# The Ultimate Guide for PhD Application

If you are interested in joining the group, admission to the group is straightforward, assuming you are a qualified, hardworking and highly motivated student.

### Step 1: Contact Prof Barbaros

Please email your CV to Prof Barbaros (<u>barbaros@nus.edu.sg</u>) and try to emphasize and answer the following questions in the email.

- 1. Why do you want to do PhD in specifically in Prof Barbaros' group?
- 2. What project/which area do you want to work on?
- 3. How does your background/experience fit into our research?

That would be most helpful. Note that generally speaking all PhD students admitted into the Programme will be automatically awarded a full PhD scholarship for 4 years, and unlike the United States, do not require any financial support from the professor.

## Step 2: Choose Programme: Physics, MSE, NGS or PhD-MBA

Prof Barbaros is a PI in both Department of Physics and Department of Materials Science and Engineering (MSE). You can apply to either department. In addition, you can also apply to NGS (NUS Graduate School of Integrative Sciences and Engineering) and NUS PhD-MBA programme. The **deadlines**, **scholarships** and **coursework** vary from one programme to another. Therefore, it is very important to decide which programme to apply to, before submitting the application. You can apply to different Programmes and different scholarships at the same time.

Programme	Duration	Duration Scholarships	
<u>Physics</u>		NUS Research Scholarship	
MSE	4 Years	President's Graduate Fellowship	
		Lee Kong Chian Graduate Scholarship	
		SINGA Scholarship	
NGS		NGS Scholarship	
		A*STAR Graduate Scholarship	
PhD-MBA	5 Years	PhD-MBA Scholarship	

#### Scholarships

#### **NUS Research Scholarship**

If you choose either Physics or MSE, you will at least get the basic NUS Research Scholarship, which gives you a monthly stipend of S\$ 2000 before QE and S\$ 2500 after QE. QE is an oral qualifying exam to present your research work, generally taking place 12-18 months of admission.

#### President's Graduate Fellowship and Lee Kong Chian Graduate Scholarship

If you have strong track record of academic performance (high GPA/ranking) and/or research (papers in high impact journals), you can try to apply for President's Graduate Fellowship or Lee Kong Chian Graduate Scholarship. You can also apply for President's Graduate Fellowship after QE, if you only have NUS Research Scholarship. Lee Kong Chian Graduate Scholarship is the most prestigious scholarship in NUS. Only up to 5 new scholarships are awarded each year.

#### NGS Scholarship and A\*STAR Graduate Scholarship

If you choose NGS programme, you choose either NGS Scholarship or A\*STAR Graduate Scholarship. NGS Scholarship is a prestigious scholarship awarded to PhD students who want to do interdisciplinary research with aims for real world applications.

If you intend to take up Singaporean Citizenship, you can apply to A\*STAR (Agency for Science Technology and Research) Graduate Scholarship. Upon graduation, you will be eligible to apply for a 2-year post-doctoral fellowship to further your research training at a top overseas university or research laboratory. Note that there is a 2-year service bond in Singapore-based companies after graduation, for non-Singaporeans. There is no service bond in all other scholarships mentioned in this article.

#### SINGA Scholarship

SINGA Scholarship gives same amount of monthly stipend as NUS Research Scholarship, but it has additional allowance for airfare and settling when you arrive at Singapore for the first time. Different from NUS Research Scholarship, which is offered by NUS, SINGA is offered by the A\*STAR. Therefore, if you have SINGA scholarship, you will have the opportunities to attend some exclusive events.

