UTS: CITY CAMPUS MASTER PLAN

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UTS FACULTY OF ENGINEERING AND IT BUILDING
The gateway to UTS's City Campus and Downtown Sydney
MEDIA KIT | JUNE 2014



The new FEIT Building marks the gateway to UTS's City Campus. Photos:Andrew Worssam unless otherwise noted.

The stunning new UTS Faculty of Engineering and IT (FEIT) building joins other new landmark buildings within the rapidly transforming and revitalised western gateway to Sydney's CBD. Representing a multi-million dollar investment in the future of learning and research, its classrooms, public spaces and research spaces will accommodate up to 5,000 students and staff.

For further media enquiries or to set up an interview, building tour or photo shoot please contact:
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Collaborative classrooms and theatres reflect UTS's student-centred teaching and learning methodology.

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KEY FACTS

Name
- UTS Faculty of Engineering and Information Technology (IT) Building

Architect
Denton Corker Marshall (DCM)

Main works contractor
Lend Lease

Location
City Campus, on Broadway (corner of Wattle St and Broadway)

Size
12 levels + four basement levels and one level of plant
Gross building area: 44,000m²
Total usable floor area: 23,500m²

Capacity
Maximum population: approx. 5,030
Staff: approx. 360
Students: approx. 4,000

Parking
160 cars (levels B2-B4)
288 bicycles (on level 1 of adjoining CB10)

Environmental Rating
UTS is targeting a 5 Star Green Star rating for the building which will be certified by the Green Building Council of Australia


Binary screens. Credit: UTS



FEIT Building elevation. Credit: Denton Corker Marshall


FEIT Building in progress. Credit: UTS

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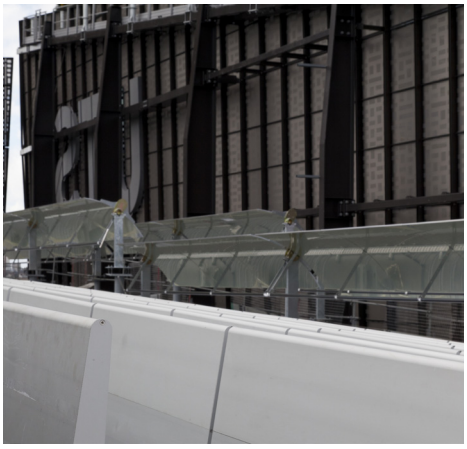
KEY FEATURES: DESIGN

Façade
Angled, semi-transparent ‘binary screens’ envelop the building and, in some areas, overshoot the structure by up to 16 metres, giving it a dramatic urban presence. The screens are made of aluminium sheets perforated with binary code – the series of ‘1s’ and ‘0s’ that underpin computer programing language. ‘Gills’ creased into the aluminium plates of the binary screen punctuate the façade and symbolically reinforce the building as a living, breathing structure. Green LED lighting will see the gills light up at night.

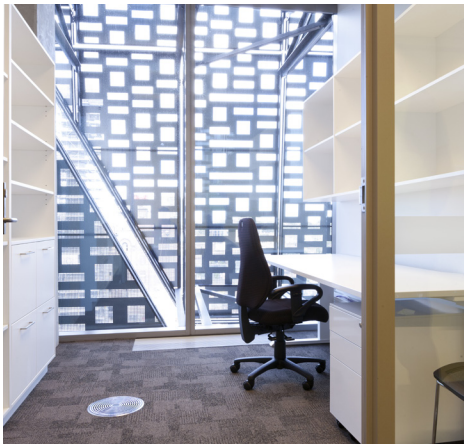
Atrium
A crevasse-like pedestrian atrium runs through the heart of the building, both horizontally and vertically. It provides natural light and pedestrian access through the building via bridge links, stairs and escalators, encouraging interactions and collaboration between staff and students. Teaching, learning, research and social spaces will be clustered around the atrium, creating a dynamic interior.

Bridge links
A series of bridge links connects the new building to Building 10 on levels 3-7 on the western (Wattle St) side and 4-7 on the eastern (Jones St) side, providing seamless integration from one building to another. The bridges will cross over the pedestrian arcade which sits between the two buildings and will be covered with a glass roof for weatherproofing. There is also a link between the two buildings at ground level and from within the car park.

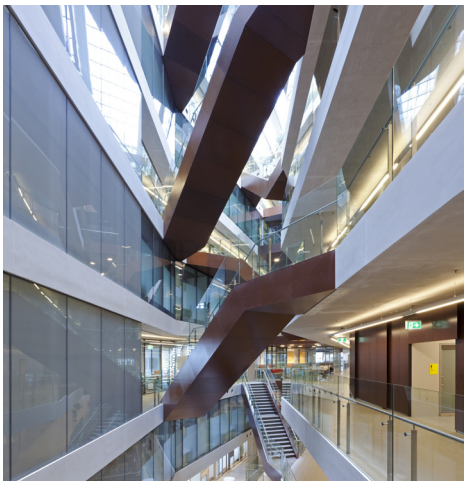
Arcade
A tree-lined arcade provides a leafy pedestrian link between Buildings 10 and the Engineering and IT Building. A café on level 1 of the building will open out into the arcade.



