4.2.9.1 Overview

Research and Development (R&D) have the ultimate aim of creating and applying technology to improve our quality of life. The resources needed for R&D are considerable, so how R&D should be best managed to yield attractive returns on investment? The new Master of Science in Management of Technology (MOT) degree programme specifically addresses this question. It is designed to provide scientists, engineers or technology professionals with business and technology management education, thus equipping them with the “science” of business innovation. The programme facilitates the synergistic integration of business management to engineering to effectively bring high-technology products and services to the marketplace with attractive returns on investments.

The need for training at the postgraduate level in Management of Technology (MOT) has been recognised by top universities in the world. In Japan, a 2003 report highlighted the need for MOT training given Japan’s higher concentration of manufacturing sector compared to US, and has estimated a demand of 10,000 MOT specialists annually for the next five years. As Singapore accelerates more into knowledge-based industry development, the need for well-trained technology managers at all levels are needed to ensure successful innovation, resulting in economic development.

MOT is a multidisciplinary field which interconnects the science, engineering and business management fields. It is called by different titles in different universities such as technology management, engineering management, engineering and technology management, management and systems, etc. The major areas covered are Strategic Aspects of Technology Management, Organisational Aspects of Technology Management, Manufacturing Management, Innovation Policy and Strategy, New Product Development, Management of R&D, and Knowledge Management and Intellectual Property (IP). The Management of R&D and IP Management are important areas unique to the MSc (MOT) programme.

A student may choose to graduate with ONE of the following:

- MSc (Management of Technology) ; or
- MSc (Management of Technology) with specialization in Innovation & Entrepreneurship (offered from Semester 1, AY2014/2015)