UNSW BUSINESS SCHOOL

SANDBOX EDUCATION PROGRAM

Co-creating a career-focused learning experience through solving real industry challenges
UNSW Business School offers its students an outstanding career-focused learning experience. We focus on providing transformative activities that are personalised, experiential, career-relevant and delivered using the latest technologies. We prepare our students for careers in a future where, to be successful, they will need to be adaptable, creative problem-solvers who are comfortable with uncertainty and equipped with the professional and personal skills to address the challenges they may encounter.

The Sandbox embodies all these features and more. It gives students a purposeful learning experience, co-creating knowledge and co-developing skills in collaboration with industry. I invite you to discover more by reading this brochure. You will see that the Sandbox is already bringing together our industry partners, our students and our staff to explore pressing business challenges. With the Sandbox format, and your participation, we will be able to address even more of the challenges faced by society today.

Professor Mark Uncles
Co-Dean (Acting) and Deputy Dean (Education), UNSW Business School
THE SANDBOX EDUCATION PROGRAM

In today’s more complex and connected world, rapid and unpredictable change is the norm. This volatility brings with it exciting possibilities as well as challenges. Equipping our future generations with the right knowledge and skills to thrive in this evolving environment requires academic educators and industry practitioners to come together to create learning experiences addressing these challenges.

With emerging technologies rapidly transforming the nature of work, we need more problem solvers and creative thinkers who are skilled for emerging, complex challenges and can adapt to dynamic needs. Educators are eager to provide graduates with the requisite skills, but need active involvement from the industry to support the continuous updates of our curricula, ensuring relevancy to the current state of the art. The industry is also in a position to demonstrate the latest practices and demands, but need educators to provide access to students on a larger scale.

The Sandbox Education Program brings together industry, educators and students, to co-create a career-focused experience through solving real-world challenges and engaging in active, collaborative learning. Inspired by the sandbox concept in Software Engineering, this award-winning program simulates a professional working environment by bringing in real-world scenarios and exciting problems into the classroom. The Sandbox creates a safe space for students to explore, collaborate and implement potential solutions.

"The Sandbox gives students a view of a real challenge that they would face in the industry. How to get the right problem-solving skill, be a bit more prepared on their first step into the industry."

– Jay Hira, Sandbox Partner and Senior Manager of Risk and Advisory, Ernst & Young
## THREE PRINCIPLES

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<tr>
<th>Number</th>
<th>Principle</th>
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<tr>
<td>01</td>
<td>The Sandbox approach is <strong>challenge-driven</strong>. We seek important, challenging questions from industry, and then empower students, educators and industry to work together to create solutions for these problems. Students are challenged to obtain the relevant knowledge and required skills, and to work effectively with their peers, educators and the industry partner to address the problem.</td>
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<td>02</td>
<td>The Sandbox approach fosters <strong>co-ownership</strong> in learning by empowering all stakeholders — the industry, educators and students — to play an active role in the learning process. The industry is also empowered to assume a closely engaged role in the process, sharing their latest know-how to inform curriculum design and impart professional work practices, culture and ethics through their active participation in classroom learning.</td>
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<td>03</td>
<td>The Sandbox approach enables <strong>co-creation</strong>. Educators work together with the industry partner to co-design teaching materials, authentic assessments, and active learning sessions to support effective learning. Having content grounded in the contemporary state of the industry and activities that stimulate problem-solving, critical thinking, communication and teamwork, the co-creation process enables an authentic learning experience with high practicality and relevance to real-world problems.</td>
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The Sandbox Education Program prepares students for their future career by engaging them in a challenge-driven learning environment. In these environments, students work together with their peers, educators and industry representatives to solve real-life problems. Through this process, they learn the latest know-how, develop problem-solving abilities and obtain foundational skills for life-long learning to be ready for the ever-evolving world.
3 STEPS TO A SANDBOX

ESTABLISH A MEANINGFUL CHALLENGE

The starting point of a Sandbox is the identification of a relevant, challenging task.

Interested industry partners are invited to submit a Sandbox Challenge: An enticing and important problem that would benefit from fresh perspectives and facilitate the acquisition of current knowledge.

Educators with relevant interests and expertise will review the available challenges and Adopt-a-Sandbox from the program. The co-creation process begins with academics working together with industry partners to embed a Sandbox Challenge into our existing curriculum.

ENGAGE IN CO-CREATIVE LEARNING

In this step we navigate students through the challenge-driven learning process. The main goal is to support students’ problem-solving process and provide them with an authentic learning experience.

Some common Sandbox activities include a kick-off session, industry-facilitated seminars, in-class role-playing or interview sessions, workshops and hands-on labs. The use of technologies to facilitate engagement and collaboration is also a key feature of a Sandbox.