Roof-mounted solar-trough and -thermal panels



Typical office



A dramatic “crevasse” runs through the heart of the building

Under-floor services

Unlike most buildings, this one has no formal ceilings and instead features a raised-floor system to contain all the services including air-conditioning. This unique design feature is beneficial from both an aesthetic and sustainability point of view. Running air-conditioning under the floor is more energy efficient as it uses low-level air displacement and only cools/heats the room's occupied area. Meanwhile, as a result of 'freeing up' the ceiling zone, the building features exposed concrete soffits (essentially the underside of a concrete slab) which add to the interior's "industrial chic" aesthetic.

Public gateway

Located on one of Sydney's busiest intersections on Broadway (between Wattle and Jones Streets, Ultimo), the new building will transform the local precinct and provide a dramatic new gateway to the UTS City campus and downtown Sydney. The partial transparency of the façade (at close range) will allow for strong visual connections and interactions between internal teaching, learning and research activities and the local community.

Living lab

The building is described as a "living laboratory" that will display real-time data on its performance, including the performance of its concrete, over time. The data, collected via sensors that have been placed in the concrete footings of the buildings and on various levels, will be displayed on screens throughout the building and updated in real-time. The data will also be available to researchers.





Collaborative class rooms centre on group work and flipped learning.

KEY FEATURES: TEACHING, LEARNING & RESEARCH

UTS Data Arena

An immersive and interactive 3D-visualisation facility (UTS Data Arena) is located at the Jones St entrance to the building (level 2). The nine-metre round 'drum' will seat about 20 people and feature one, continuous screen around the perimeter. Five projectors will be used to create 360-degree visuals and 3D glasses, worn by viewers, will add to the immersive nature of the presentations. When the building opens, the Data Arena will be the most advanced facility of its kind in Australia, in terms of the quality of the projection, screen resolution and sound. This facility is anticipated to open in August/September 2014, with fitout and commissioning of the facility being completed in the meantime.

Collaborative theatres

Two large, tiered collaborative theatres (seating approximately 200 students and located on level 0) facilitate multiple forms of engagement including lecture presentations, collaborative group work and technology-enabled activities. The theatre's design, featuring two work benches per tier with moveable furniture, encourage group work and all benches include power outlets. There are two small collaborative theatres (seating 95 and located on levels 0 and B1).

Collaborative classrooms

Nine collaborative classrooms, seating 30, 60 and 90 students and located on levels 3-5, feature interactive whiteboards or LCDs, as well as mobile furniture. The lectern in these rooms is situated in the middle and rotate 90° or 180° depending on the size. The spaces provide opportunities for technology-enabled project work and learning that occurs in groups.

Learning commons
These informal learning spaces, located on levels B1-1, will be used for individual and group study as well for socialising.

Pods
A range of bookable and open-access pods, located on levels B1-1, will be used by both students and staff for group work, presentations and meetings.

Laboratories
State-of-art engineering labs featuring the latest technology are located on most levels of the building. Some of the main labs include:
- Aerodynamics Lab (B4)
- Dynamics and Mechanics of Solids Lab (B4)
- Software Development Studio (L05)

Computer labs
Students have access to two computer labs on levels B1 and 1. There are also be 10 dedicated labs for Faculty staff.







Perspective of Data Arena. Credit: Denton Corker Marshall

KEY FEATURES: SOCIAL SPACES

Student lounges/informal lounges

A number of student and staff lounges will be located on levels 3-12 which are ideal for relaxing between classes as well as informal study and group work. The majority of lounges are located around the atrium.

Café

A café on level 1 will open out into the tree-lined arcade. It will also be a licenced bar and include take-away options and table service. This facility is currently being completed and will open in July 2014.



The FEIT Building integrates sustainable features that will not only power the building but be used for teaching and research.

SUSTAINABILITY

UTS is targeting a 5 Star Green Star rating for the Engineering and IT Building which will be certified by the Green Building Council of Australia. The building's design incorporates sustainable features throughout, with the majority of renewable-energy technology located on the roof, including:

- A roof-mounted wind turbine, solar panels and solar concentrating troughs that feed into the building's 'micro-grid' to generate power for various laboratories and classrooms, the UTS 'Sky Sign' visible from Wattle St, Broadway and Jones St, three electric-vehicle charging stations in the basement car park and hot water in some kitchens/common areas. This will significantly offset the building's power use.

- The renewable technology connects to the Building Management System (BMS) and Energy Management System (EMS) and helps determine heating and cooling levels throughout the building.

- Internal sensors placed throughout the building, internally and within the concrete, monitor air quality, sound, vibration, concrete ion erosion and movement of the structure.

- Unique raised-floor system will result in more energy efficient air-conditioning.

- A crevasse-like pedestrian atrium provides natural light throughout the building while encouraging the use of stairs instead of lifts.

- The building's façade, while serving an aesthetic function, also reduces the overall solar load on the building through shading and will provide energy savings of up to 10-15%.