

# ARCH 7020 COOL GREEN CITIES

**Credit Points** 10

**Legacy Code** 102853

**Coordinator** Sebastian Pfautsch ([https://directory.westernsydney.edu.au/search/name/Sebastian Pfautsch/](https://directory.westernsydney.edu.au/search/name/Sebastian%20Pfautsch/))

**Description** Climate change, urban expansion and densification result in hotter microclimates and loss of green infrastructure. The increasing frequency and severity of heatwaves, floods and droughts require changes to how we design and retrofit existing neighbourhoods and build new suburbs. Contemporary urban planning and design principles recognise blue and green infrastructure as a 'must have'. Blue and green infrastructure is key to building cool and resilient cities capable of functioning well within the social, environmental and economic challenges of the 21st century. This unit provides knowledge about what it takes to deliver cool green cities. Focusing on practical applications at precinct or suburb scale, it enables students to implement learned principles in their professional practice.

**School** Social Sciences

**Discipline** Urban Design and Regional Planning

**Student Contribution Band** HECS Band 2 10cp

**Level** Postgraduate Coursework Level 7 subject

**Equivalent Subjects** ARCH 7013 - Green Urbanscapes Bio-physical Functions and Services

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Discuss complex functional links between services provided by urban ecosystems and how climate change may alter these functions.
2. Examine current and anticipated extent of urban ecosystems in metropolitan areas.
3. Evaluate biophysical dimensions of environmental impacts from urban development to critically assess/apply strategies for managing and developing urban regions.
4. Integrate ecological benefits and economic incentives of urban blue and green infrastructure into planning processes for sustainable urban development.

## Subject Content

Urban ecosystems and urban planning

Blue and green urban infrastructure

Threatened urban ecosystems and strategic conservation planning

Urban cooling

Principles of Biophilia for contemporary, sustainable urban planning

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Professional Task	500 words	20	N	Individual
Report	1,000 words	20	N	Group
3a Proposal	1,000 words	40	N	Individual
3b Presentation	15 minutes (equiv. to 500 words)	20	N	Individual

Teaching Periods

## Spring

### Parramatta City - Macquarie St

#### Day

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View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=ARCH7020\\_22-SPR\\_PC\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ARCH7020_22-SPR_PC_D#subjects))