STRaight from NUS High School to the NUS Faculty of Engineering, Mr Terry Gani Zhi Hao, 19, will be graduating this year with a B Eng (Chemical Engineering). A student with the Global Engineering Programme (GEP), Terry is the youngest to have obtained a B Eng in the Faculty's history.

Recounting his experience in NUS with a semester spent at UIUC last year as part of the GEP's curriculum, Terry said it has been very positive so far and he did not receive special privileges from his mentors in view of his "tender" age.

"Sometimes, it can be tricky to find conversation topics with the guys who have completed their NS and who are essentially working-age adults at least five years older than I," said Terry.

Terry has always been very fascinated by numbers and by how things worked. He recalled being really interested in encyclopaedias. By early secondary school, he was set on a science or math related career.

"At NUS High School, I had the chance to participate in several research projects including a six-month part time project on microfluidics in the Department of Physics at NUS. I enjoyed these projects and this led me to consider a career in research," recounted Terry.
On his interest in chemical engineering, physics and math, he said: "I found physical chemistry particularly deep, enthralling and in some sense, elegant. I am still very much fascinated by other disciplines like physics and math -- my interest for math has never really waned. I decided on chemical engineering just after I graduated from NUS High. I was very interested in the core ideas of chemical engineering -- how large scale processes are developed based on the molecular properties of reactions and the physics of reactors. The catalytic cracker, he said, is a great example. I also appreciated the fact that chemical engineering is a broad based course that would put me in a good position for research that is becoming increasingly multidisciplinary."

**His learning philosophy**

"It may sound cliched but I feel that the best way to learn is to enjoy the subject. Otherwise it would be very difficult to find the motivation. Many people have commented that I spend little time studying. I guess this is partly because I am able to pick up new concepts relatively quickly. I also study in short bursts and spend a lot of time thinking about related (interesting) ideas and problems -- this would be very difficult without the interest. Nonetheless, for some subjects and/or topics there is no shortcut to doing well. This is true with organic chemistry for which I spent a lot of effort getting the foundation right."

After 2 years of NS, Terry will be heading to the Massachusetts Institute of Technology (MIT) this August to pursue a PhD in Chemical Engineering and looks forward to the challenges ahead. His current research interests are in the area of heterogeneous catalysis and he hopes to join the chemical industry as a researcher after graduation, working on the development of novel, environmentally friendly processes.