UNSW Course Outline

ARCH7213 Performance over Time of Building Systems - 2024

Published on the 18 May 2024

General Course Information

Course Code : ARCH7213
Year : 2024
Term : Term 2
Teaching Period : T2
Is a multi-term course? : No
Faculty : Faculty of Arts, Design and Architecture
Academic Unit : School of Built Environment
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

Performance over Time of Building Systems introduces you to the analysis of the users' needs in relation to related to the architectural space and translating these into performance-based requirements and specifications to prevent building defects and durability issues. You will

investigate the durability of building envelope components and possible design countermeasures to the most common defects due to errors in conception, construction, or maintenance. Your detailed technological design will be informed by software simulations of the hygrothermal performance of building components. Finally, you will orient your work in relation to regulatory frameworks, including the National Construction Code and technical standards (e.g. AS/NZS or ISO standards), to develop specifications, and verify the delivered performance and building quality.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Apply users' needs and performance requirements to the design of building envelope systems.
CLO2 : Analyse modes of failure in building components in relation to improving building technology and preventing major building defects.
CLO3 : Develop specifications applying technical standards to ensure building quality and performance and prevent building defects.

Course Learning Outcomes	Assessment Item
CLO1 : Apply users' needs and performance requirements to the design of building envelope systems.	• Hygrothermal Performance • Building Pathology and Durability • Technical Design Brief to Performance Verification
CLO2 : Analyse modes of failure in building components in relation to improving building technology and preventing major building defects.	• Hygrothermal Performance • Building Pathology and Durability
CLO3 : Develop specifications applying technical standards to ensure building quality and performance and prevent building defects.	• Technical Design Brief to Performance Verification

Learning and Teaching Technologies

Moodle - Learning Management System | Echo 360

Learning and Teaching in this course

The lectures provide the framework, including practical workshops as demonstrations. The tutorials will provide a space to develop the tasks, assisted by the teaching staff. The practical

activities and workshops are designed to support learning.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Hygrothermal Performance Assessment Format: Individual	35%	Start Date: Not Applicable Due Date: 21/06/2024 11:55 PM
Building Pathology and Durability Assessment Format: Individual	35%	Start Date: Not Applicable Due Date: 12/07/2024 11:55 PM
Technical Design Brief to Performance Verification Assessment Format: Group	30%	Start Date: Not Applicable Due Date: 09/08/2024 11:55 PM

Assessment Details

Hygrothermal Performance

Assessment Overview

You will produce an analysis of the hygrothermal performance of building envelope components and moisture-related risks, together with material and design options to overcome the issues. Grading will be done against assessment criteria, accompanied by written feedback.

Course Learning Outcomes

- CLO1 : Apply users' needs and performance requirements to the design of building envelope systems.
- CLO2 : Analyse modes of failure in building components in relation to improving building technology and preventing major building defects.

Detailed Assessment Description

With the simulation tool introduced in class, analysis of the hygrothermal performance of building envelope components and moisture-related risks, and material and design options to overcome the issue.

Step 1. Hygrothermal simulation. For the selected building component, you simulate at least five moisture risk scenarios and analyse the results, after you presented all input data and boundary conditions.

Step 2. Discussion of the results and solutions. You discuss the results, also using information from textbooks and scientific literature (or other reference documents).

Step 1. Hygrothermal simulation [max 6 pages]

You select one building component from the list of proposed building components categories. You cannot develop your analysis focusing on ETICS (i.e., External Thermal Insulation Composite Systems with rendering, which is presented in the example). Selecting ETICS will attract 0% mark and be regarded as plagiarism.

For the selected building component, you simulate **at least five (5) moisture risk scenarios** and analyse the results (these might be the combinations of design and moisture risk scenarios). The mark is not increased for additional scenarios exceeding the minimum of 5 (you might still do it because it makes sense for your analysis).

How to count the scenarios?

