Singapore, 10 September 2004

NTU to offer new engineering degree in aerospace engineering

The Nanyang Technological University (NTU) School of Mechanical & Production Engineering (MPE) will offer a new aerospace degree. The first of its kind in Singapore, the programme will be launched in July 2005 with an initial intake of 60 students.

The four-year Bachelor of Engineering degree in aerospace engineering is a joint initiative in the College of Engineering, with participation from the School of Electrical & Electronic Engineering and the School of Material Engineering. The new programme aims to produce engineers who are well-trained in the fundamentals of aerospace engineering with in-depth and integrated system view of the field to support the booming aerospace industry. The programme is designed to equip students with the right knowledge and skills for a seamless entry into the industry.
Students with the appropriate grades/qualifications will be admitted directly into the aeronautical engineering degree program in their first year of study. They will share common engineering curricula with other disciplines in the first year. In addition, they will undergo a “Discovery Course” to learn the fundamentals of aeronautical engineering. The curricula for the remaining three years will include core fundamental aeronautical subjects and prescribed specialisations.

The new aerospace engineering degree programme has several unique features. Firstly, relevant subjects are grouped into clusters:

a) aircraft design and manufacturing  
b) aerodynamics and aircraft performance  
c) aircraft maintenance and reliability  
d) aircraft materials and structures  
e) avionic systems engineering

Such manner of clustering serves to equip students with an in-depth understanding of the issues and challenges in various areas of aerospace engineering faced by professionals in the aviation industry.

Students will be given projects that are multidisciplinary in nature and will be tasked to solve open-ended, realistic engineering problems. Such practice-oriented learning is aimed at encouraging lateral thinking. They will also be assigned industrial mentors, in addition to academic mentors, who will provide them with guidance on career prospects and development in the aviation industry.

Responses from the Republic of Singapore Air Force as well as major players in the local aviation industry have been overwhelming, underscoring their unanimous support of the new initiative and the need for such a degree. They have agreed to participate in course presentations and act as resource personnel when the need arises. They have also expressed interest in offering industrial attachments and scholarships for this degree.

*** END ***