



# Scientia Education Investment Fund Grants Final Report

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**Development of a micro-credentialed online gateway course for  
UNSW and PLuS Alliance master's programs**

**School of Humanities and Social Sciences**

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## 1. Executive Summary

UNSW Canberra's School of Humanities and Social Sciences (HASS) offers a suite of highly regarded online distance-mode masters programs addressing the field of military and strategic studies. The purpose of this project was to enhance and expand on this reputation by developing a new HASS course package consisting of online master's course, four micro-credentialed professional education short courses and a free, publicly available introductory course (similar to a MOOC). The topic, and title, of the courses is 'Military Game Changers in 21<sup>st</sup> Century Warfare' and covers in a multidisciplinary manner four key disruptive capabilities: special warfare, unmanned and autonomous weapons, cyber operations and space operations. To complement the courses a companion textbook was proposed along with a spin-off documentary series developed in partnership with Canberra based production company WildBear Entertainment (See Fig 1.)

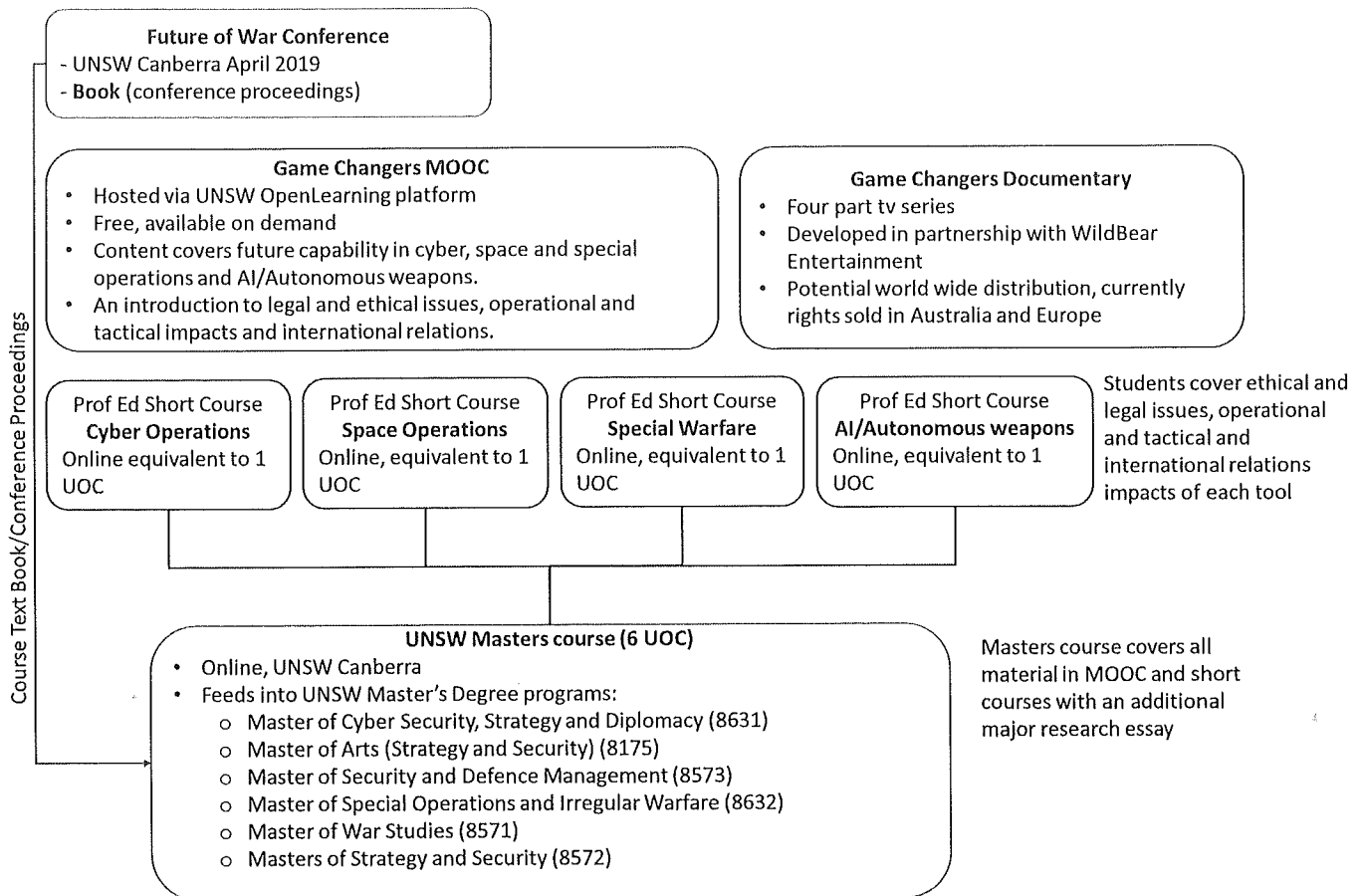


Figure 1. Structure of the Military Game Changers course package.

