

INTRODUCING A DUAL STUDY MODEL- A SUBMISSION TO THE AUSTRALIAN UNIVERSITIES ACCORD REVIEW PANEL

This submission demonstrates the benefits of creating an integrated relationship between Australian industry and the tertiary sector using the approach of the German dual study model, as implemented by the 110,000 student IU International University of Applied Sciences.

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The Australian Universities Accord Panel review instigated by The Hon. Jason Clare, MP. Minister for Education presents a welcomed and valuable opportunity for the Germany-based global IU International University of Applied Sciences (IU) to contribute to the vital discussion of developing and overseeing an integrated approach to the dual study vocational and higher education model.

The dual study model has been a driving force in Germany, fostering a skilled, focussed workforce that has enabled German industry to thrive as one of the world's leading economies over the past 50 years. As the Accord review seeks submissions addressing seven core challenges, IU's successful experience over the last decade in four of these areas showcases the democratisation of education, particularly in terms of providing insights for Australia:-

- Meeting Australia's knowledge and skills needs now and in the future for all stages of lifelong learning;
- Access and opportunity;
- The connection between Vocational Education and Training (VET) and the higher education sector;
- Quality and sustainability.

These four challenges are intrinsically at the centre of any successful dual study work integrated learning programme that provides a skilled, innovative workforce. Without these objectives being embraced in a fully integrated manner, it is difficult to see how the various decision outcomes can be sustainably introduced.

Australia's leading peak bodies consistently refer to the challenges of corporates and educational institutions "*working more closely*"; "*of business being more integrated with educational vocational outcomes*"; "*programmes being genuine partnerships involving employees, universities, and students*";

and “seeking to effectively bring about better collaboration between universities, TAFE, employees, and community organisations” while recognising that “resourcing is a major barrier to small business”.

The Business Council of Australia (BCA) urges that “the goal should be to expand the learning and career options available to Australians and provide more choice and control in the skills and education pathways they take” and highlights the need for “a genuinely joined and interoperable post-secondary system that will be able to support Australian learners, businesses, and industry and build a lifelong learning culture”.

With a projected need for one million new jobs within the next five years and over 50% requiring a degree, the challenge is substantial. Moreover, the task becomes even more daunting when considering that nine out of ten new workers will require post-secondary qualifications in the years ahead.

THE GERMAN DUAL STUDY MODEL

The German dual study model is a unique, renowned vocational / higher education system that effectively combines practical work experience with theoretical education and is recognised as one of the most successful vocational education systems globally.

Dating back to the 1970s, the dual study model emerged when Germany experienced a significant increase in high school graduates interested in pursuing university education. Industrial companies, such as Daimler-Benz and Robert Bosch in Baden-Württemberg, recognised the resulting potential skills shortage, particularly in manufacturing. They proposed integrating their apprenticeship model with university content to create a more attractive training model for high school graduates. After a trial in 1974, it took until 1995 for vocational academy graduates to officially receive university graduate status. Today, various states in Germany have established their own vocational academies, with numerous technical colleges and universities offering dual study programmes nationwide¹.

Dual study programmes involve students dividing their time between employment with a company and attending a vocational school or university.

This structure enables students to apply classroom learning to real-world work experiences, fostering a deep understanding of their chosen field. Additionally, the programme allows students to build relationships with potential employers and earn a salary while studying (while there is no legal minimum for dual students, depending on the company, city, and degree programme, students earn the equivalent of between 15-30k AUD per year pre-tax, with remuneration increasing yearly²).

The German dual study model's synergy of theoretical and practical knowledge, combined with the close relationship between students and employers, effectively addresses the skills gap in Germany. This flexible and efficient approach prepares students for careers across various industries and has been successfully implemented in other countries such as Austria, Switzerland, Belgium, and France, with the UK exploring a similar format.