- 2 orientations (north & south) & 2 indoor moisture levels (high/low) & with and without vapour retarder = 8 scenarios (8 combinations) > 5 scenarios = OK.
- 5 cases on vapour retarder: no vapour barrier/retarder & vapour barrier in position A & vapour barrier in position B & vapour retarder in position A & smart vapour retarder in position A = 5 scenarios = OK.

Each scenario will produce one set of results (e.g., a curve, a bar in a barplot, etc.). The scenarios must be meaningful for your building component and helpful to support a design/technical/ management decision (e.g., whether to put or not a vapour retarder, or decide its properties, or what is the optimal position for the thermal insulation to achieve a fail-safe system, etc.).

The input data, boundary conditions and results are presented in no more than six pages. Further details can be found in the example, and a template is provided. The report must include:

- Building component cross-section
- Details on the materials and their hygrothermal properties (in the form of a table)
- Input data, assumptions, boundary conditions,
- Results presented in the form of tables or charts, including appropriate units.

NB: providing all the input values is essential so that the teaching staff can assist you and provide feedback.

Step 2. Discussion of the results and solutions [max 4 pages, references included]

You can discuss the results using information from textbooks and scientific literature, design guides, or standard practice (or other reference documents) and/or compare your results with those achieved by your groupmates (or classmates for similar building components). In this

case, it should be a succinct reference indicating the name and group of the classmate.

In the discussion, you compare your results and findings with those of others (literature and/or classmates) and present how your findings can be used i.e., you identify design countermeasures such as adding another layer or changing the position of a layer (position of a vapour retarder). The quality, suitability, and extent of the considered sources will be assessed. A minimum of 2 literature sources and 1 classmate is advised.

Step 3. Upload the simulation file [mandatory]

Run the simulation for 1 hour (while to achieve the results for step 1, you will need at least to simulate three years. This way, the file is lighter than 500 kB, and it can be easily uploaded).

Assessment Length

10 A4 pages (max)

Submission notes

A template and an example are provided on Moodle

Assessment information

Interaction with groupmates. This is an individual assignment. Members of the same group work on the same class of building components (e.g., a wall with interior insulation), but they consider different materials and different climate contexts (the weather files are provided in Moodle). Students are free to select the climate context (within or outside of Australia). The building component must be sized according to the climate context (i.e., an uninsulated wall in Tasmania or in a cold region of China is unrealistic). The selection of contexts in different climate classes is recommended (e.g., Sydney, Alice Springs, and Darwin), so that you can compare the performance of the selected construction type when exposed to a variety of climate stimuli.

The classifications for Australian locations can be found here:

http://www.bom.gov.au/jsp/ncc/climate_averages/climate-classifications/index.jsp

Results of the same or similar building components can be compared within the same group or among groups. This is not plagiarism but healthy collaboration and intercomparison among professionals, and it's encouraged.

Assignment submission Turnitin type

This is not a Turnitin assignment

Building Pathology and Durability

Assessment Overview

You will produce an analysis of the performance over time of a selected building envelope component, together with design, construction and/or maintenance countermeasures. Grading will be done against assessment criteria, accompanied by written feedback.

Course Learning Outcomes

- CLO1 : Apply users' needs and performance requirements to the design of building envelope systems.
- CLO2 : Analyse modes of failure in building components in relation to improving building technology and preventing major building defects.

Detailed Assessment Description

Analysis of the performance over time of a selected building envelope component (i.e., most common failure modes and durability issues), with design, construction and/or maintenance countermeasures. Assignment 2 is a short essay of no more than ten (10) pages.

Step 1. Definition of the building envelope component. Please provide the cross-sections, with dimensions and identification of the layers (i.e., material and/or function) for one main building envelope component: wall, roof, window (for the window, you can simply identify the type) coupled to shading device system (i.e., blinds, roller blind, etc.), basement.

