Design 5 presents an introduction to complex architectural thinking. It examines both conceptual and exceptional spaces and develops an understanding of corresponding architectural methodologies and systems. Topics will explore the cutting edge of architecture, with an individual emphasis on the theoretical, contextual, architectonic, communicative, material, spatial, sociological or topographical.

“Te hau tere i Maukatere,
Hailing from the swift winds of Maukatere,
Te tama i whangai i te pioke, i te tuna”
The child reared on dried shark and eel

Te Ari Prendergast
Ngai Tahu, Te Whanau A Apanui
TOA Architects

TE MARAE O MATAWHERO
GENERAL COURSE INFORMATION

Course: Design 5 ARCHDES300
Points Value: 30 points
Course Director: Sarosh Mulla: s.mulla@auckland.ac.nz
Course Co-ordinator: Uwe Rieger: u.rieger@auckland.ac.nz
Studio Teacher: TE ARI PRENDERGAST
Contact: teari@toa.net.nz
Location: TBC
Hours: Monday and Thursday 1:00-5:00pm

For all further general course information see the ARCHDES300 COURSE OUTLINE in the FILES folder on CANVAS.

TE MARAE O MATAWHERO

Purpose:
To create an architecture that connects our future space travellers to their new homeland as well as maintaining connection to their Earth origins as well as to each other.

Rationale:
Aotearoa was essentially the last place to be inhabited by people on Earth. Likewise, our Polynesian ancestors were great voyagers adapting to the unique landscapes and environments they encountered. Maori would create new stories to explain these new landscapes of encounter while maintaining a connection the landscapes of their past, through waka and origin stories. Tribal societies always begin with associations to their historic waka that their ancestors arrived on connecting them to their spiritual homeland and then to the first ancestral explorers who often named the landscape after their exploits but also of places that remind them of home. These stories were carved into their houses, utensils and even their faces, bringing the past very much into the fore of everyday life.

Process:
Students will utilise the concept of the marae and the Powhiri ritual of welcome as a design tool to create a Martian architecture that begins to describe and entrench a Martian culture and identity. Students will gain
an understanding of the importance of Maori design principles and apply these to a topical issue such as the exploration of Mars. This offers a chance to engage with these concepts but in a manner that many have not had the opportunity thus adding to a globally relevant conversation about the ethics of inhabiting another planet and the values that will guide such exploration.

Students will engage with the complexities of building and providing for life on Mars’ harsh climate and lack of atmosphere, but the focus will be on the socio-cultural requirements of a Mars community.

To make sense of the multiple narratives and complexities of Mars living students will develop a thematic matrix and utilise this to test and compare concepts early on. A thematic matrix involves placing different design concepts along a continuum and then allows you to compare and contrast concepts and manifestations to explore how spaces can be understood. For this exercise, students will document the stages of the pōwhiri ritual as described in Anne Salmond’s *Hui* and from personal experience of our site visit, and explore how each threshold can be expressed conceptually in regard to their spatial, experiential, mythological, and ritualistic quality.
The pōwhiri (or pōhiri) is performed as the visitors move into the marae. The local people are lined-up in front of their meeting house, old women in front, and younger women and men behind, with fronds of greenery in their hands. The leader (kaea) starts up the chant.... The pōwhiri is only performed for important groups of visitors, and the greater the mana [status] the more people join in ...

(Salmond 1976: 142-3)

To introduce Maori concepts students will take a trip on an Ocean-going double hull waka not unlike the traditional waka that Maori ancestors travelled upon, following the stars to new lands. From this journey students will create a navigational map combining their own identity story with a journey from Earth to Mars. A ‘cultural map’ is not necessarily a cartographic plan. There are other forms of representation that can powerfully express ideas of place, time, people, event and agents. They can show locations and connections, and they can take unexpected or combined viewpoints (like the combination of perspective and section shown in the Buck Nin image below). Think about how you can use colour and scale to emphasise particular content, and how significant non-visual elements (sounds, tactility, memories, etc) might be mapped.

Buck Nin, ‘Putahi Incandescent,’ n.d.

Students will explore the use of ritual through physical model making.
The final project will anticipate a new age of Māori architecture, in which kawa and tikanga occur on another planet and for a future civilisation. The design intervention will focus on some aspect in the cultural lives of the future Mars inhabitants, for example, an earth cenotaph, a place to admire and retell stories from earth.

A key component will for students to engage with their own origin stories and craft a pepeha that they feel reflects their whanau and identity. Alongside this work, you will be preparing a pepeha that recognises your family and your landscapes of belonging that you will present with your final design.

