# Becoming a Preferred Graduate in Mechanical Engineering



Preferred Graduate Checklist + Reflective Note = Your Story of Becoming a Preferred Graduate

#### **Your Story of Becoming a Preferred Graduate**

Monitoring your development and reflecting on your experience help you become better. The checklists and templates in this document are specially designed to help you monitor and reflect on your status as a preferred graduate.

#### How?

- 1. Use the *preferred graduate checklist* to check your status as a preferred graduate at regular intervals (e.g. every year / semester)
- 2. *Reflect* the guidelines in the reflection templates will help you and write down your reflections, thoughts, ideas, plans...

Write your story,

Live your story!



#### **Preferred Graduate Checklist**



What is a Preferred Graduate in Mechanical Engineering? See table below.

Why are the qualities of a Preferred Graduate important? Read the first column carefully.

Nature of the Mechanical Engineering discipline	Qualities of the Preferred Graduates in the discipline	How far am I from being a Preferred Graduate?
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would there be in your bucket?'

A B C D E
Circle one.

'How much water

Mechanical engineering is about improving the performance of different machines such as car engines, household appliances, industrial machines, jet engines, etc. One must understand that this field is general and involves many different areas.	Understand mathematics and engineering concepts in general	ABCDE	1
Because the mechanical engineering field contains many areas, a mechanical engineer cannot specialise in all of them. Instead, he or she must know about the whole field and specialise only in a few areas.	Have specialised knowledge in chosen areas of engineering	ABCDE	2
Factors such as cost, comfort, safety, environmental concerns, etc. are as important as the technical (技術上) issues in machine design and analysis.	Have general knowledge of economics, social, human and environmental sciences, etc.	АВСDЕ	3
Calculations are important in mechanical engineering, but the physical interpretation (解釋) of numerical results (數字答案) are even more important.	Able to explain the meaning of numerical results	ABCDE	4

Continued on the next page...



Nature of the Mechanical Engineering discipline	Qualities of the Preferred Graduates in the discipline	How far am I from being a Preferred Graduate?	
When doing a job, mechanical engineers often work as a team. Therefore, they must have strong communication and teamwork skills.	Have strong communication and interpersonal skills	A B C D E	5
	Able to be a team player	A B C D E	6
Since a team must have leaders, mechanical engineers have strong leadership skills.	Able to be a leader	A B C D E	7
In mechanical engineering, for every problem there are usually several possible solutions. To	Open-minded	A B C D E	8
get the best result, it is necessary to first consider (考慮到) all possible solutions before deciding on the best one.	Have critical thinking (思考) and analytical (分析) skills	АВСDЕ	9
	Have problem solving skills	A B C D E	10
Mechanical engineering often involves creatively applying an old technology to a new situation to produce new results.	Creative	ABCDE	11
Since the mechanical engineering field changes everyday, mechanical engineers must learn through a lifetime. They are committed in continuous professional development (CPD).	Have independent and life-long learning skills	АВСDЕ	12
A mechanical engineer understands the direction the world is going towards and tries to lead that direction.	Have a global view (掌握國際趨勢)	АВСDЕ	13
Mechanical engineers must observe the ethical standards of the profession. They also weigh (衡量) fairly the limitations (極限) of the	Be responsible for the actions taken	АВСDЕ	14
products and technologies that are developed.	Able to see both the positive and negative sides of everything	A B C D E	15

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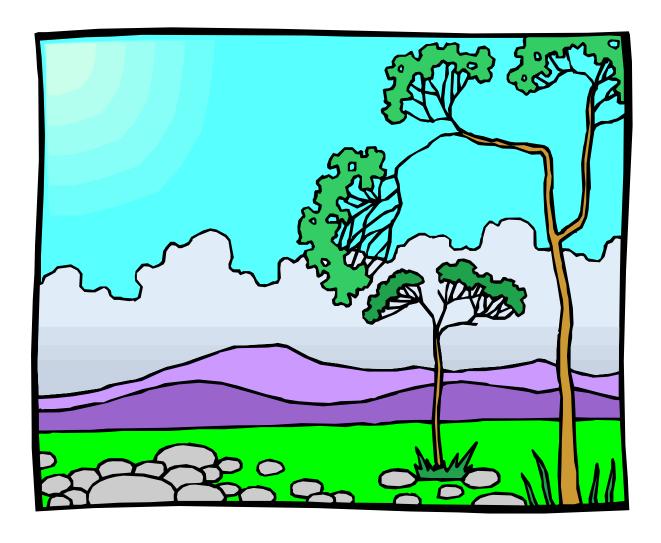


## Your first time... with the preferred graduate checklist

Now that you have completed the preferred graduate checklist for the first time, what have you learnt about your discipline? What have you learnt about *yourself* as a future professional in that discipline? How prepared are you? What do you need to work on? How...

- 1) Assess your status as a preferred graduate by completing the preferred graduate checklist.
- 2) Write on next page your reflections and plans regarding your development as a preferred graduate.

NUC	M	y Reflections	Today is
3/10	<ul> <li>Is being a professional in your field like what you have expect</li> <li>What qualities do you need? What qualities do you have?</li> <li>How do you plan to develop the qualities you need?</li> </ul>		you have?



### One year has gone... How far have you gone?

It has been some times since you last completed a preferred graduate checklist, how far have you progressed since then? What qualities have you developed or need to develop? What new goals will you set for the coming year?

- 1) Assess your status as a preferred graduate by completing the preferred graduate checklist.
- 2) Write on next page your reflections and plans regarding your development as a preferred graduate.

SVO	M	y Reflections	Today is
3/15	@ @ @	Have you achieved the goals that you set last tin Are the strategies that you have used to develop What do you need to work further on?	ne? relevant qualities effective?

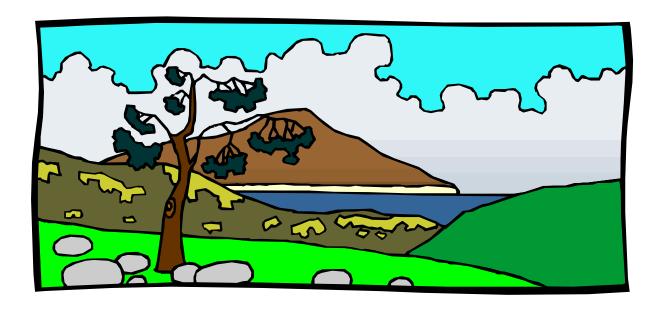


### The time is coming closer ... Let's give it the finishing touch

You are now only one year from your becoming a professional, how far left do you have to go? What steps do you need to take to get there (in terms of competence rather than qualification)? What would be your focuses this year?

- 1) Assess your status as a preferred graduate by completing the preferred graduate checklist.
- 2) Write on next page your reflections and plans regarding your development as a preferred graduate.

My Reflections	Today is
<ul> <li>What qualities remained to be developed?</li> <li>What learning difficulties have you encountered?</li> <li>How would you plan this year in relation to your</li> </ul>	How could they be overcome? career development?



### Finale... Are you ready?

At last, you are here, up on a hill looking at the prospect that lies in front of you, seeing all the challenges and opportunities. After all these years, what have you learnt about yourself? Are you ready?

- 1) Assess your status as a preferred graduate by completing the preferred graduate checklist.
- 2) Write on next page your reflections and plans regarding your development as a preferred graduate.

My Reflections	Today is
<ul> <li>What do you know about your strengths a</li> <li>How well do you know yourself as a learn</li> <li>What will you bring with you from your u</li> </ul>	ner, a professional, and a person?