There is an escalating global demand for high-quality professional military education (PME) resources, and professional development and educational opportunities in related spheres such as the NGO sector, think tanks, journalism, international law, and the civil service. The project highlights and reinforces UNSW Canberra's unique position as 'Defence's University' and will reach into this global defence-focused education market through the online and on demand delivery of courses, open access textbook and international distribution of the TV documentary series. The project directly responds to SEIF priorities:

1. Develop new, or significantly expand existing, fully online Masters offerings for UNSW students;
2. Develop short, discipline specific, professional non-award courses linked to micro-credentials.

Additionally, the project meets themes in all three of the UNSW 2025 Strategy Priorities: Educational Excellence and Student Experience, Thought Leadership and Partnerships.

As designed, the suite of courses would use a microcredential system. A typical path of learning would be to complete the MOOC, followed by the four short courses then the masters course. With each level being a

prerequisite for the next. As such, learners need to first complete the MOOC to undertake the short courses and to undertake the masters learners need to complete the MOOC and all four short courses first. A certificate of completion would be available for the MOOC and short courses. Students could complete just one or all the short courses depending on their learning goals, but the MOOC is required by all. For the courses to function this way, significant progress needs to be made in the area of establishing a functioning microcredentialling system at UNSW. This would need to include a UNSW maintained and supported Learning Management System for professional education short courses that can issue microcredentials to successful students. Additionally, UNSW will need to establish an automatic system for applying earned credentials towards courses that are designed to accommodate microcredentials. Until such a system is developed we will apply the Recognised Prior Learning (RPL) approach to advancing students from short course completion to masters entry. The OpenLearning platform can manage MOOC and short course progressions.

At present, professional education courses are charged at different rates and managed independently of university courses. For our proposal to work in practice, a fee structure and payment system must be developed that enables the University to charge students for the masters course somehow accounting for fees already paid for short courses. We are aware that high level discussions at the University are ongoing in financial management of short courses and microcredentials and look forward to implementing new processes as they become available.

## **2. Outcomes and impact**

As part of the process for capturing course content we brought a number of international academics to UNSW Canberra. The project team worked with The Australian Centre for Study of Armed Conflict and Society (ACSACS) staff to run a conference at around the topic of game changers and future warfare. We hosted the conference at UNSW Canberra on 8th April 2019 (<https://www.unsw.adfa.edu.au/acsacs/news/future-warfare-conference>) with 7 international and 9 local speakers from academia, government, industry and the military. Over 400 people from academia, the military, government and non-government organisations registered to attend the 1 day event. Proceedings from the conference will be published mid 2020 with ANU press as an open access publication and will be used a part of the core readings for the Military Game Changers course. The online short courses and MOOC will be available mid-2020 through the UNSW OpenLearning platform. Significant enrolments can be expected for this course. One of the project team, Deane-Peter Baker, developed and ran a MOOC on Military Ethics in 2016-2017 with approximately 5000 enrolments for each iteration of the course. The course was well received and highly regarded by learners. With appropriate marketing we think we could achieve similar numbers for the Military Game Changers MOOC.