THE IU DUAL STUDY MODEL

IU International University of Applied Sciences (IU) is Germany's largest university and Europe's leading Edtech player, with over 110,000 students. The private, state-recognised institution offers more than

¹Duales Studium: Entwicklung, Geschichte, Statistik | Wegweiser-Duales-Studium.de

²<https://www.abiturienta.de/duales-studium/gehalt/ausbildungsverguetung.php>

350 bachelor's and master's programmes in both English and German. Established in 2000, IU now operates in 40 German cities, providing a decentralised regional setup.

Students can choose from online, blended, dual, or flexible combination study formats. IU's dual study¹ program, with over 20,000 students, combines academic education with practical experience. Students alternate between their corporate partner and campus at short intervals, allowing for immediate application of theoretical knowledge. With a vast network of over 15,000 corporate partners², IU supports employee development across companies like VW Financial Services, Deutsche Bahn, Deutsche Telekom, Vodafone, and more. Additionally, student careers are kickstarted, with up to 80% of students receiving a full-time offer with their corporate partner after graduation.

IU's dual study model differs from traditional German programmes by offering a unique recruitment approach, matching students with corporate partners through a team of over 300 study advisors. Furthermore, rather than spending blocks of time (~ 3 months) studying and working, students split their time on a day-by-day basis, spending half their week in class and the other half with their corporate partner. This method, enabled by IU's numerous campus locations and virtual campus, promotes improved knowledge reinforcement and retention.

Germany faces a skills shortage, particularly in STEM fields. IU's extensive network of 40 campuses and its virtual campus allows it to serve students and companies across the country, addressing the skills shortage at the point of need while reducing the need for urbanisation and relocation. With 80% of IU's corporate partners being small-to-medium-sized enterprises (SMEs), the dual study programme supports the backbone of the German economy by providing qualified talent and future leaders for regional businesses.

The IU dual study programme emphasises flexibility in learning through a blended teaching model that combines virtual and in-person instruction in a hybrid format. This modern approach facilitates optimal use of classroom time for clarification and discussion, while assessment incorporates various methods such as project work, posters, and presentations. Today, the IU dual study programme has over 20,000 students and is growing by 47% p.a., with some courses and study locations achieving up to 100% growth p.a. (in comparison to 6% growth of the overall German dual study market)³.

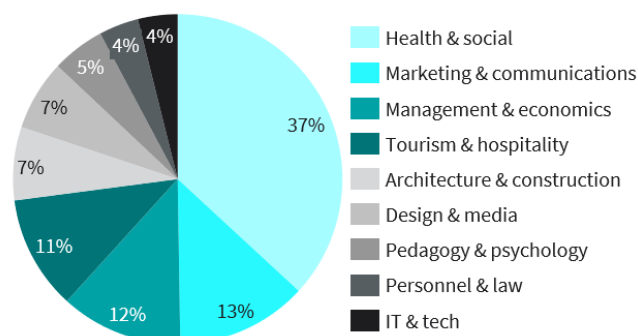
The most popular subject areas constitute health and social work, followed closely by marketing and communications, as well as management and economics. As can be seen in the chart below, IT and technology currently still presents a small fraction of overall student numbers, but is the fastest growing subject area, given the prominent skills gap in this area.

¹<https://www.iu.de/en/dual-studies/>

²<https://www.iu.de/en/news/the-largest-network-for-dual-studies/>

³Destatis reporting, IU reporting, L.E.K. Consulting research and analysis.

IU DUAL STUDIES STUDENTS BY SUBJECT AREA



This impressive growth is expected to continue as more campuses and courses are added. Student satisfaction is extremely high at 85% (as determined by regular internal student surveys), and publicly recognised on the public German study portal, StudyCheck.de, where the IU dual study programme was voted highest out of 502 dual study universities in terms of satisfaction and likelihood of recommendation by students¹.

THE DUAL STUDY OPPORTUNITY IN AUSTRALIA

Australia stands at a pivotal moment to introduce a dual study model integrating vocational and higher education, an approach sought by the BCA and others for better alignment with industry needs. Both the business and education sectors must collaborate to create a shared understanding between corporations and tertiary institutions to address cross-sector requirements.

