# Australasia early careers opportunities handbook



A future with purpose

We are a collective of designers, advisors and experts working together to help shape a better world. We do this by making the right choices, finding a better way and working together.

No matter where you start your career with us, our people have the support and guidance to take their career in new and exciting directions.

Working across disciplines and drawing on diverse voices is an essential part of who we are. Learn about disciplines, explore our work and opportunities.

#### **Contents**

Advisory	3
Buildings	4
Cities, planning and design	5
Climate services	6
Digital	7
Infrastructure	8
Technical consulting	8
Ready to take the next step?	10

## Advisory

Our advisory team is made up of economists, strategists, project and programme managers, asset managers, sustainability advisors, change managers and more.

Our team is split into six services:

**Strategy and insights** 

Finance and economics

**People and organisations** 

**Assets and operations** 

**Programmes and projects** 

Sustainable development advisory

We bring clarity, insight and rigour to our clients to help them make informed organisational decisions.

#### What will I be doing?

You will work hand in hand with our entire range of disciplines and technical experts providing our clients with insights and opportunities. You will have a unique advantage over other advisory firms by bringing a broad depth of technical knowledge to bring new ideas and proposals to market.

#### Our work and clients

Bringing resilient infrastructure to Bangladesh, United Nations for Project Services

Assets and Operations

<u>Funding a sustainable waste solution, Asian</u> <u>Development Bank</u>

Finance and economics

A resilient and sustainable future for Singapore, Ministry of National Development and the National Research Foundation (NRF)

Strategy and insights and Sustainable development advisory

Sydney CBD and South East Light Rail, Transport for NSW

Programmes and projects

## **Buildings**

We bring together a worldwide community of inventive and highly skilled building engineers and designers to help our clients to shape ambitious buildings.

We offer the following disciplines in our early careers programmes:

Structural engineering

Mechanical engineering

**Electrical engineering** 

**Vertical transportation** 

Hydraulic services engineering

**Architecture** 

#### What will I be doing?

You will work with a range of clients from the project creation and concept design stages, through to detailed design and construction, inspections, and the development of maintenance plans and complete renovations. You will help us redefine the expectations of quality working and living environments and be a front runner in decarbonising the built environment.

#### Our work and clients

#### Quay Quarter Tower, AMP Capital

Mechanical engineering, electrical engineering, vertical transportation, fire safety engineering and hydraulic services engineering

#### <u>Merdeka 118, PNB Merdeka Ventures</u> Sdn. Berhad

Structural engineering

Singapore Sports Hub,
Dragages Singapore Pte Ltd
Singapore Sports Hub Consortium

Architecture, Structural engineering

#### Optus Stadium - Arup

Geotechnics, civil, structural, transport, facades, BIM

"I want to create a positive impact on the world, and the buildings team gives me the most practical way of achieving this."

Nila Govindaraju Graduate Engineer Singapore

## Cities, planning and design

Through collaborative, contextual and innovative design, we create the urban solutions needed for the difficult challenges of our time. Our team comes from a mix of disciplines including architecture, landscape architects, urban planning, and transport planning.

We offer the following disciplines in our early careers programmes:

Resilience, security and risk

**Urban planning and design** 

**Transport planning** 

**Landscape architecture** 

**International development** 

**Architecture** 

#### What will I be doing?

You will combine local knowledge and investment insights to unlock cities true potential. From single projects to master planning a new city, you will help us design sustainable places in balance with the aspirations of communities.

#### Our work and clients

Mahindra World City Jaipur, Mahindra Lifespaces

Urban planning and design, landscape architecture

Bruce Highway Upgrade, Fulton Hogan Seymour Whyte Joint Venture for the Department of Transport and Main Roads

Transport planning

Implementation of Innovative Bridge Technologies in Solomon Islands and Vanuatu, World Bank

Resilience, security and risk

<u>City Resilience Index 3 – Semarang</u>, The Rockefeller Foundation

International development

### Climate services

Our climate services team provides the strategic capability for our firm to address the challenges of climate change, biodiversity loss and social justice. You will work closely with Arup's business leaders to develop innovative services that help our clients accelerate their sustainable development goals.

We offer the following disciplines in our early careers programmes:

**Environmental consulting** 

**Sustainability consulting** 

Climate change resilience and adaptation

#### What will I be doing?

Climate change is a challenge for all of us, we can help organisation recalibrate for the net zero era and maintain a thriving organisation. You will help our clients prepare for a net zero world and evaluate the specific climate and sustainability issues they are facing now and in the future.

#### Our work and clients

Multi-Hazard Climate and Disaster Risk Assessment for Tongatapu, Asian Development Bank

Environmental consulting, climate change resilience and adaptation

Fisherman's Bend Sustainability Standards, Victorian Government - Department of Environment, Land, Water and Planning

Sustainability consulting

## **Digital**

We bring together digital capability with specialist depth in technical engineering domains to provide digital strategy, services and solutions that meet our clients' current and emerging needs. We achieve this through Arup's deep commitment to ensuring a resilient and sustainable world, underpinned by our founding social values.

