5. Discussion

### 5.1 Summary of Main Findings

This study investigated the satisfaction levels of recent IT graduates from QUT, focusing on their learning experience, career readiness, and influencing factors. The key findings indicated that the majority of respondents were generally satisfied with their learning experience, with 70% expressing satisfaction (Figure 1). However, despite the positive feedback regarding course relevance and skill development, only 18% of graduates felt well-prepared for the IT industry (Figure 2). The factors most influencing satisfaction included course content, teaching quality, practical opportunities, and internship experiences (Figure 3). A significant number of respondents emphasized the importance of internship experience in improving career readiness, yet many expressed dissatisfaction with the availability of such opportunities. Graduates' perceptions of their career prospects were divided, with nearly half (48%) expressing pessimism regarding their future in the IT industry (Figure 4).

### 5.2 Interpretation and Explanation of Results

The results reveal a complex relationship between academic satisfaction and career readiness. While most students reported high satisfaction with the overall quality of the curriculum and teaching—evidenced by a 61% satisfaction rate with technical skill development (Figure 9)—there remains a marked gap in perceived career preparedness. This disparity suggests that although students may feel well-supported in an academic context, there may be limitations in translating this support into practical, real-world readiness for IT careers. Practical opportunities, such as internships, were repeatedly highlighted as crucial for career readiness, with 70% of graduates considering internships vital (Figure 7). However, the reported scarcity of internship opportunities (Table 4) likely contributes to the low levels of confidence in career preparedness, indicating that enhancing internship availability or integrating more practical applications into the curriculum could help bridge the gap between academic training and industry expectations.

Additionally, while programming was identified as the most essential technical skill, many respondents rated their proficiency at a beginner level (Table 2), highlighting a critical gap in the skill development process. This suggests that, despite the emphasis placed on certain

skills, the curriculum may not adequately equip students with the proficiency required to thrive in the competitive IT job market.

Feedback from students with an IT background reflects a relatively optimistic outlook regarding their future. However, they express concerns that many foundational courses fail to provide the necessary challenges or in-depth knowledge they require. They desire more advanced and challenging courses, indicating a wish for increased learning opportunities connected to the industry. In contrast, students without an IT background face different challenges, often feeling overwhelmed by the difficulty of the courses and assignments, leading to feelings of inadequacy and a lack of confidence. Consequently, the university should strengthen its support for these students by offering additional learning resources and tutoring to help them better grasp foundational knowledge and skills. This scenario underscores the need for QUT to adopt a more flexible approach in course design, taking into account students' backgrounds to provide more targeted and relevant learning content.

## 5.3 Comparison with Prior Work

The findings of this study align with existing literature that emphasizes the necessity of practical experience and industry-relevant coursework in preparing graduates for the workforce. Research indicates that while employers express moderate satisfaction with ICT graduates, key areas for improvement, particularly in practical experience, remain. Studies reveal that graduates engaged in hands-on learning, such as internships, are better equipped for the job market. However, challenges persist, especially for students from diverse educational backgrounds, highlighting a gap between academic training and industry expectations. This study contributes valuable insights to the ongoing discussion on curriculum effectiveness, underscoring the importance of integrating work-integrated learning (WIL) to enhance graduates' employability and readiness for the demands of the IT sector.

## 5.4 Implications

The implications of these findings are significant and multifaceted for curriculum design at QUT and similar educational institutions. The university should adopt a more flexible approach to course offerings, taking into account the diverse backgrounds and needs of its students. By tailoring course content to address the varying levels of expertise among both IT

and non-IT students, QUT can enhance the educational experience and better prepare graduates for the demands of the industry. This might include offering advanced courses that challenge technically proficient students while simultaneously providing additional resources and support for those who may struggle with foundational material.

Furthermore, the findings underscore the importance of integrating more experiential learning opportunities, such as internships and practical projects, into academic programs. Establishing stronger partnerships with industry could facilitate greater access to internships and practical experiences, which are crucial for enhancing students' perceptions of their career readiness. These initiatives could potentially reduce the levels of pessimism regarding job prospects and build confidence among graduates as they transition into the workforce.

## 5.5 Limitations

While this study provides valuable insights, it is not without limitations. One significant constraint is the relatively small sample size, with only 33 respondents participating in the survey. This may limit the generalizability of the findings to the broader population of IT graduates. Additionally, the study relied on self-reported data, which may be subject to biases such as social desirability or selective memory. Moreover, the focus on graduates from a single institution (QUT) restricts the applicability of the findings to other universities or geographic regions.

Another limitation concerns the timing of the survey. The respondents may have been influenced by their recent experiences, particularly if they faced challenges entering the workforce during an economic downturn or in a highly competitive job market. This could have skewed perceptions of career readiness and job prospects.

## 5.6 Suggestions for Future Research

Future research could explore the effectiveness of different teaching methods and curricular adjustments based on student backgrounds. Additionally, longitudinal studies could assess the long-term impacts of these educational experiences on graduates' career trajectories, further informing curriculum development and support services at QUT and similar institutions.

## 6. Conclusion

This study aimed to assess the satisfaction levels of recent Information Technology (IT) graduates from Queensland University of Technology (QUT) and to explore the factors influencing their perceptions of educational quality and career readiness. Through a mixed-methods approach, key findings emerged that highlight both the strengths and weaknesses of the current IT curriculum.

The research revealed that while a majority of respondents (70%) were generally satisfied with their learning experience, there exists a significant disconnect between this satisfaction and their perceived readiness for the IT workforce, with only 18% feeling adequately prepared. Factors such as course content, teaching quality, practical opportunities, and internship experiences were identified as pivotal in shaping graduates' satisfaction levels. Furthermore, the mixed perceptions regarding career prospects, with nearly half expressing pessimism, underline the challenges that recent graduates face as they transition from academia to industry.

The implications of these findings are substantial for curriculum design and student support services at QUT and similar institutions. Enhancing the availability of practical experiences, particularly internships, is essential for improving students’ perceptions of their career readiness. By fostering stronger industry partnerships and creating tailored support mechanisms for diverse student backgrounds, QUT can better prepare graduates for the demands of the ever-evolving IT landscape.

However, this study is not without limitations. The relatively small sample size of 33 respondents restricts the generalizability of the findings, and reliance on self-reported data may introduce biases. Future research should focus on larger, more diverse samples and longitudinal studies to provide deeper insights into the effectiveness of educational practices over time.

In conclusion, this research contributes valuable insights into the satisfaction levels of recent IT graduates, revealing crucial areas for improvement within educational programs. By addressing the identified gaps, institutions like QUT can enhance the overall quality of their IT programs, ultimately fostering better career preparedness among graduates and positively impacting the broader workforce.

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