

Curtin Credentials
Naval Nuclear Foundations:
Lifecycle, Infrastructure &
Regulation

Make tomorrow better.

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Start:
14 - 15 October



Duration: 30 hours
Length: 2 Days



Delivery Mode:
Blended



Price:
Fully Funded

Join H&B Defence to discover what it takes to safely deliver and sustain a nuclear-powered submarine fleet. Explore the lifecycle, infrastructure, governance and regulation shaping Australia's naval nuclear future.

As Australia develops the capabilities needed to support nuclear-powered submarines, professionals across government, defence and industry require a shared understanding of the broader naval nuclear enterprise. Delivered by experienced industry professionals, this course explores how nuclear-powered submarine programs are designed, supported and governed across their entire lifecycle. Participants will examine the infrastructure, governance arrangements and stakeholder networks required to deliver and steward this enterprise safely, effectively and compliantly.

Through examining the roles and responsibilities of key organisations across Australia, the United Kingdom and the United States, this course compares the regulatory philosophies that shape nuclear safety, assurance and oversight across the three nations.

By connecting lifecycle planning, infrastructure, enterprise stakeholders and regulation, this course gives participants the foundational knowledge needed to engage confidently and compliantly within the Australian Naval Nuclear Program.

You'll gain hands-on insight into:

- The key stages of the nuclear-powered submarine lifecycle and how decisions at one stage create obligations and constraints for those that follow.
- The infrastructure required to support submarines across their lifecycle, including facilities, workforce capability, testing, commissioning, maintenance and disposal.
- The roles, responsibilities and authorities of government, defence, industry and regulatory stakeholders across the Australian Naval Nuclear Program.
- How Australia's evolving naval nuclear framework compares with regulatory approaches in the United States and United Kingdom.
- Practical considerations for engaging with stakeholders and working effectively within a highly regulated environment.

Who is this credential for?

This credential is suitable for:

- Individuals intending to support the design, build, sustainment or disposal of nuclear-powered submarines and associated infrastructure.
- Individuals with responsibility for people supporting nuclear powered submarines including tier 2 supplier management, and waterfront enabling functions.

Eligible candidates must:

- Applicants are required to reside in Western Australia at the time of their application.
- Applicants must be employed in, contracted to, or otherwise engaged with an organisation that operates within or supports the maritime Defence industry. This may include shipbuilding, sustainment, engineering, manufacturing, technical services, or supplier organisations connected to maritime Defence capability.

Learning Outcomes

Submarine Lifecycles

Explain the relationship between geography, a platform's stage in the submarine lifecycle, and the key considerations at each stage, in order to have meaningful conversations with AUKUS enterprise stakeholders.

Infrastructure

Understand the scale and complexity of infrastructure requirements relevant to each phase of the nuclear-powered submarine lifecycle in the Australian context

Nuclear Regulations

Explain the origins of Australia's nuclear regulatory environment, how it compares to US and UK approaches, and what navigating compliance, social licence and regulatory grey areas looks like in practice within AUKUS.

Assessment

To successfully complete this credential, you are required to pass a final assessment.

To demonstrate what you have learned, you will:

Complete a scenario-based assessment that draws on the analytical tools introduced across all four sections:

- Constraints and obligations
- The five build capability categories
- Roles, responsibilities and authorities
- The compliance considerations that follow from each regulatory framework

Discover more

Curtin Credentials focus on five themes, which have been carefully curated based on what's most relevant and valuable to professionals today, and in the future. This credential fits within the following theme:



Future of Work

Thrive and adapt in the changing world of work by developing and broadening your skillset in a range of areas including work design

Earn a badge

Once you successfully complete and pass the final assessment, you'll earn a digital badge that is instantly shareable to your social networks (including LinkedIn) which showcases your new skills and knowledge mastery.



Essentials

This credential provides foundation knowledge in a discipline and doesn't require previous knowledge.

You will also earn 5 credit points which are in line with Australian Qualification Framework Level 8 criteria (<https://www.aqf.edu.au/framework/aqf-levels>), ensuring comprehensive theoretical and/or technical knowledge of the credential. 100 credit points are required to earn a Graduate Certificate at Curtin.

Meet your facilitators



Ashley Schneider

Chief Safety, Engineering & Assurance Officer at H&B Defence, oversees safety governance and technical assurance for major defence programs. Formerly Director for AUKUS Emerging Markets at HII, she led strategic planning and new operations in Australia. With 20+ years in nuclear engineering, waste management, and emergency planning, Ashley holds degrees from UCF, Virginia Tech, and UT Knoxville.



Chris Saint

Senior Engineering Manager at H&B Defence, oversees engineering capability and workforce development. A former Royal Naval Artificer Apprentice on Vanguard Class submarines, Chris has 12+ years in nuclear submarine engineering, including serving as UK Naval Nuclear Head of Engineering Capability at Babcock. He holds a Mechanical & Manufacturing Engineering degree from Portsmouth University.



Rick Connolly

Mr. Connolly has 30+ years of experience in nuclear and industrial infrastructure, spanning project management, engineering, operations, and strategic business development across military, Department of Defence, Department of Energy, and commercial roles. He is currently Director of Program Business Management at HII, providing a National Defence element with strategic integration, budgeting, risk management, and stakeholder engagement.



Express your interest now

Expressions of Interest are now open for 2026. Eligible candidates will be contacted with details for enrolment via email. Submitting an expression of interest does not guarantee a funded place within this course. Eligible candidates must reside in Western Australia at the time of application and must be employed in, contracted to, or otherwise engaged with an organisation that operates within or supports the maritime Defence industry.

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This program includes a limited allocation of funded places through the WA Government's Defence Industry Reskilling and Upskilling Grant Program, State Government of Western Australia. The funding supports the skilling and re-skilling of workers in the Western Australian Defence industry as part of the State's broader workforce development priorities. To qualify for a funded place in this micro credential, applicants must meet both the residency and employment eligibility criteria. These requirements ensure the funding is directed to individuals who are part of, or contributing to, the maritime Defence workforce. Curtin University may cancel or reschedule a credential at any time and for any reason at its discretion. Start dates and all other details relating to this credential are provided as a general guide only and are subject to change. Limited fully funded places may be available for Western Australia-based defence industry professionals. This publication is correct as at July 2026 but may be amended. Curtin University reserves the right to vary course content, delivery methods, assessment requirements and tuition fees; withdraw courses or limit enrolments; and make changes to other arrangements, including the academic area in which courses are offered. For the most current information, please visit study.curtin.edu.au. This publication contains general information only. Readers should consider how the information applies to their personal circumstances and seek independent advice where appropriate. Subject to applicable law, Curtin University accepts no liability for any loss or damage arising from reliance on the information contained in this publication.

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