

# University Preparation Program (UPP)

# The Engineering Stream

The University Preparation Program (UPP) is an opportunity for you to build your academic skills, experience part-time study in an area of interest and consider university level study. At UNSW it is not a case of how much you are willing to pay or how mature you are, it's about hard work and potential. Once you complete the UPP you can use your results to apply for further studies at UNSW or at another institution which accepts UPP results for entry.

### **Entry Requirements**

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You should be 20 years or over on 1 March in the year you start the program (please note: younger applicants who are eligible for the UNSW ACCESS Scheme may be eligible for entry to UNSW Prep).

> Citizenship/Residency

You should be an Australian citizen, New Zealand citizen or hold a current Australian Permanent Resident visa.

> Language

English language proficiency is required if your previous schooling was not completed in English. Read the English Requirements Policy for further information.

> Previous Study

You should have not already attempted university study. If you have attempted university study (either in Australia or overseas) since leaving high school you need to contact UNSW Admissions, who will advise on your best pathway.

> Additional Criteria

You should not be enrolled in another program of study at the same time.

### How to apply

Applications must be made online via the Universities Admissions Centre (UAC) from August www.uac.edu.au.

You may apply until the end of January 2024, and you must accept your offer and enrol no later than the deadline on your offer letter.



## Timing with UPP

- Study involves 4 x 10 week terms (February - April, June - August, September - November and February - April)
- > Time commitments are based on the subjects undertaken within each term (see Course Components to follow). At least 6-8 hours of independent study per week is recommended for each course, as well as some time each week for online learning. 80% attendance is a requirement for each UPP course.

### Fees

UPP is fully funded by the Australian Government so there are **no course fees**. This may change. Please check fee details prior to application: www.futurestudents.unsw.edu.au/upp

You need to pay the part time Student Services and Amenities Fee (\$78.25 per term, part time), which lets you access all the services for students at UNSW.

You pay the cost of any materials you need for your course.

# Still curious?

Academic Skills

**UNSW Sydney** 

Sydney NSW 2052 Australia

Contact us: upp@unsw.edu.au

unsw.edu.au/upp

# **UPP Course Components** Term 1

# University Orientation and Study Skills 1 (UNSW course code - REGZ9000)

Units of credit 6 (3 UoC per term)

Hours per week 3

Available Terms 1 and 2 (exclusively to UPP students)

Timetable The UOSS 1 course continues over two consecutive terms (Terms 1 and 2). In 2024, each week students attend one of the following 2 hr class sessions: Monday 6pm - 8pm OR Tuesday 6pm -8pm OR Friday 12pm - 2pm

Prior Knowledge Must be proficient in written and spoken English

The UOSS 1 course provides a practical engagement with the academic skills needed for success at university: for example, time management, . note making critical thinking and academic • tutorial presentations writing. UOSS 1 has a ·essay writing  $\textbf{particular} \qquad \textbf{focus} \qquad \textbf{on} \qquad \textbf{the} \qquad \cdot \textbf{referencing and citation skills}$ understanding of, and the preparation required to produce an academic essay.

### Topics

- · orientation to the academic system
- · critical/analytical thinking

- · assignment planning
- · research and critical reading
- examination techniques

# UPP Mathematics Skills 1 (UNSW course code - REGZ9070)

Units of credit 6

Hours per week 6

Available Term 1 (exclusively to UPP students)

Timetable In 2024, students attend BOTH sessions: Monday 6pm - 9pm AND Wednesday 6pm - 9pm

Prior knowledge Year 10 Advanced Level Mathematics is assumed. (Confident with algebra, such as simplification of expressions, solving equations & in-equations, factorisation including quadratic equations and using a scientific calculator including the fraction, power and exponential keys.)

UPP Mathematics Skills 1 is for students who have not achieved an appropriate level of mathematics at high school or equivalent and wish to apply to UNSW degree programs with assumed knowledge in mathematics.

