

## Position Description

# IT Curriculum Designer

*Position Number:*  
*Position Title: IT Curriculum Designer*  
*Date Written: August 2020*

*Faculty / Division: UNSW-Canberra*  
*School / Unit: SEIT*  
*Position Level: Level 8*

### ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten-year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia's global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as 'research intensive' or 'teaching intensive'. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition, we are attracting the very best academic and professional staff to play leadership roles in our organisation.

### VALUES IN ACTION: OUR UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high-performance culture. The behavioural expectations for UNSW are below.



Delivers high performance and demonstrates service excellence.



Thinks creatively and develops new ways of working. Initiates and embraces change.



Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.



Values individual differences and contributions of all people and promotes inclusion.



Treats others with dignity and empathy. Communicates with integrity and openness.

## OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

The University is developing transformative educational concepts in the areas of Artificial Intelligence and Data Science for the Australian Department of Defence.

The IT Curriculum Designer will support the development of a new Artificial Intelligence and Data Science Education Capability at the University. The position will contribute to the design of AI and data science courses, support the development of a hands-on curriculum for data science, and offer technical support to the academic staff delivering the curriculum.

The role of IT Curriculum Designer reports to the Chief Investigator (CI) of the project.

## RESPONSIBILITIES

Specific responsibilities for this role include:

1. Drive and develop complex software and data requirements for the design of data science curriculum.
2. Maintain complex software infrastructure to support the delivery of the curriculum.
3. Design and develop data analysis and visualisation tools using open source libraries, including professional interface design.
4. Support the development of efficient database systems to hold and manipulate the data.
5. Provide technical support and advice to students as they use the software.
6. Document the development of the code, databases, data generation, and analysis steps.
7. Support the Chief Investigator in managing different personnel involved in the data science program, key stakeholders and the wider university community.
8. Provide professional and technical advice to students and staff involved in the delivery of the curriculum.
9. Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.

## SELECTION CRITERIA

1. A relevant tertiary qualification in Computing Science with experience or knowledge gained through any combination
2. Proven ability in C++ and/or Python programming languages, and experience with networking and TCP/IP programming.
3. Knowledge of data science and data analysis tools and experience with relational databases.
4. Demonstrated experience with version control and software documentation.
5. Ability to apply judgement, creativity, and flexibility to generate new and innovative ideas and approaches and to solve problems.
6. Ability and capacity to implement required UNSW health and safety policies and procedures

*It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.*

## Position Description

# Senior IT Curriculum Designer

*Position Number: 00085976*  
*Position Title: Senior IT Curriculum Designer*  
*Date Written: August 2020*

*Faculty / Division: UNSW-Canberra*  
*School / Unit: SEIT*  
*Position Level: Level 9*

### ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten-year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia's global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as 'research intensive' or 'teaching intensive'. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition, we are attracting the very best academic and professional staff to play leadership roles in our organisation.

### VALUES IN ACTION: OUR UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high-performance culture. The behavioural expectations for UNSW are below.



Delivers high performance and demonstrates service excellence.



Thinks creatively and develops new ways of working. Initiates and embraces change.



Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.



Values individual differences and contributions of all people and promotes inclusion.



Treats others with dignity and empathy. Communicates with integrity and openness.

## OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

The University is developing transformative educational concepts in the areas of Artificial Intelligence and Data Science for the Australian Department of Defence.

The Senior IT Curriculum Designer will support the development of a new Artificial Intelligence and Data Science Education Capability at the University. The position will contribute to the design of AI and data science courses, support the development of a hands-on curriculum for data science, and offer technical support to the academic staff delivering the curriculum.

The role of Senior IT Curriculum Designer reports to the Chief Investigator (CI) of the project.

## RESPONSIBILITIES

Specific responsibilities for this role include:

1. Drive, develop, and manage complex software and data requirements for the design of data science curriculum.
2. Design, develop and maintain complex software infrastructure to support the delivery of the curriculum.
3. Design and develop data analysis and visualisation tools using open source libraries, including professional interface design.
4. Design and develop efficient database systems to hold and manipulate the data.
5. Provide expert technical support and advice to students as they use the software.
6. Document the development of the code, databases, data generation, and analysis steps.
7. Manage relations with different personnel involved in the data science program, key stakeholders and the wider university community.
8. Provide expert professional and technical advice to students and staff involved in the delivery of the curriculum.
9. Project manage software and data requirements for the project to ensure requirements are delivered on time and within budget.
10. Conceptualise, develop and review progress in line with strategies to meet the objectives of the University.
11. Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.

## SELECTION CRITERIA

1. A post-graduate qualification in Computing Science substantial experience or knowledge gained through any combination of these.
2. Strong experience with C++ and/or Python programming languages, and experience with networking and TCP/IP programming.
3. High level knowledge of data science and data analysis tools and experience with relational databases.
4. Effective software project management skills and experience delivering projects on time and within budget.
5. Demonstrated experience with version control and software documentation.

6. Proven high-level representational, negotiation, and communication skills with the ability to engage stakeholders at all levels.
7. Ability and capacity to implement required UNSW health and safety policies and procedures

*It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.*