Step 2. Performance over Time. Here, you research the performance over time of the selected materials, technology and system. You Produce two (2) cross-sections (or building details if necessary) with one typical design/construction error and one durability issue for the building technology that you selected. In addition, please describe each failure case in no more than 300 words. You may also include one or more pictures as an example. Your claims must be supported by references to textbooks, scientific literature, or reference documents.

Step 1. Definition of the building envelope component.

Please provide the cross-section(s), with dimensions and identification of the layers (i.e., material and/or function) for one main building envelope component: wall, roof, window (for the window you can simply identify the type) coupled to shading device system (i.e., blinds, roller blind, etc.), basement. You must continue working on the same building component which you analysed in A1, unless you are considering windows or glazing systems.

Step 2. Performance over Time.

You research the performance over time of the materials, technology, and system that you have selected. You present two (2) cross-sections (or building details if necessary) with one (1) typical design/construction error and one (1) typical durability issue for the building technology that you selected (this can concern just one material or layer such as the roofing membrane or metal cladding). You can produce these cross-sections/details with CAD or freehand. For the durability issue, the cross-section can be a schematic representing the action of agents producing degradation.

Therefore, you analyse two failure modes and degradation mechanisms: one due to natural ageing of the materials (durability) and one caused by a defect (pathological situation). In addition, you describe concisely the chain of degradation or alteration (max 300 words or bullet points recommended). You also include one or more pictures as an example (you can take pictures of buildings in your area or use images from other sources, which must be acknowledged). For each of these, please identify the possible solution, namely, how to prevent it in design and/or construction phase (or maintenance). Your claims must be supported by references to textbooks, scientific literature, or reference documents. Thus, for step 1 and step 2, you present:

- *Correct case*. Cross-section with details about materials without building defects, including construction sequence. It can be a series of images (also frames from videos). Sources must be acknowledged.
- *Two failures*. Two cross-sections (or building details if necessary) with typical design/ construction errors and durability issues, together with the referenced discussion.
- *Solution*. For each of these, please identify the possible solutions, namely, how to prevent the failures. The claims are supported and referenced.

In the discussion of the solution, in addition to academic and industry sources, you can cross-reference the findings of your group or classmates. For example, *my classmate (name and group) has found that to prevent failures for the same building component material X should be avoided, but here this is does not apply because the failure derives from the interaction between layer X and layer Y, which is not present in my case*.

This is not plagiarism, but encouraged healthy collaboration, which will help you to gather a deeper understanding of the subject and achieve the course learning outcomes.

Assessment Length

15 A4 pages (max)

Submission notes

A template and an example are provided on Moodle

Assignment submission Turnitin type

This is not a Turnitin assignment

Technical Design Brief to Performance Verification

Assessment Overview

In groups, you will produce a consolidated summary on the findings from earlier assessment, together with recommendations on how to prevent the issues from occurring, and how to implement the dissemination of this information in your firm. Grading will be done against assessment criteria, accompanied by written feedback.

Course Learning Outcomes

- CLO1 : Apply users' needs and performance requirements to the design of building envelope systems.
- CLO3 : Develop specifications applying technical standards to ensure building quality and performance and prevent building defects.

Detailed Assessment Description

You produce a consolidated report also relying on the findings presented in Assignment 1 and Assignment 2, focusing on how to prevent the issues from occurring and how to implement the dissemination of this information in your firm. You consider the users' needs and then the standards and technical information, and development of specifications for all the most relevant performance criteria concerning a selected building component.

Step 1. Technical design brief. You define a design scenario selecting a building class, use and hypothetical users and stakeholders. You write a technical design brief for the building component, starting from the users' needs and the performance requirements, to be approved by the project stakeholders (you connect the requirements to the failures that you analysed in A1 and A2).

