



The road to Chartered Status



be more...

do more...





The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill




Destination



ENGINEERS
AUSTRALIA

How many different designations
of membership are there in
Engineers Australia?



Professional Engineer	Engineering Technologist	Engineering Officer
FIEAust	TFIEAust	OFIEAust
MIEAust	TMIEAust	OMIEAust
GradIEAust	GradTIEAust	GradOIEAust
		



Professional Engineer	Engineering Technologist	Engineering Officer
FIEAust	TFIEAust	OFIEAust
MIEAust	TMIEAust	OMIEAust





The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill



Destination



ENGINEERS
AUSTRALIA

To achieve Chartered status, the applicant must demonstrate the achievement of appropriate occupational competencies....

...in the first instance by producing an EPR which addresses the competencies defined by Engineers Australia in the National Generic Competency Standards.



The National Generic
Competencies are
structured in UNITS and
ELEMENTS

There are two types of
UNITS of competency:

Compulsory Units

Elective Units



THE COMPULSORY COMPETENCIES

PC1 Engineering practice

PC2 Engineering planning and design

PC3 Self management in the engineering workplace



THERE ARE 3 COMPULSORY UNITS OF COMPETENCE. THE COMPULSORY UNITS AND THEIR RESPECTIVE ELEMENTS ARE:

UNIT PC1 ENGINEERING PRACTICE

- PC1.1 Presents and Develops a Professional Image
- PC1.2 Pursues Continuing Professional Development
- PC1.3 Integrates Engineering with other Professional Input
- PC1.4 Develops Innovative Engineering Solutions
- PC1.5 Identifies constraints on Potential Engineering Solutions



THERE ARE 3 COMPULSORY UNITS OF COMPETENCE. THE COMPULSORY UNITS AND THEIR RESPECTIVE ELEMENTS ARE:

UNIT PC2 ENGINEERING PLANNING & DESIGN

- PC2.1 Interprets and Scopes Design Requirements
- PC2.2 Prepares Concept Proposal and seeks advice on latest Technology
- PC2.3 Implements Planning and Design Process
- PC2.4 Reviews the Design to Achieve Acceptance
- PC2.5 Prepares and Maintains Documentation during the Design Process
- PC2.6 Reviews Design Outcomes in Operation



THERE ARE 3 COMPULSORY UNITS OF COMPETENCE. THE COMPULSORY UNITS AND THEIR RESPECTIVE ELEMENTS ARE:

UNIT PC3 SELF MANAGEMENT IN THE ENGINEERING WORKPLACE

PC3.1 Manages Self

PC3.2 Works Effectively with the Team

PC3.3 Manages Information

PC3.4 Manages Work Priorities and Resources

PC3.5 Facilitates and Capitalises on Change and Innovation

PC3.6 Establishes and Maintains Business Relationships with Client/Stakeholder/Supplier/Regulator



ELECTIVE UNITS

There are seven elective units - two are required to be addressed

PE1A Engineering Business Management

PE1B Engineering Project Management

PE2 Engineering Operations

PE3 Materials / Components / Systems

PE4A Environmental Management

PE4B Investigation and Reporting

PE5 Research / Development / Commercialisation





The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill



Destination



ENGINEERS
AUSTRALIA

PREPARING THE CER's OF YOUR EPR

For each CER:

- **Select** a posting or task to write about that will demonstrate your engineering skills and competencies
- **Give** the CER a "Job Title" and indicate the time period
- **Plan** the Structure for your CER for the narrative to flow in logical sequence
- **Write** in first person singular to clearly define your roles and responsibilities
- **Avoid** many letter Acronyms
- **Edit** your CER, checking spelling and grammar for a good and professional presentation



SUGGESTED STRUCTURE FOR A CER

- Introduction the posting or task you will write about
- Overview of how you will undertake the posting or task
- Define your role and responsibilities together with your interactions with other Engineers
- Describe the work, emphasising the problems encountered how resolved, judgements made, decisions taken, advice sought, outcomes.
- Conclusion, posting / task outcomes, successes, lessons learned, deliverables





The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill



Destination



ENGINEERS
AUSTRALIA



CPD

The theory of CPD is that every professional, whatever career she or he has chosen, should continue to learn about their profession for the whole of their working life.

