

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 subject 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.

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

Teaching Periods

Spring (2022)

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)

Spring (2023)

Parramatta City - Macquarie St

On-site

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