Step 2. Performance Verification and Prevention of Defects. You detail how you can prevent the building defects and durability issues that you analysed in Assignments 1 and 2, with design, construction and/or maintenance countermeasures. You develop the specifications for one selected building component. You collect all the necessary information from standards, technical documents and design guidelines, National Construction Code, and any other sources that are helpful to specify a building component. Then, you identify the performance criteria that

describe the building component of your interest. Finally, present all the different aspects of performance, thresholds, and references in a table. Please consider three (3) aspects (e.g., water-tightness, air tightness, risk of mould growth, risk of interstitial condensation, etc.)

Step 3. Controls. You indicate the controls that you wish to implement at the construction site and on the delivered building (i.e., commissioned and fully delivered to the client). A set of minimum controls includes: verification of technical sheets at the acceptance of deliveries; geometric check and/or visual check of the progress of construction. Additional controls can include: performance check upon delivery; metering or measurements; sample measurements on materials.

Step 4. Corruption prevention. Include countermeasures to prevent corruption and misuse of funds with procurement and technical performance indicators.

Assessment Length

10 A4 pages (max)

Submission notes

A template and an example are provided on Moodle

Assessment information

Interaction with groupmates. This is an individual assignment. Members of the same group work on the same class of building component (e.g., wall with interior insulation), but they consider different failure modes and durability issues. You can differentiate by considering different materials (e.g., finishing layers or clay bricks vs concrete blocks).

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

General Assessment Information

Detailed grading guides and "How to do the assignment" videos are available on Moodle.

Use of Generative Artificial Intelligence (AI) not allowed in ARCH7213

Simple editing assistance is allowed in this course. For the assessment tasks in this course, you may use standard editing and referencing software but not generative AI. You are permitted to use the full capabilities of standard software (e.g., Microsoft Office suite, Grammarly, etc.). advanced editing and text improvement by means of tools such as Grammarly GO is also

allowed and considered equivalent to editing. Extreme care in its use is recommended, as all these tools can alter the intended meaning of the original text. The assignment conception, outline and structure must be defined by you, not by a generative tool.

If the use of generative AI such as ChatGPT is detected, it will be regarded as serious academic misconduct and subject to the standard penalties, which may include 00FL, suspension and exclusion.

Supplementary Assessment Information

In this course, ARCH7213, a Supplementary Assessment may be offered at the end of term, after results for the course are finalised, to students who satisfy the following conditions:

- Your final result in ARCH7213 is between 45-49FL.
- Your failure of the course is not due to misconduct or lateness (and no other misconduct incidents or academic matters under review).
- You have not failed the course in previous years.
- You have attempted all assessment tasks in the course and met all attendance requirements if and as specified.

Your Course Convenor will contact eligible students via email at the end of term.

A satisfactory grade for the Supplementary Assessment will result in a final mark/grade for the course of 50PS. An unsatisfactory grade for the Supplementary Assessment will result in no change to your original mark/grade for course. Once you have agreed to complete the supplementary assessment, you will have no further recourse to an appeal or a request for a review of results.