Although there are already successful case studies in Australia where dual sector education providers (both public and private) have developed integrated programmes in partnership with the corporate sector, the country still lacks a unified, structured, and accredited model that enables this approach on a large scale across various sectors and regions. Notably, several regional Australian universities have collaborated with mining companies and support industry services to deliver successful dual study outcomes.

The dual study model can facilitate cost-sharing for education and workforce skilling across public, private, and corporate sectors, benefiting both large corporations and small businesses in urban and regional Australia. With numerous cross-sector institutions and an extensive geographic campus network (over 250 locations), Australia already possesses the infrastructure to support a nationwide dual study approach.

However, challenges persist, such as public perception that values higher education over vocational training, even though many corporations are partnering with education providers to develop practical courses and micro-credentials for their employees. Yet, there continues to be some dissatisfaction expressed by corporates towards the “*job readiness*” of the graduate market which is largely negated in the dual study model. If corporates are increasingly relying on practical courses to upskill their workforce, the notion that higher education is necessarily of higher value than VET is called into question. Additionally, the complex regulatory landscape (State and Federal responsibilities) and uneven quality in the VET sector pose obstacles to uniformity and integration.

¹<https://www.iu-dualesstudium.de/hochschule/news/iu-duales-studium-ist-die-beliebteste-von-502-hochschulen-auf-studycheck/>

Despite these challenges, the dual study model has demonstrated its potential in South Australia through successful collaboration between specialised defence sector corporations, universities, and VET institutions.

The closest existing example to the German dual study model in Australia is the apprenticeship system, but these are generally trade-specific and operate at a lower level on the Australian Qualifications Framework (at Levels 3 and 4). Generally trade specific, these apprenticeships have less of a “study” component and more of a trade competency structure. In the higher education sector, Work Integrated Learning (WIL) and internships are common, but these are generally institution-based, where the work experience or placement is seen as part of the higher education programme of study and the students generally would not be employed by the corporate partner, nor would they have any structured practical vocational education integrated into the WIL programme.

Australia, like Germany, faces skills shortages but boasts world-class post-secondary education across both higher education and VET sectors. This makes the country an ideal environment for implementing a dual study model. To achieve this, a mindset shift is necessary at the national level to overcome challenges posed by the complex relationship between State and Federal roles in higher education and vocational training. Encouragingly, Germany's success with the dual study model, despite its similar federal system, demonstrates that this approach can be effective. The positive developments at Australian dual sector universities in promoting integration between the two systems provide some examples of successful dual study outcomes, but more needs to be done to make them the norm rather than the exception.

IU DUAL STUDY BUSINESS CASES

While the IU dual study portfolio incorporates over 30 different programmes, the following four case studies have been picked as examples, given their relevance to the skills shortage faced in both Germany and Australia (e.g., largest skills shortage in Australia faced by technicians and skilled workers, professionals, machinery operators and drivers, and community and personal service workers¹).

CASE STUDY 1 – CIVIL ENGINEERING

The demand for skilled professionals in the field of civil engineering has been on the rise in recent years. The dual study programme in civil engineering provides an excellent opportunity for students to combine theoretical knowledge with practical experience in the field. Students studying civil engineering in the dual study programme at IU acquire a sound knowledge of the construction of buildings and the procurement, development, and supply of usable space, receiving a broad and practical education in the field, with direct links being made to the neighbouring disciplines of architecture, real estate management, and industrial engineering.

A prime example of the benefits of the dual study programme for civil engineering is a project with major telecommunications companies, such as Vodafone and Deutsche Telekom, who currently constructing Germany’s network of 5G cell towers with the support of IU dual study students.

¹https://www.nationalskillscommission.gov.au/sites/default/files/2022-10/2022%20SPL%20Key%20Findings%20Report%20-%206%20October%202022_0.pdf

In addition to concrete projects with their corporate partners, IU has established a building materials laboratory for civil engineering students at its campus in Berlin. Here, students have the opportunity to see their theoretical knowledge learned in lectures confirmed through live experiments, such as destructive and non-destructive tests. The testing machine software and the IT equipment allow students outside of Berlin to follow and evaluate the tests live via HD-cam from any IU study location. This is a unique solution to maintain the geographical flexibility of students.

