Maintaining a competitive edge is difficult. A company has to choose its key areas of technology and/or operations and then out-perform international best practice.

This requires experts in key areas who are abreast of state of the art technology and able to stand above competitors. They must be able to innovate and manage such innovation.

These experts must be able to deal confidently with complex issues by rigorous analysis. They must also be leaders and will have achieved, or be aspiring to, top jobs in industry and business.

Such experts must be developed by both experience and education. The Engineering Doctorate is aimed squarely at speeding up that development.

The highest level of university degree associated with developing experts has traditionally been the Doctor of Philosophy (PhD). However this degree tends to be very academic and narrow in its focus.

The Doctor of Engineering (EngD) has a different emphasis and is better suited to the needs of industry compared to the PhD. It is more flexible and suits senior executives. Participants must be company-employed and credit is given for relevant industrial experience. The essence of the EngD is:

- development of the ability to think in depth, whilst providing innovative solutions to real industrial problems,
- continual broadening as a result of obtaining and applying new knowledge from a modular taught programme.
The Engineering Doctorate (EngD) is a part-time doctorate programme of typically 4 years duration. Admission to the EngD in Hong Kong is normally preceded by a Post-graduate Award (PgA), during which the candidate not only fulfills the requirement of that award, but is also prepared (through additional development work) for potential transfer to EngD at a later date. The PgA will typically take a year for completion, and if to transfer to EngD is successful, credits for this period of study will be carried, resulting in an EngD registration of typically 3 years.

The requirements of the EngD are met primarily through project work which may consist of one or more significant projects. These can cover the whole spectrum of manufacturing industry, i.e. from management to technology. It is important however, that the projects have the potential for innovation and are of significance to the business.

Commitment to the EngD

All participants are registered part time on the degree. It is therefore essential in the case of company employees that their day to day work and their EngD project work are as similar as possible. Attendance on modules varies from two to six weeks per annum depending on the prior qualifications and experience of the participant. In addition, it is best to allow at least one day per month to visit the academic mentor and to attend individual workshops and seminars connected with the EngD.

Assessments for PGA & EngD

The PgA requires the successful completion of 3 MSc level modules, usually within a 1 year registration period. Aside from this, successful transfer to EngD requires a satisfactory assessment of a written assignment, specifically related to the proposed topic of EngD research.

The EngD is assessed by means of a portfolio. This is built up over the period of registration. It includes the post-module work, but its main content is based on the research work. Substantial submissions need to be made at least once per year. The portfolio and the participant are examined by a small panel of industrialists and academics appointed by the University. Graduates are able to use the title Dr.