Grading Basis

Standard

Requirements to pass course

Achieve a composite mark of at least 50%.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 20 May - 26 May	Activity	Form groups of 3 people Familiarize with the course page Moodle and the course outline and organisation
Week 1 : 27 May - 2 June	Lecture	L1: Introduction to the course. The facets of performance. Introduction to hygrothermal performance. (online, pre-recorded)
	Presentation	In class: Assignment 1 presentation and Q&A on A1 (1 – 2 pm)
	Workshop	Introduction to hygrothermal simulations (for A1) (pre-recorded software demonstration + in-class workshop) Online pre-recorded tutorial: software demonstration with introduction to the tool and first simulations Outcome of the in-class workshop: set up of the building component in WUFI, with selection of building materials, and first simulation.
Week 2 : 3 June - 9 June	Lecture	L2: Building Pathology and Durability (online, pre-recorded)
	Presentation	Summary of L1 and discussion Q&A on Assignment 1 and resolution of common problems
	Workshop	Pre-recorded simulation tutorials: • T2.1 Caveats and moisture risk scenarios • T2.2 Moisture Risk Scenarios simulation • T2.3 Basements • T2.4 Plotting Graphs - optional In-class workshop: set up of moisture risk scenarios for Assignment 1
Week 3 : 10 June - 16 June	Lecture	L3: Roofing systems (online, pre-recorded)
	Presentation	Summary of L2 and L3 and discussion Q&A on Assignment 1 and resolution of common problems
	Workshop	Hygrothermal simulations (for A1) & A1 revision T3. Simulation tutorial 3 (online, pre-recorded). Results Analysis and Interpretation. T3.1 Introduction, condensation, and transient thermal transmission T3.2 Mould growth and corrosion T3.3 Wood rot and other cases In-class workshop: Data analysis and interpretation, depending on the degradation pattern.
Week 4 : 17 June - 23 June	Lecture	L4: Façade systems (online, pre-recorded)
	Presentation	Summary of L4 and discussion. Final questions on A1 and resolution of common queries.
	Workshop	T4. Literature Search and Referencing (online, pre-recorded demonstration) In-class workshop: final feedback session and wrapping up the assignment for submission.
	Assessment	Assignment 1 submission (Individual, 35%) due on 21/6 at 23:55
Week 5 : 24 June - 30 June	Lecture	L5: Glazing and solar control, basement walls and floors (online, pre-recorded)
	Presentation	Assignment 2 presentation, discussion and Q&A.
	Workshop	In-class workshop: selection of failure modes to be analysed (feedback sessions group by group). At the end of this session, you should have selected the building defect and durability issue you will focus on during your Assignment 2.
Week 6 : 1 July - 7 July	Activity	Integration week – readers on building pathology and durability. No in-class activity.
Week 7 : 8 July - 14 July	Lecture	L6: Building details and joints. Interior partitions. (online, pre-recorded)
	Presentation	Summary of L5 and L6 and discussion. Final Q&A on Assignment 2. Resolution of common queries.
	Assessment	Assessment 2 (35% individual) due on 12/7 at 23:55
Week 8 : 15 July - 21 July	Lecture	L7: Legal and technical regulation framework. Corruption in Construction. (online, pre-recorded)

	Presentation	Presentation of Assignment 3 and Q&A.
	Workshop	Analysis of users' needs and regulation and identification of technological requirements Group work and set up of the structure of Assignment 1
Week 9 : 22 July - 28 July	Lecture	L8. Specifications to enable performance (online, pre-recorded)
	Presentation	Summary of L7 and L8 and discussion. Resolution of common queries on Assignment 3.
Week 10 : 29 July - 4 August	Lecture	L9. From users' needs to technical specifications to build durable architecture. (online, pre-recorded)
	Presentation	Course summary and presentation of the results from Assignment 2 (presentation of all case studies submitted) and collective discussion. Final Q&A on Assignment 3.
	Workshop	Organisation of performance verification and controls for Assignment 3. Group feedback sessions.
Week 11 : 5 August - 11 August	Assessment	Assessment 3 (Group, 30%) due on 09/08 at 23:55

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

General Schedule Information

Lectures and software demonstrations are pre-recorded.

In the lecture time, there will be a 1 h face-to-face session dedicated to a) introduction to the assignment briefs, b) summary of lectures and discussion, and c) Q&A.

Tutorials are face-to-face and each will be a workshop dedicated to producing a part of the assignment.

Course Resources

Prescribed Resources

Lecture slides and tutorial material on Moodle.

Recommended Resources

Resources linked on the lecture slides (either open access or accessible through UNSW library). Additional resources are provided via Moodle.

Additional Costs

No additional costs.

Course Evaluation and Development

We encourage and support students to maintain regular contact with the course convenor to provide informal feedback throughout the course. For specific issues or detailed feedback, please arrange a meeting with the course convenor via email.

In this course there is an option for students to provide anonymous feedback via the course's Moodle page, which is directly sent to the convenor. As a final step, students are invited to share their insights and experiences by completing the MyExperience survey. The feedback gathered each year is integral to the continuous enhancement and development of the course.