- · basic arithmetic and algebra (2.5 weeks)
- · further arithmetic and algebra (2.5 weeks)
- · coordinate geometry (2 weeks)
- · functions and graphs (2 weeks)

# Term 2

# University Orientation and Study Skills 1 Continued

(UNSW course code - REGZ9000)

Units of credit 6 (3 UoC per term)

Hours per week 3

Available Terms 1 and 2 (exclusively to UPP students)

Timetable The UOSS 1 course continues over two consecutive terms (Terms 1 and 2). In 2024, each week students attend one of the following 2 hr class sessions: Monday 6pm - 8pm OR Tuesday 6pm -8pm OR Friday 12pm - 2pm

Prior Knowledge Must be proficient in written and spoken English



# **UPP Course Components**

## Term 2 (continued)

# UPP Mathematics Skills 2 (UNSW course code - REGZ9072)

Units of credit 6

Hours per week 6

Available Term 2 (exclusively to UPP students)

Timetable In 2024, students attend BOTH sessions: Monday 6pm - 9pm AND Wednesday 6pm -

Prior knowledge Successful completion of REGZ9070

UPP Mathematics Skills 2 is designed to provide a level of competency in mathematics for students who have not studied HSC Mathematics (or equivalent) at high school and who wish to apply to UNSW programs with assumed knowledge in Mathematics, and follows on from REGZ9070. It takes students to the equivalent of 2 Unit Yr 12 Mathematics.

### opics

- differential calculus (3 weeks)
- integral calculus (1.5 weeks)
   trigonometry and trigonometric functions
- (2.5 weeks)
   exponential and logarithmic functions (2 weeks)

# Term 3 UPP Mathematics Skills 3 (UNSW course code - REGZ9073)

Units of credit 6

Hours per week 6

Available Term 3 (exclusively to UPP students)

Timetable In 2024, students attend BOTH sessions: Monday 6pm - 9pm AND Wednesday 6pm - 9pm

Pre-requisites Successful completion of REGZ9072

UPP Mathematics Skills 3 is for students who have not achieved an appropriate level of mathematics at high school or equivalent and wish to apply to UNSW degree programs with assumed knowledge in mathematics.

### Topics

- applications of calculus (2 weeks)
- sequences and series (2 weeks)
- introductory probability (2 weeks)
- introductory statistics (3 weeks)

# Communicating in Engineering (UNSW course code - ENGG0360)

Units of credit 6

Hours per week 6

Available Term 3

Timetable In 2024, students attend BOTH sessions:
Monday 6pm - 9pm AND Wednesday 6pm - 9pm

Pre-requisites Successful completion of
REGZ9000 (UOSS 1) and REGZ9070 (UPP Mathematics
Skills 1)

Communicating explores Engineering expectations and the conventions applying to spoken and written communications within engineering and science; textual genres; aspects of rhetoric; ethical use of material; formal language structure; grammar and syntax.

Students will improve their ability to collect and build ideas into coherent arguments, learn how to construct texts that demonstrate critical thinking, and develop their communication skills (speaking, listening, writing, & reading), in preparation for subsequent study in a professional context.

# **UPP Course Components**

# Term 1 or Term 3, 2025

# Fundamentals of Mathematics B (UNSW course code - MATH1001)

Units of credit 6 Hours per week 6 Available Term 1 or Term 3

### Topics

- Functions (and their inverses), limits, asymptotes, continuity
- · differentiation and applications • integration, the definite integral and applications
- inverse trigonometric functions applications
- · introduction to probability theory
- · introduction to 3-dimensional geometry
- · introduction to linear algebra

# Fundamentals of Physics (UNSW course code - PHYS1111)

Units of credit 6 Hours per week 6 Available Term 1 or Term 3

This is an introductory level course in physics for students from all disciplines.

Methods of Physics including:

- the description of motion
- forces and momentum · the dynamics of particles
- · oscillations and simple
- harmonic motion · waves, wave reflection,
- refraction and interference · kinetic and potential energy
- the conservation of energy
- thermal equilibrium
- thermal energy

- · fluids and fluid flow
- $\ensuremath{\raisebox{0.5ex}{$^{\circ}$}}$  the wave nature of light
- · electric fields and charge • electric potential and energy
- · electric currents
- magnetism
- electromagnetic induction and Faraday's law
- · early quantum theory and models of the atom
- nuclear physics and radioactivity
- · nuclear energy

• temperature and specific and latent heat

Contact us: upp@unsw.edu.au

unsw.edu.au/upp