**TOPIC STRUCTURE AND CONTENT**

*Field trip 1: Auckland War Memorial Museum*

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<tr>
<th>Event</th>
<th>Cost per Student</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>Free Date: 28th of March 2019</td>
<td></td>
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<td>Maritime Museum</td>
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*Field trip 2: Waka voyage leaving from the Maritime museum and travelling within the Waitemata harbour as well as a star dome experience explaining Maori celestial navigational knowledge.*

*Students to bring adequate clothing (Hat and wind/rain proof jacket) for harbour voyage.*

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<tr>
<td>$16.00 Date: 2nd of May 2019</td>
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<td>Maritime Museum</td>
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*Guest: Presentation by Atelier Aitken about designing for complexities of the harsh Mars environment.*

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<thead>
<tr>
<th>Week</th>
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<tr>
<td>1</td>
<td>Mon 4.3</td>
<td>12:00 All architecture meeting, rm 311</td>
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<td>Thu 7.3</td>
<td>2:15 Design 5 staff presentations and studio ballot</td>
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<td>Design 5 Studio classes commence</td>
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<td>2</td>
<td>Mon 11.3</td>
<td>Pepeha: introductions</td>
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<td></td>
<td>Thu 14.3</td>
<td>Introduce thematic matrix</td>
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<td>3</td>
<td>Mon 18.3</td>
<td>The pōwhiri as a thematic matrix</td>
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<td>Thu 21.3</td>
<td>Presentation of Thematic Matrix</td>
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<td>4</td>
<td>Mon 25.3</td>
<td>Cultural mapping the stars</td>
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<td></td>
<td>Thu 28.3</td>
<td>Field trip 1: Museum celestial navigation</td>
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<td>Week 12</td>
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<td></td>
<td>Thu</td>
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RESOURCES


https://www.youtube.com/watch?v=Ryel4gvemn0&feature=youtu.be


National Geographic Series Mars: Season 1 & 2, binge it on Netflix.

REQUIRED PRODUCTION

1. Thematic Matrix
A thematic matrix involves placing different design concepts along a continuum and then allows you to compare and contrast concepts and manifestations to explore how spaces can be understood. For this exercise, students will document the stages of the pōwhiri ritual as described in Anne Salmond’s Hui and from personal experience of our site visit, and explore how each threshold can be expressed conceptually in regard to their spatial, experiential, mythological, and ritualistic quality.

2. Cultural ‘Navigational’ Maps
A ‘cultural map’ is not necessarily a cartographic plan. There are other forms of representation that can powerfully express ideas of place, time, people, event and agents. They can show locations and connections, and they can take unexpected or combined viewpoints (like the combination of perspective and section shown in the Buck Nin image above). Think about how you can use colour and scale to emphasise particular content, and how significant non-visual elements (sounds, tactility, memories, etc) might be mapped.

3. Model-making
Architecture can be generated in many different ways. Your design studios at university and an opportunity to focus on generating new
forms through experiment. Model-making can be used to show both tangible and intangible experiences by investigating space, form, colour, texture, tectonics, movement and the elements (light, wind, water). Your models can then be transformed into new architectural responses and then into concepts.

4. **Architectural Section**

The section as a presentation tool can give a snapshot of your project demonstrating concept information of both the interior and exterior. Students should be able to describe the main drivers of their concept by talking to this one A1 section drawing.

5. **Final Presentation**

The final presentation will be a combination of the previous presentations reworked plus any additional drawings and models to meet the requirements of the course and topic outcomes. Each student will prepare a pepeha as part of their oral presentation.

**ASSESSMENT & FEEDBACK**

This course is assessed as 100% coursework. Conversational feedback is given throughout the semester. Written feedback, with indicative grading, is given at a date around the mid-point of the semester. All further information regarding assessment is available in the ARCHDES 300 Design 5 Course Outline (on Canvas).

**LEARNING OUTCOMES**

General Course Outcomes: On successful completion of this course students should be able to:

- **Theory:** Show evidence of engagement with selected / prescribed areas of architectural theory and knowledge. Further, to show evidence of the exploration of the possible influence of this upon the development of architectural propositions.
- **Architectonics:** Demonstrate abilities to project, explore and develop the tectonic characteristics of the project through the creative engagement with material, structural or constructional propositions.
• Programme: Show evidence of engagement with identified cultural, social and functional positions as they might inform speculative architectural propositions.

• Performance: Show abilities to advance conceptual thinking through engagement with environmental and contextual conditions that could bear upon the project, and to examine the way in which the architecture may affect those same conditions in return.

• Form and space: Demonstrate abilities to develop speculative three dimensional architectural form and space.

• Media: Display skill in the communication and development of design propositions through the considered use of architectural media.

Specific Topic Outcomes: This studio topic will engage the general course outcomes in the following ways:

• Theory: Utilising ritual as a key design tool for experiential design. Understanding of key Maori design principles and the application of authentic indigenous design to architecture projects

• Theory: Articulate an understanding of tikanga Māori (Māori customs) and kawa (protocols) of pōwhiri as space-making customs and protocols through the development of novel and needed Māori architectural interventions in Tamaki.

• Architectonics: Demonstrate an innovative and culturally-appropriate use of materials, structural and constructional technologies that project and advance the kaupapa (foundations) of the brief.

• Programme: Show evidence of a strong understanding of sites of significance to Māori navigation, tikanga Māori (Māori customs) and kawa (protocols) through their use as a design driver to achieve the objectives of the brief.

• Performance: Show abilities to advance conceptual thinking about the ‘environment’ as a system of natural forces and cultural influences that effect design and are reinforced by the positive affect of the final design.

• Form and space: Demonstrate abilities to develop a three-dimensional architectural approach to form and space that employs the tikanga of pōwhiri to redevelop existing architecture and create new spaces.
• **Media:** Display skill in the communication and development of design propositions through the considered use of drawing, thematic matrices, cultural mapping and modelling.