



# UWA 2018/19 Summer School

## Mathematics Foundations: Specialist (MATH1722)

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### Welcome

Thank you for your interest in UWA's annual Summer School, an additional teaching period for students and an opportunity for people to pursue an area of interest or up-skill and progress their career to the next level.

This year's UWA Summer School runs from late November 2018 until early February 2019 and includes nearly 60 units.

Our Summer School units cover a range of engaging topics across various disciplines and embed practical application and experiential learning.

I encourage you to visit [study.uwa.edu.au/summer](http://study.uwa.edu.au/summer), the UWA Summer School website for more information about all units on offer, the enrolment process and available services.

We look forward to welcoming you to the UWA Community this summer.

### Professor Graham Brown

(Dean of Coursework Studies (Acting))



THE UNIVERSITY OF  
**WESTERN  
AUSTRALIA**

**SUM  
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SCHOOL**

# Your Unit

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**Unit Name: Mathematics Foundations: Specialist (MATH1722)**

**Location: Perth Campus**

**Non-assessed Fee: : \$1,148.00** *Enjoy the complete educational experience but without the stress of assignments)*

**Assessed Fee: : \$1,148.00** *(Enjoy the complete educational experience, including assignments/ exams and receive a final mark. The earned credit can be counted towards a future qualification at UWA)*

**Dates: 7 January 2019 – 8 February 2019**

**Time: Tuesdays, Wednesdays, Thursdays, and Fridays, 2pm-4pm**

**Mathematics is humanity's most powerful tool for comprehending the universe and is essential for many modern endeavours such as science, technology, engineering, and finance.**

## Description:

Strengthen your experience in calculus, vectors, and matrices by exploring topics such as limits and continuity, differentiation and its applications, integration and its applications, vectors in three dimensions, matrices, and mathematical reasoning.

## Learning outcomes:

In this unit, you will:

- practice using the language of mathematics competently, and employ mathematical skills, concepts and facts to solve problems;
- explore the mathematical idea of functions;
- learn about the calculus concepts of differentiation and integration, and become familiar with some of their applications; and
- learn about vectors and matrices and how to use them.

## Lecturer:

**Dr. Thomas Stemler**

Dr. Thomas Stemler is a researcher and lecturer in the School of Physics, Mathematics and Computing, working in the area of dynamical systems theory and non-equilibrium thermodynamics. His research has been widely published in international journals. His current projects include a study on enhancing short and longer term network performance prediction capabilities through data-driven analytics and simulation.

## Contact details:

Thomas.Stemler@uwa.edu.au

## Summer School Logistics:

- All external applicants will receive a parking permit to allow them to park on-campus, free of charge. See [transport.uwa.edu.au](http://transport.uwa.edu.au) for information about parking areas, and check your permit for more details when you receive it.
- All students will receive a PHEME account and access to the online learning system (LMS), online library and course materials.
- Free on-campus WIFI will be available through your PHEME account.
- The UWA Summer School Precinct includes a number of cafes with extended opening hours during Summer School. Visit the Student Guild website for more information. [www.uwastudentguild.com](http://www.uwastudentguild.com)
- Summer School students will have access to the Reid Library and all its facilities: computers, charging stations, electrical outlets, printers/copiers, rest areas, group study facilities, private study areas, and of course, the librarians and library staff.
- Lockers and change rooms are available in the Reid Library. Bike racks are located throughout campus. End-of-journey shower facilities are available at the Fitness Centre.
- Information about public transport and cycling to UWA can be found at [study.uwa.edu.au/summer](http://study.uwa.edu.au/summer)
- Further information, including course materials, detailed timetable information, PHEME details, and campus maps, will be provided prior to commencement of the unit.