## **Summary of Scholarships**

	Monthly Stipend			Deadline	
Scholarships	Before	After	Other Benefits	Jan	Aug
	QE	QE		Intake	Intake
NUS Research Scholarship	S\$ 2000	S\$ 2500	None		
President's  Graduate  Fellowship	S\$ 3000	S\$ 3000	Airfare grant of S\$ 750 Settling allowance of S\$ 1000		15 Nov ( <u>Physics</u> ) 1 Nov
Lee Kong Chian Graduate Scholarship	S\$ 3500	S\$ 3500	Airfare grant of S\$ 3000  Computer allowance of S\$ 1500  Book allowance of S\$ 500 (annual)	15 May	( <u>MSE</u> )
NGS Scholarship	S\$ 3000	S\$ 3000	Computer allowance  Book allowance  Conference allowance		15 Jan
A*STAR Graduate Scholarship	\$\$ 3000	S\$ 3000	Computer allowance Book allowance Conference allowance Thesis allowance Overseas attachment (12 months)	(not sure	year when is dline for ntake)
PhD-MBA Scholarship	S\$ 3200	S\$ 3200		15 May	15 Nov
SINGA Scholarship	S\$ 2000	S\$ 2500	Airfare grant of S\$ 1500 Settling allowance of S\$ 1000	1 Jun	1 Jan

The monthly stipends are for international students. Please check the links above if you are a PR or Singapore Citizen. For the full list of scholarships available, please click <a href="here">here</a>.

#### Coursework

#### Written qualifying exam

One key difference is that, if you choose Physics Department, you are required to take a comprehensive written qualifying exam around two months after admission. The coverage of the paper is standard undergraduate physics. The details can be found <a href="here">here</a>. If you don't have a bachelor degree in physics, you are *strongly advised* to apply to MSE Department or NGS.

#### Modules

Another key difference is the course work requirement. If you are under MSE Department, you are required to take 3 mandatory modules: Physical Properties of Materials, Thermodynamics and Kinetics of Materials, and Structures of Materials. These are the only modules provided by the department. The remaining 3 modules can be chosen from other departments, subject to availability and department approval.

If you are under Physics Department, you will have more choices. You are required to take 5 from 20+ modules from the department. You can also choose modules from other departments, but it seems to be more difficult to do so than in MSE. In addition, you will need to take a module for presentation skills called Graduate Seminar module.

If you have NGS scholarship, you can select courses from various departments with less difficulty. The course structure for PhD-MBA is slightly complicated, because you are doing a PhD and a MBA at the same time. Please check <u>this link</u> for the details.

Programme	Written Qualifying Exam	Coursework	
<u>Physics</u>	Yes	1 module (graduate seminar module) + 5 modules from 20+ physics modules	
MSE	No	No 3 compulsory modules + 3 modules from other departments	
NGS	No	6 modules from various departments	
PhD-MBA	No	6 modules from various departments +  8 MBA core modules +  6 MBA electives modules +  2 Internships	

Step 3: Submit Applications

Once you have decided which programme(s) you want to apply, you can start preparing for

the application(s). As mentioned earlier, you can apply to different Programmes and different

scholarships at the same time. However, each application requires separate physical

application package and charges application fee.

Online application:

• For all programmes except for SINGA scholarship, submit online applications via

Graduate Admission System (GDA2): <a href="https://inetapps.nus.edu.sg/GDA2/Home.aspx">https://inetapps.nus.edu.sg/GDA2/Home.aspx</a>

• For SINGA Scholarship, apply via A\*STAR Scholarship Portal: <a href="https://app.a-">https://app.a-</a>

star.edu.sg/sms/applicant/login.aspx

For A\*STAR Graduate Scholarship, please apply in both GDA2 and A\*STAR Scholarship

Portal.

Click <u>here</u> for an instruction for applications via GDA2.

Physical application:

After you submit the online application, you are required to send a physical application to the department you applied for via postal service. You should be able to find the address in

the GDA2 online system or the documents you found on the programme pages.

Checklist for the physical application:

Physics: www.science.nus.edu.sg/images/graduate/application checklist gda21.doc

MSE: http://www.gse.nus.edu.sg/OnlineApplicationInstructions Aug13.pdf

You will be notified the results of the application by email:

For **Aug intake**: you should receive the offer from **March to May**.

For Jan Intake: the notification period is from October to November.

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