Many of our Sandboxes include simulation modules co-designed with the industry partners. Simulations work particularly well for introducing relevant technologies and tools used in the professional environment, walking students through real-life scenarios, and allowing them to experiment with important, but often risky decisions in a controlled environment. Collaborative platforms are also used to facilitate the interactions and learning among peers and between students and the industry representatives.

Industry engagement in this stage can happen in various forms, depending on the type of partnership established. Nevertheless, the co-creation of teaching materials and activities is a necessary component of a Sandbox to ensure students are given sufficient opportunities to learn from industry-relevant content and stakeholders. Educators will work with industry partners in the co-creation process to ensure alignment to learning outcomes and academic rigor.
At the conclusion of the Sandbox, we review the solutions created by the students, provide feedback and guidance in their reflection and consolidation of learnings. The industry partners and educators play an important guiding role at this stage by providing context for students to review the feasibility and relevance of their solutions, and to distil specific lessons learned from the process.

The presented solutions can be of various forms depending on what aligns best with the Sandbox’s objectives. Solution examples include a proof-of-concept, an information slide deck, a pitch, and a professional whitepaper.

The *trilateral relationship* developed from the Sandbox engagement will continue to grow beyond this point. Subsequent engagement can take various forms, including a longer-term mentoring program, work-shadowing and internship opportunities, attending and co-hosting relevant events and more! Some of our past Sandbox students have commenced their careers in graduate and vacationer positions at the partner organisation.

I think the cyber and networking course is one of the more practical courses that you would do in the university. Even if you don’t end up pursuing a career in cyber security, it is a good example of what university courses should be teaching. Focus not on the books, but on what you will actually be doing in a career.

— Justin Yap, a student in a sandboxed course in 2018

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The Sandbox Education Program was created as a platform to build the trilateral relationship between the industry, educators and students. Becoming a Sandbox Partner allows you to develop meaningful connections with our leading academics and contribute to cultivating our future leaders and workforce.

By the end I had learnt so much and I totally love [cybersecurity] now. EY offered me a job for next year before I had even graduated. I never would have dreamt that could happen.

— Sunny Zhan, a student in a sandboxed course in 2019 (interviewed by NewsCorp)

BECOMING A SANDBOX PARTNER

• Students typically work on a Sandbox Challenge in a team of 5–6 members. The Challenge you propose should be at a sufficient level of difficulty to engage each member of the team for around 10 hours per week, over a 4–8 week period.

• When drafting the challenge brief, be specific about your requirements and expectations. Consider, for example, what knowledge students will need to solve the challenge? Which skills will be assessed? What does a potential solution look like?

• Each Sandbox Partner is required to nominate an appropriate number of representatives to engage in the co-creation process, to participate in the learning activities and to mentor the students during the problem-solving process, which can be 4 to 8 weeks long. The number of representatives required will depend on the type of partnership and the number and size of the student teams.

• As a mentor, we do expect your commitment in participating in the mutually agreed activities and to be available to respond timely to relevant queries throughout the engagement.

• Consider and decide on the level of commitment your organisation can put forward. The Sandbox Program is driven by a common goal to equip students with career-ready skills. We believe in a partnership approach which focuses on building a sustainable relationship that can continuously create value for all parties.

• Committing as a Sandbox Partner should indicate that your organisation is willing and able to provide appropriate value-adding opportunities to the students. Initiatives such as mentoring program and internship opportunities will be tremendously helpful to further the learning and equip students for their future career.
INDUSTRY
• Contributing to the development of future-ready students through direct input into curriculum design and active involvement in challenge-driven education
• Creating greater visibility and gaining direct access to bright and talented students while earning fresh perspectives and creative solutions to current problems

STUDENTS
• Expanding experience by working on real industry challenges with support from professionals
• Gaining transferable skills required for success in our dynamic and evolving work environment by solving complex challenges in a collaborative setting

EDUCATORS
• Fuelling the connection between the industry and higher education to cultivate graduates who are more work-ready
• Developing meaningful relationships with the industry for continuous innovation in education and research

The Sandbox Education Program is an education platform created to meet the needs of an increasingly complex world. The co-creative relationship formed between students, educators, and the industry will unleash the potential of our young learners and prepare them to face the challenges of tomorrow. Together, we can inspire more changemakers to transform the way we educate our future generations.

Dr. Yenni Tim
Director, Sandbox Education Program
E: yenni.tim@unsw.edu.au

Digital Enablement Research Network (DERN)
School of Information Systems and Technology Management (SISTM)
UNSW Business School
UNSW Sydney 2052 Australia

CONTACT US

FIND OUT MORE AT UNSW.TO/EDUSANDBOX