



BECOME A  
**BUILDING  
SERVICES  
ENGINEER**

Design, build and innovate with  
building services engineering



A guide for university  
students in Australia  
and New Zealand

# WHAT IS BUILDING SERVICES ENGINEERING?

Building services engineering offers the potential to build a rewarding career in a sector that is growing in importance and opportunity.

Building services transform the way in which we experience buildings. The services – lighting, heating, lifts, security systems and a host of other technologies – are key to making buildings comfortable and safe for people living and working in them.

It is building services engineers who enable buildings, from homes to hospitals, to function efficiently. They design systems to help manage infection risk in operating theatres, crowds in football stadiums and security in airport terminals. It's their job to ensure these systems operate effectively, sustainably and unobtrusively and blend with the architectural design of the building.

Building services engineers generally work in teams, alongside other built environment professionals to deliver projects for clients. Those clients may be major industries or businesses, global property companies, local authorities or other building owners, such as universities.

Energy consumed in the buildings sector accounts for 20% of the total delivered energy consumed worldwide. Building services engineers therefore have a key role to play in helping us, and our buildings, use natural resources wisely. They help buildings and occupants tackle the new and emerging challenges presented by major issues including global urbanisation, our changing climate and cybersecurity.



Building services engineering is a broad field, covering areas including:

Energy use and technologies

Daylight and artificial lighting

Heating, ventilation and air conditioning

Water, drainage and plumbing

Escalators and lifts

Communications technology

Protective systems – for fire, security and other risks



# REALISE YOUR POTENTIAL

By becoming a building services engineer, you'll have the chance to develop a range of skills and talents, realise your potential and pursue career opportunities in Australia, New Zealand and overseas. At the same time, you'll have the satisfaction of knowing that you're making a difference to the way people live and work in buildings, and to the environment.

Construction is a global industry, so it is fairly commonplace for building services engineers to travel not only across Australia and New Zealand, but also further abroad for business. Opportunities could range from working on skyscrapers in Dubai or the USA, to meetings with manufacturers in Germany or China to discuss innovative environmental technologies for buildings.

The industry has many career paths, progressing through such roles as project engineer to senior manager, director or partner – or you may want to establish your own business. Building services engineering offers you the chance to pursue your career goals.

## TYPICAL SALARY LEVELS

*\*Based on Connexus  
Recruitment 2022  
Salary Guide*

  
**\$60K-  
\$67K**

For a new  
starter

  
**\$145K-  
\$170K**

For an Associate  
Chartered  
Engineer

  
**\$180K-  
\$300K**

For a senior  
manager/director

## TYPICAL WORKING LIFE

The work of a building services engineer may typically include:



Scoping out a new building project with its architects



Solving engineering problems using latest design, modelling and visualisation software



Presentations to potential and existing clients



Guiding an installation team on site



Managing the operation and maintenance of building services in a completed facility



Site visits to see how designs are working in practice

## HOW THEY GOT THERE



### SIAN WILLMOTT

*Principal Sustainability Consultant*

**Career path:** Studied full time at Victoria University (Bachelor of Architectural Engineering); before starting a career at a global multidisciplinary consultancy as a sustainability consultant. Has worked as a sustainability consultant for the last 8 years.

**Sian says:** “My role is diverse; and opportunities ever changing; I love working with clients to help them understand how they can make a positive influence on people and places.”



### JERRIN PIUS

*Mechanical Engineer – Building Services*

**Career path:** Studied BE(Hons) in Mechanical Engineering at The University of Auckland. I discovered the potential of Building Information Modeling (BIM) in construction and thus I was captivated into building services.

**Jerrin says:** “The role we play has a significant impact on the lives of everyday people. As we live in a fast-moving society, it encourages us to be innovative problem solvers, which is what I like about building services.”



### IAN VAN EERDEN

*Group Manager Sustainability*

**Career path:** Studied renewable energy engineering and worked in compliance and policy for government before moving into building services consultancy and sustainability.

**Ian says:** “I love my job because I get to see how my involvement in projects helps solve problems and make buildings perform better, environmentally, socially and economically.”