As a CPEng you will be required to keep an auditable log demonstrating that you have undertaken at least 150 weighted hours of CPD over any three year period.



CPD Log

Summary of activities
claimed as continuing professional development 2001

				Time	
Date	Type	CPD activity/topic/provider	Actual	Weighting Factor	Weighted Hours
17 Apr	C	CPEng Workshop/ IEAust	2	1	2
20 Apr	B	Read "Engineers Australia"	1.5	0.5	0.75
23 Apr	A	Attended MBA lecture/ Curtin	3	2	6
30 Apr	A	Attended MBA lecture/ Curtin	3	2	6
30 Sep	B	Read "Engineers Australia"	1.5	0.5	0.75
TOTAL HOURS FOR YEAR					86



Weighting factors



A Formal education and training activities	2
B Informal learning activities	0.5 – 1
C Conferences and meetings	1
D Presentations and papers	10 – 50
E Service activities	1 (max 10)
F Industry involvement (academics)	1



The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill



Destination



ENGINEERS
AUSTRALIA



National Professional Engineers Register

- Engineers Australia, in a joint initiative with ACEA and APESMA have established a simple, uniform database, **National Professional Engineers Register (NPER)** to which the public can refer when identifiable Engineering Skills are required.





- **NPER** identifies Members and Non-Members whose academic qualifications, cumulative and current experience and Continuing Professional Development (subject to audit) are of the standard considered appropriate for independent Professional Practice in their field of expertise



- The National Engineering Registration Board (**NERB**), with representation from State and Territory Government and several other National Organisation, is responsible for the operation of **NPER**

**NPER is administered by
Engineers Australia**





The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill



Destination





Code of Ethics

Chartered Engineers need a **Code of Ethics** because they can have a significant influence and impact on:

- the **Environment**
- the **Life, Health and Welfare** of the Community.



Code of Ethics

Chartered Engineers practice in accordance with Engineers Australia's **Code of Ethics** because they:

- work **independently and are self regulatory**
- are **free thinkers, creative and innovative**
- practice engineering according to **sound engineering principles**
- conduct business in a **professional manner**





Ethics in engineering

Members of **Engineers Australia** are bound by its **CODE of ETHICS**.

Chartered Engineers have earned the respect of the Community and continue to do so not only by **practicing** but to be **seen to be practicing** according to the **Code of Ethics**



The Cardinal Principles of the Code of Ethics are



1. To respect the inherent dignity of the Individual
2. To act on the basis of a well informed conscience
3. To act in the interests of the Community
4. To uphold its Tenets

The nine tenets...

1. Responsibility to the community
2. Act with honour and dignity
3. Act only in areas of competence
4. Act with honesty, good faith and without discrimination
5. Apply skills in the interests of employer



The nine tenets...

6. Inform self, clients and employers of social, environmental and economic consequences
7. Give evidence only on basis of adequate knowledge
8. Continue to learn (CPD)
9. Do not assist in or induce a breach of the Code of Ethics



Breaches of the Code...

Preliminary review by the Chief Executive

Convene Complaints Board

Range of sanctions:

Admonition or reprimand

Fine

Suspension or expulsion

Withdrawal of registration

Obligation to work under supervision





The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill



Destination



ENGINEERS
AUSTRALIA



Down the final hill...

- ⦿ Your **APPLICATION**
 - original plus 2 copies
- ⦿ Certified evidence of Academic Qualification/s, if you are not GradIEAust. Or MIEAust.
- ⦿ Verified EPR or assembled endorsed CER's
- ⦿ Your CV and evidence of CPD
- ⦿ Completed Application Form (3 Pages)
 - College Nomination and NPER
 - Declaration
- ⦿ Lodgement Fee





The road to Chartered Status

Membership



Competencies

Writing reports



Keep up-to-date

Registers



Ethics

Final Hill



Destination



ENGINEERS
AUSTRALIA



Destination

THE PROFESSIONAL INTERVIEW

- ◆ Peer review by a panel of experienced Engineers of your Discipline and Area of Practice
- ◆ You give a 15-minute uninterrupted presentation
- ◆ Your peers will test your depth and breadth of engineering knowledge over approximately 30 minutes
- ◆ We test your understanding and appreciation of the Code of Ethics
- ◆ You have a short wait while the formal assessment is carried out





Success!

CATHY FREEMAN



The road to CPEng

Safe journey!