Currently, more than 1,700 students are pursuing an IU dual degree in the fields of civil engineering, architecture, mechanical engineering, industrial engineering, and electrical engineering, up from only 60 students in 2019.

CASE STUDY 2 - SOCIAL WORK

The skills shortage in Germany (and elsewhere) is not only prominent in STEM, but similarly severe in the field of social work. In the IU dual study program, the largest degree course by student numbers is by far the social work degree, which has more than three times as many students as the next largest degree course (marketing management), thereby combatting the skills shortage in this area.

Within social work, the corporate partners of IU students reflect the breadth of the field, ranging from child and youth welfare and day care to offers for adults and elderly care, as well as remedial education. In this field, the dual study programme has unique benefits, as success in social work depends heavily on interpersonal relationships. By applying lessons from the classroom in their work with their corporate partner, be this a nursery, a youth centre, an assisted-living facility, a school, a refugee centre, or something else, students can continuously build up relationships with their clients and their employer throughout their degree.

The social work dual degree is not only the largest programme at IU, but also consistently highly rated, receiving the highest score in 6 out of 25 categories in the CHE ranking (a comprehensive ranking of German universities and universities of applied sciences)¹. Furthermore, an additional 1,000 students are pursuing a dual degree at IU in the field of child pedagogy. These programmes have grown rapidly from 2,000 and zero students in 2019 respectively, thereby contributing significantly to the skills shortage in the social work field.

CASE STUDY 3 - HEALTH MANAGEMENT

Health management is a field that is critical in ensuring the effective and efficient delivery of healthcare services to the population. In today's rapidly changing healthcare landscape, there is a growing need for professionals who are equipped with both technical and management skills.

To meet this demand, a dual study programme in health management was introduced to provide students with the opportunity to acquire a comprehensive education in this field. Topics covered in the programme include the political and legal framework of the healthcare system, administration and structure, medicine and ethics, quality management, personnel and organisation, compensation models, marketing strategies, and digital trends in the health market.

¹https://ranking.zeit.de/che/de/rankingunion/show?esb=23#&left_f1=23&left_f2=611&left_f3=54&left_f4=42&left_f5=58&order=average&subfach=undefined

Graduates of the programme usually end up working in consulting or administration in the healthcare industry, including hospitals, care homes, health authorities, and even adjacent areas such as veterinary medicine and funeral services. The job market for skilled professionals in the healthcare industry is very competitive, and there is a growing demand for experts who can think across sectors and make evidence-based recommendations. Thus, dual degree students have an inherent advantage over other graduates.

Currently, 816 students are enrolled in the IU dual study programme for health management, up from 336 in 2019, thereby proving to be a further significant demand driver.

CASE STUDY 4 – AGRICULTURE MANAGEMENT

Agriculture accounts for over half of Australia's land use¹. Agriculture management is a field that focuses on optimising agricultural practices to ensure sustainability and improve yield and profitability. As such, there is a high demand for skilled professionals in agriculture management.

The dual study programme in agriculture management at IU was introduced in 2022 with 21 students. While still small at 26 students today, the programme is showing growth potential and demand.

In particular, students are taught the fundamentals of agriculture management, including how to deal with agricultural processes, as well as the scientific background of crop cultivation, plant protection, agricultural ecology, and livestock management. In addition to the fundamental knowledge of agriculture, students also acquire knowledge in the areas of business administration, technology, and management, to help shape the (digital) future of the agriculture sector.

Students can specialise in a range of areas, including agricultural management, agri-business, animal management, resource management and material flow balance, renewable resources in agriculture, and legal foundations of agriculture. This sets them up ideally to move into a diverse set of professions with their corporate partners, such as farm management, product management in agricultural trade, or consulting services for agriculture.

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¹[Australian Government: Department of Agriculture, Fisheries and Forestry](#)