# APPLY FOR STUDENT MEMBERSHIP

Apply online at: [www.cibse.org/ANZstudent](http://www.cibse.org/ANZstudent)

PERSONAL DETAILS	COURSE TUTOR DETAILS
Title <input type="text"/> First Name(s) <input type="text"/>	Please provide details of your course tutor or head of department who can verify, if required that you are registered on the below course of study:  Name <input type="text"/> Email <input type="text"/> <input type="text"/> Telephone <input type="text"/>
Surname <input type="text"/> DOB <input type="text"/> / <input type="text"/> / <input type="text"/>	
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Mobile No <input type="text"/>	

I am studying Full time  Part time

NB. Fee applies for P/T students. If P/T is selected we will email a form for credit card payment.

University or College	Full title of qualification	Award	Date course commenced	Course duration	Date qualification due to be obtained	Mode of Study (F/T, sandwich, etc.)
eg UNSW	Electrical Engineering	BEng (Hons)	01.03.2018	3 years	01.12.2020	P/T
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## APPLICANT'S DECLARATION

I certify that the information in this application and supporting documents is correct.

Signature

Date  /  /

NB. In the event of it coming to light that information supplied on this form is inaccurate, CIBSE reserve the right to withdraw membership of the Institution and discipline the applicant under the Code of Professional Conduct.

## DATA PROTECTION PREFERENCES

The information you provide in this application will be used by the Chartered Institution of Building Services Engineers (CIBSE) and CIBSE Services Ltd for management of your membership of the institution, its Societies (divisions), Groups and Networks, and provision of services which are included in the benefits of membership. Upon being accepted in to membership CIBSE will communicate to you about related member benefits and services via email, you can manage your preferences at [www.cibse.org/mycibse](http://www.cibse.org/mycibse) and you can opt out at any time. If you are happy for CIBSE to contact you by other methods please opt in below:

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Phone

SMS

For more information on how we use your data and the procedures we have in place to safeguard it please visit [www.cibse.org/privacy](http://www.cibse.org/privacy)

Please submit your application via email to [membership-apps@cibse.org](mailto:membership-apps@cibse.org)

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# SET YOUR CAREER ON TRACK FOR SUCCESS

The Chartered Institution of Building Services Engineers (CIBSE) is the professional body for building services engineers and accredits some degree courses. You can start your route by studying in an engineering discipline and applying for CIBSE student membership – Free to full-time students.

Once you have gained work experience in a Building Services Engineering field you can apply for Chartered Engineer status and corporate membership.

CIBSE offers a variety of routes to become Chartered depending on work experience and qualifications. Candidates who do not hold a Masters qualification can still gain corporate membership and Chartered Engineer status via the alternative route by demonstrating relevant experience.

CIBSE also has a mutual recognition agreement which allows members of Engineers Australia (EA) or IPENZ to 'fast track' into CIBSE corporate membership.

More information: [www.cibse.org/join-cibse](http://www.cibse.org/join-cibse)

## CIBSE BY NUMBERS



**20,000**

Members of the  
Chartered Institution of  
Building Services  
Engineers

**94**



Countries around the  
world where CIBSE  
members can be found



Knowledge sharing  
groups that CIBSE hosts  
for members or non-  
members. They include  
the Young Energy  
Performance Group



CIBSE's history dates  
back to this year, when  
the Institution of Heating  
and Ventilating Engineers  
was founded

# WANT TO KNOW MORE?

## CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

The Chartered Institution of Building Services Engineers (CIBSE) is the professional body for building services engineers. CIBSE approves courses and work-based training programmes, providing routes to professional registration and membership. It is a global network, providing professional support to building services engineers, and sets the criteria for best practice in the profession.

**Check out: [www.cibse.org.au](http://www.cibse.org.au)**

## WOMEN IN BUILDING SERVICES ENGINEERING (WiBSE)

CIBSE's WiBSE network has been established to support and encourage women who are joining, working and progressing in the building services sector. Membership is free, and you don't have to be a CIBSE member in order to join. The network is open to men as well as women.

## CIBSE YOUNG ENGINEERS NETWORK (YEN)

The CIBSE Young Engineers Network (YEN) is a network of regional centres aimed at young professionals. There are no costs or strings attached to membership, and you don't have to be a CIBSE member to join – although you can begin your CIBSE membership as a Student. CIBSE YEN has its own LinkedIn networking group, while its regional centres organise a range of activities including technical tours and social events. CIBSE YEN has regional centres across the ANZ as well as overseas.

**Check out: [www.cibse.org/YenANZ](http://www.cibse.org/YenANZ)**



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