Student feedback will be solicited through anonymous online surveys via Moodle before the myExperience survey at the end of the course. Further, feedback will be asked in class during workshops.

Previous students told us:

- To encourage starting earlier to work on the hygrothermal simulations.

- To include a presentation of work done for Assignment 2, so you can see the work of your peers and learn about the failure modes of other building components.

We have responded to this feedback by:

- Including a recommended timeline for progress towards Assignment 1

- Included an informal (not assessed) presentation of Assignment 2 on Week 10 to offer more peer learning opportunities and elicit discussion.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Riccardo P aolini		Rm 2025, Lv2, Anita B. Lawrence Centre, West Wing (H13)	02 9385 5627 | replaced by MS	By appointment – organise via email	Yes	Yes

Other Useful Information

Academic Information

Due to evolving advice by NSW Health, students must check for updated information regarding online learning for all Arts, Design and Architecture courses this term (via Moodle or course information provided).

Please see: https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support/protocols-guidelines for essential student information relating to:

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Dean's List;
- review of results;
- credit transfer;
- cross-institutional study and exchange;
- examination information;
- enrolment information;
- Special Consideration in the event of illness or misadventure;
- student equity and disability;

And other essential academic information.

Academic Honesty and Plagarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

- Copying: Using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This includes copying materials, ideas or concepts from a book, article, report or other written document, presentation, composition, artwork, design, drawing, circuitry, computer program or software, website, internet, other electronic resource, or another person's assignment without appropriate acknowledgement.
- Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original information, structure and/or progression of ideas of the original without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.

- Collusion: Working with others but passing off the work as a person's individual work. Collusion also includes providing your work to another student for the purpose of them plagiarising, paying another person to perform an academic task, stealing or acquiring another person's academic work and copying it, offering to complete another person's work or seeking payment for completing academic work.
- Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.
- Duplication ("self-plagiarism"): Submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

The UNSW Academic Skills support offers resources and individual consultations. Students are also reminded that careful time management is an important part of study. One of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items. UNSW Library has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW, but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time
- understand your rights and responsibilities as a student at UNSW
- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

Use of AI for assessments

As AI applications continue to develop, and technology rapidly progresses around us, we remain committed to our values around academic integrity at UNSW. Where the use of AI tools, such as ChatGPT, has been permitted by your course convener, they must be properly credited and your submissions must be substantially your own work.

In cases where the use of AI has been prohibited, please respect this and be aware that where unauthorised use is detected, penalties will apply.

Use of AI for assessments | UNSW Current Students

Submission of Assessment Tasks

Turnitin Submission

If you encounter a problem when attempting to submit your assignment through Turnitin, please telephone External Support on 9385 3331 or email them on externalteltsupport@unsw.edu.au

Support hours are 8:00am – 10:00pm on weekdays and 9:00am – 5:00pm on weekends (365 days a year). If you are unable to submit your assignment due to a fault with Turnitin, you may apply for an extension, but you must retain your ticket number from External Support (along with any other relevant documents) to include as evidence to support your extension application. If you email External Support, you will automatically receive a ticket number, but if you telephone, you will need to specifically ask for one. Turnitin also provides updates on their system status on Twitter.

Generally, assessment tasks must be submitted electronically via either Turnitin or a Moodle assignment. In instances where this is not possible, alternative submission details will be stated on your course's Moodle site. For information on how to submit assignments online via Moodle: https://student.unsw.edu.au/how-submit-assignment-moodle

Late Submission Penalty

UNSW has a standard late submission penalty of:

- 5% per calendar day,
- for all assessments where a penalty applies,
- capped at five calendar days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Students are expected to manage their time to meet deadlines and to request Special Consideration as early as possible before the deadline. Support with Time Management is available here.

School Contact Information

beadmin@unsw.edu.au