We offer the following disciplines in our early careers programmes:

#### **Visualisation**

**Building information modelling (BIM)** 

Digital engineering

**Geospatial and earth observation** 

**Digital consulting** 

System engineering and safety assurance

#### What will I be doing?

You will join a team of engineers and data scientists, planners and designers, strategists and digital experts committed to enhancing the built and the natural environments around us. You will embed digital processes and tools throughout the whole lifecycle of a project, from inception and design, to construction, management, maintenance and retrofit.

#### Our work and clients

Water Trading with Blockchain, NSW Government

Digital consulting

Brisbane River Botanic Gardens, Brisbane City Council

Visualisation

Singapore University of Technology and Design Library Pavilion, SUTD Library

**Building Information Modelling** 

<u>Thomson-East Coast Line 1</u> (<u>Geospatial and Earth Observation</u>)

Geospatial and Earth Observation

### Infrastructure

We are responsible for some of the most iconic infrastructure projects across the globe. Regarded as an industry leader, we push the boundaries of thinking in design to create increasingly innovative project solutions.

We offer the following disciplines in our early careers programmes:

#### **Civil engineering**

#### Bridge, civil and structural engineering

<u>Rail</u>

**Waste** 

**Energy** 

Water

**Maritime** 

**Highways** 

#### **Electrical and connected infrastructure**

## Ground engineering and tunnelling (geotechnics)

#### What will I be doing?

You will help the public and private sector create the world's hardest working infrastructure – from metro systems to dams, bridges to power stations, and highways to high-speed railways. You will help us push the boundaries of thinking in design to create increasingly innovative project solutions, increasing sustainable development and client outcomes.

#### Our work and clients

#### <u>Central Interceptor, Ghella Abergeldie</u> <u>Joint Venture</u>

Water, civil structural, geotechnical, tunnelling, waste

National Hydrogen Infrastructure Assessment,
Department of Industry, Science,
Energy and Resources

Energy

#### Thomson East Coast Line 3, Land Transport Authority of Singapore

Civil engineering, civil structural engineering, geotechnical, tunnelling, rail

#### Second Penang Bridge, Jambatan Kedua Sdn Bhd

Bridge and geotechnical engineering

#### Bruce Highway Upgrade, Fulton Hogan Seymour Whyte Joint Venture for the Department of Transport and Main Roads

Highways, bridge and civil structures, geotechnical, civil engineering

Terrigal Boardwalk, Central Coast Council

Maritime

Greater Jakarta Commuter Rail Revitalisation

Rail

"Our firm invests in people, and I look up to our leaders who started out as graduates and are now project directors, team leaders and board members."

Humza Tariq Graduate Engineer Melbourne

## Technical consulting

Our technical consulting team is a community of practitioners across many disciplines. Our experts are leaders in their fields, pushing the boundaries of what clients can expect in specialist fields as diverse as materials science, building physics, acoustics and geotechnics.

We offer the following disciplines in our early careers programmes:

**Acoustics consulting** 

Audio visual and multimedia

Façade engineering and diagnostics

Fire safety engineering

**Theatre consulting** 

Lighting design

**Geospatial and earth observation** 

**Materials** 

Wind engineering

Advanced technology and research

#### What will I be doing?

You will work across a range of different projects using your technical skills to make the unseen changes that can transform daily experiences in diverse environments. You will develop expertise in your specialist field and offer strategic advice on concept development all the way through to construction documents and on-site support, in a team with unparalleled creativity backed by technical excellence and experience.

#### Our work and clients

Sydney Modern: The Tank Acoustic Design, Art Gallery of NSW

Acoustic consulting

ACMI Centrepiece Exhibition:
The Story of the Moving Image, ACMI

Audio visual and multimedia, acoustic consulting, lighting design

School of Arts Singapore, Singapore National Arts Council

Theatre consulting, acoustic consulting

Thomson East Coast Line 1, Land Transport Authority of Singapore

Geospatial and earth observation, acoustic consulting

Olkola Cultural Knowledge Centre, Olkola Aboriginal Corporation

Materials

Singapore Flyer, Singapore Flyer Pte Ltd Melchers Project Management

Wind engineering, advanced technology and research

## A future with purpose.

## How will you shape yours?

Applications for our early careers programmes open annually in the following periods:

Graduate Development Programme:

February – March 2024

July – August 2024

Summer Vacation Programme:

July – August 2024

If you would like to register your interest in our early career programmes, please complete the expression of interest form below:

<u>Arup Early Careers Expression of Interest Form</u>

Those registered will be contacted when the next campaign opens.

arup.com