

9 July 2018



Research Student Application Details

Family Name: Cooper **Given Names:** Afsaneh

Student Number (if known): M056216

Undergraduate Education Details

1. **University:** Sharif University of Technology **Country:** IRAN

Degree Type/Major: Bachelor's degree in Mechanical Engineering / Solids Design

Year completed: 1984

Ranking amongst peers: # 20 out of # 100 in program; **Source:** Referee Report by Dr Rad [Head of Mechanical Engineering] stating I was the top 20% of my Graduate Class in my B.Sc. in Mechanical Engineering.

(e.g. transcript)

Ranking of University: # 95 out worldwide; # One [in engineering specialty] in country; Source: Website of www.en.sharif.edu/

and:

<https://www.usnews.com/education/best-global-universities/search?country=iran®ion=asia&subject=engineering>

<http://cwur.org/2017/iran.php>

<http://www.shanghairanking.com/Shanghairanking-Subject-Rankings/mechanical-engineering.html>

<http://webometrics.info/en/Asia/Iran%20%28Islamic%20Republic%20of%29>

(e.g. the ARWU at www.shanghairanking.com or the QS ranking at www.topuniversities.com)

Honors Category Awarded: [Note: this information agrees with my transcript]

Category: (e.g., Honors 1)	H2A	Threshold: (e.g. 85%, 3.7GPA)	72% [B.Sc. GPA] Or 14.38 out of 20
-------------------------------	------------	----------------------------------	---

Note: The top student of our class graduated with GPA=83%, mine was 72%. Please refer to Audio tape for my grades adjustments by typing **CD10** in search box of www.ewindfly.net

Overall undergraduate GPA/WAM: 14.38 out of 20 Or 72%

GPA/WAM/Percent (Final year): 15.42 out of 20 Or 77.1%

9 July 2018

Relevant technical subjects undertaken [for Educational, Project Management and CAD relevant units Please ask for File: Qualifications Steam Table at interview]:

[Typically includes at least all subjects in the final 2 years of your program, excluding only cultural or general studies]

English Name of Subject Taken	Year (1,2,3,4...)	Mark/GPA (e.g. 80%, 17/20, A+)	English Name of Subject Taken	Year (1,2,3,4...)	Mark/GPA (e.g. 80%, 17/20, A+)
Machine Design I	3	92%	Fundamentals of Electrical Engineering II	4	86%
Engineering Graphics I	1	90%	Mechanic of Solids III	3	85%
Fundamentals of Machine Design I	3	90%	Special Workshop II	2	85%
Machine Tool Design	4	90%	Workshop I	1	80%
Fundamentals of Electrical Engineering I	3	83%	Fluid Mechanics Lab	4	75%
Fundamentals of Machine Design II	4	81%	Project: Gearbox Design by Computer	4	75%
Engineering Design Methods	5	80%	Turbomachinery	3	75%
Special Workshop I	2	80%	Fluid Mechanics I	2	73%
Machine Elements Design II	4	80%	Strength of Materials Lab I	3	71%
Dynamic Machine Lab	3	71%	Dynamics II	4	68%
Automatic Control	4	71%	Material Science	4	65%
Strength of Material Lab I	3	71%	Fluid Mechanics II	3	65%
Engineering Graphics II	2	70%	Mechanics of Solids I	3	63%
Mechanic of Solids II	3	70%	Measurement and Control Systems	5	60%
Properties of Materials	2	68%	Workshop II	1	58%
Dynamic Systems I	3	68%	Kinematics of Mechanisms	2	55%
Bearing & Lubrication	4	68%	Dynamic of Machinery	3	55%
Mechanisms Design	4	53%	Statics	2	50%

Scholarships held during undergraduate study: __All my fees were free [it was loan given by University to students with above average GPA], I got my stationary, books, travel expenses from home to University and my lunch cost at University canteen.

9 July 2018

Awards received: several letters of praise and encouragement from university and professors whom I worked with were received, which are attached as “**Referee Reports**”. You can click on the relevant link by typing **CD10** in search box of **www.ewindfly.net**

2. **College:** North Metropolitan TAFE [previously Central Institute of Technology] **Country:** Australia

Qualification Type/Major: Diploma in Engineering Technical-CAD (Mechanical)

Year Started: July 2010

Year deferred: Sept 2010

EFTSL=0.5 year [out of 1 year]

Also, I studied two more units in AutoCAD at South Metropolitan TAFE during 1998-99. In 2010 I studied AutoCAD 2D and SolidWorks 3D, Also I studied MS Office [Word, Excel, Access, PowerPoint,

3. **College:** South Metropolitan TAFE **Country:** Australia

Qualification Type/Major: Certificate IV in Training and Assessment [teaching Mechanical Engineering (AutoCAD, SolidWorkd & TurboCAD) to College students]

Year Completed: July 2016

EFTSL=0.5 year [out of 0.5 year]

4. **College:** South Metropolitan TAFE **Country:** Australia

Qualification Type/Major: Certificate IV in Project Management Practice

EFTSL=0.45 year [out of 0.5 year]

Postgraduate Education Details

5. **University:** Shiraz University **Country:** Iran

Degree Type/Major: Master’s degree in Mechanical Engineering / Applied Design (Aerospace)

Year completed: 1988

Ranking amongst peers: # 2 out of # 6 in program; **Source:** Dr Mohammad Mehdi Alishahi [then head of Mechanical Engineering Department. He was my Master’s Thesis supervisor and is still working there.]