The Military Game Changer's in 21<sup>st</sup> Century Warfare master's course will run for the first time in S2 2020 as a fully online course. It is listed in the course handbook as an elective in the following programs:

- Master of Cyber Security, Strategy and Diplomacy (8631)
- Master of Arts (Strategy and Security) (8175)
- Master of Security and Defence Management (8573)
- Master of Special Operations and Irregular Warfare (8632)
- Master of War Studies (8571)
- Masters of Strategy and Security (8572)

Contributors to the conference, documentary series and course materials come from across UNSW Canberra faculty, PLuS Alliance universities, the Australian military and other local and international institutions:

- Dr Deane-Peter Baker (UNSW Canberra, HASS)
- Dr Jian Zhang (UNSW Canberra, HASS)
- Prof David Kilcullen (UNSW Canberra, HASS)
- Prof Robert McLaughlin (UNSW Canberra, HASS)
- Prof Greg Austin (UNSW Canberra)
- Dr Tristan Moss (UNSW Canberra, HASS)

- Dr Tom Richardson (UNSW Canberra, HASS)
- Dr Sadjad Soltanzadeh (UNSW Canberra, SEIT)
- Dr Natalia Jevglevskaja (UNSW Canberra, SEIT)
- Nigel Phair (UNSW Canberra Cyber)
- Dr Melrose Brown (UNSW Canberra Space)
- Dr Nikki Coleman (UNSW Canberra Space)
- Duncan Blake (UNSW Canberra)
- Major General Mick Ryan (Australian Army)
- Brigadier Ian Langford (Australian Army)
- Major Andrew Maher (Australian Army Research Centre)
- Dr Albert Palazzo (Australian Army Research Centre)
- Dr Malcolm Davis (Australian Strategic Policy Institute)
- Captain (retired) Roger Herbert (United States Naval Academy)
- Dr Nadya Bliss (Arizona State University)
- Assoc Prof Rain Lijjova (University of Queensland)
- Prof Peter Lee (University of Portsmouth)
- Dr Mark Hilborne (King's College London)
- Prof Mervyn Frost (King's College London)
- Assoc Prof Valerie Morkevicius (Colgate University)
- Linda Robinson (RAND Corporation)
- Ian MacLeod (John Hopkins University Applied Physics Laboratory)
- Erin Hahn (John Hopkins University Applied Physics Laboratory)

Each participant was interviewed for 1-3 hours on their topic of expertise, for a total of approximately 50 hours of content. In addition to using interview content in the documentary and course materials, a library of footage is available to UNSW Canberra staff to use in their teaching practice.

Discussions are currently underway with the Australian Army to secure a Game Changer's professional short course training package for at least 200 Army staff in 2020.

## **2. Dissemination strategies and outputs**

We will be asking contributors to the course materials and book to promote the course through their professional networks. With a substantial list of academics contributing to the course, including a couple of high-profile speakers, we hope to reach a considerable defence related audience. All people registered to attend the 2019 Future Warfare conference will be advised of the release of both the Conference Proceedings and the MOOC, short courses and masters course when they are open for enrolments.

Airing of the Military Game Changers documentary series will expose the University and course package to a global audience. A significant number of documentary speakers are academics and researchers at UNSW Canberra, and their affiliation will be clearly identified onscreen. The film credits will include UNSW Canberra and the Military Game Changers course, while two members of the project team will be listed as Associate Producers for the documentary.

We have enlisted assistance from the UNSW Canberra and OpenLearning marketing teams. UNSW Canberra marketing plans to use video content developed for the courses as well as develop some new multimedia to promote the University and the courses. They will market in internal communications, social media, print media and to defence contacts. OpenLearning will focus on building awareness of courses before going live mid 2020, then optimise enrolments once the courses are open. They will focus on the global defence market, using social media, and their million+ learner database.

With more than 10,000 enrolled learners starting the Military Ethics MOOC, it would be great to capitalise on that audience to promote the new courses. Unfortunately, Military Ethics was managed through the FutureLearn platform, while the new courses are run through OpenLearning and cross platform marketing is not possible. For future courses it would be advantageous to use the same learning platform to strengthen connections with existing learners while also building new audience. This may be something we need to consider when choosing learning platforms, and for UNSW administration to consider when choosing and supporting platforms. As we understand most learning management systems are funded and supported on a 12 month cycle.

### **3. Evaluation of project outcomes**

As with all UNSW courses, the Military Game Changers master course will be evaluated directly by learners using the myExperience survey. Feedback from the survey will be used to improve teaching materials and strategies and help drive future development/maintenance of course content. The professional short courses and MOOC will be evaluated by a similar learner survey facilitated via OpenLearning. In addition we can use active learner statistics and course enrolment vs course completion statistics collected by the OpenLearning platform to evaluate the success of our course package.

One way to determine the package impact on masters course enrolment would be to ask at the time of new student enrolment how the student learned about and chose UNSW Canberra to complete their studies.