(e.g. transcript)

Ranking of University: # 801 worldwide; # 6 in country; **Source:**

<http://cwur.org/2017/iran.php>

https://en.wikipedia.org/wiki/Shiraz_University

<https://www.timeshighereducation.com/world-university-rankings/shiraz-university>

<http://www.webometrics.info/en/Asia/Iran%20%28Islamic%20Republic%20of%29>

GPA/WAM (if applicable): 14.70 out of 20 or 74%

(e.g. Times Higher Education Rankings)

9 July 2018

Research component: 25% of total credits in M.Sc. course but in time, it was 43% or 1.5 years out of 3.5 years full time course (e.g. research project might represent 25% of a coursework masters)

Scholarships held during postgraduate study: All my university fees in 3.5 years full time study for this M.Sc. degree was free paid by Iranian government. My lunch at University restaurant was free and as well as my books and transport cost and pocket money were paid to me monthly by government.

Awards received: I received several Referee Reports from Shiraz University lecturers who taught me in class or supervised my research projects, but the Award from my M.Sc. supervisor was a high distinction grade of 83% [16.5 out of 20] for my M.Sc. thesis by research and Shiraz University Graduate Education office paid for publication of my Thesis Book of 320 pages which includes 185 pages texts and 2,820 lines of computer program. This book is bound by black leather cover, is professionally typed by a University typist and the Thesis committee whom were present for my assessment signed my Thesis book. The thesis was considered a very hard work. I studied two years full time course work and did 1.5 years full time research work including computer programming to complete my master's degree and graduate. Please see master's degree course document by **typing CD10 in search box of www.ewindfly.net**

6. **University:** Murdoch University **Country:** Australia

Degree Type/Major: PhD degree in Energy Storage Engineering / Flywheel for Wind Turbine

Year Started: Feb 1990 **Year Withdrew:** Oct 1994 **EFTSL:** 2.75 years

Ranking amongst peers: # 20 out of # 100 in program; Source: Prof Philip Jennings, Head of Physics and Engineering Department and my PhD supervisor, and graduate of Harvard wrote in his referee report for me to Monash University that I was top 20% among his students in rank. See it among my referee reports documents.

Ranking of University: # top # 201-250 in Education and Training, QU WUR by Subject:

<https://www.topuniversities.com/universities/murdoch-university>

7. **University:** Murdoch University **Country:** Australia

Degree Type/Major: Graduate Diploma in Education – Secondary Computing

Year Started: Jan 2000 **Year Withdrew:** Aug 2001 **EFTSL:** 0.65 Year [out of 1 year]

8. **University:** Edith Cowan University **Country:** Australia

Degree Type/Major: Graduate Certificate in Education – Teaching English to Speakers of Other Languages [TESOL]

Year Started: Feb. 2017 **Estimated completion year:** Dec 2018

EFTSL: 0.25 Year [out of 0.5 year]

Publications (list authors, in order, "title in quotes", *journal/conference in italics*, publisher, year, page numbers)

Please **type CD10 in search box of www.ewindfly.net** to see **web page: Certified Documents of Afsaneh Cooper**, near the end of the Web page you would find "**Publication**" title and the relevant file to download.

9 July 2018

Research Experience (projects, your involvements and contributions)

Please see list of my "Research Capabilities and Research Experiences" by typing CD10 in search box of www.ewindfly.net and see web page: **Certified Documents of Afsaneh Cooper**, near the end of the Web page you would find "**Research Capability**" and the relevant files to download

I am Interested in Applying at Deakin for: (place an "X" at the relevant entry)

ME: _____

PhD: X

ME/PhD: _____

My Research Area of Interest is:

1. "Energy Generation, Conversion and Storage Engineering",
2. Wind Power and Energy Storage Systems Engineering (excl. Solar Cells),
3. CAD/CAM Systems, eLearning,
4. "Higher Education and Workplace Technical Training",
5. Innovation and Engineering Project Management,
6. Mechanical Engineering,
7. Advanced Finite Element Analysis
8. Electrical Engineering,
9. Risk Engineering,
10. Knowledge Representation and Machine learning,
11. Technical Writing,
12. Nanotube material

Other: eFactory for Flywheel Energy Storage for the Vertical Wind Turbine and Rail Car – Solid Modelling, Simulation and Optimization and Reverse Engineering

I have identified the following potential supervisors for this research:

I have found some academics in other Australian Universities who have sent me written agreement that they can work as my Co-Supervisors. Also, I have found all required academics from some overseas universities that they have written to me they can work as my main supervisors. I decided to stay in Australia or in Iran and choose a University which can offer me a main supervisor for this covering letter's content. After I found that supervisor, then among the 7 PhD Proposals recently I have written I choose the relevant content to mix and a mutually agreed PhD Proposal I write for the confirmed main supervisor with a proper university in Australia or overseas, which is prepared to do research in advanced engineering topics. This covering letter can be sent to potential supervisors which **Project Sponsor at University** finds suitable. I would write a PhD Proposal after the main supervisor is determined by the Project Sponsor. All

9 July 2018

my PhD proposal have Industry support which would be discussed in detail after the main supervisor was determined by the University.

Scholarship requirements:

I will need a tuition fee scholarship/waiver: _____ (place an "X" here if essential)

I will need a full scholarship with living allowance: _____ (place an "X" here if essential)

I already have a scholarship: Centrelink pays me \$877 per fortnight until my study finishes, also Centrelink International would pay for my living expenses in overseas country [one out of 30 in their list] if I study full time in those countries. Endeavour Scholarship and Fellowship needs a conditional letter of enrolment from University to pay all cost of living, fees and trip costs for up to 10 countries in their list if my Project requires advanced research and Equipment in overseas universities, which I need to attend. I have found three overseas universities who are willing to admit me. There are constraints for **Endeavour scholarship and Fellowship** which I would discuss this in interview.

Note: EFTSL means Equivalent to Full Time Study Load

9 July 2018

Reference for the template: UNSW Covering letter of PhD Applicant to the Potential Supervisor