2. **AIMS AND OUTCOMES OF THE PROGRAMME**

2.1 Programme Aims

Internet and multimedia technologies are among the key technologies that support the economic growth worldwide. Products with multimedia features such as digital cameras, personal digital assistants, 2G/2.5G mobile phones with built-in cameras, 3G mobile phones, are in great demand and new models are being developed almost everyday. Moreover, with the increasing popularity of wired broadband communications and wireless 2.5G/3G mobile communications, more and more multimedia contents are being created, delivered and shared among users via the Internet. In the years to come, there will be a rapid convergence of computer, communications and consumer electronics. There will also be a need of professionals who possess knowledge in all three areas of computer networks, multimedia signal processing and electronics. The Programme primarily aims to produce graduates that will fulfill such a need by providing sufficient technical training to students for a career in the field of Internet and multimedia technologies. Moreover, the Programme aims to develop all-round students to adapt to the rapidly changing environment. All students will also acquire some form of work-integrated education before graduation.

Specifically, the Programme is designed to equip students with

- the necessary practical skills in the application of Internet and multimedia technologies through hands-on experience and industrial placements;
- an in-depth and up-to-date knowledge of Internet and multimedia technologies;
- the skills to evolve into self-learners who have the necessary foundation to continue to update their expertise;
- fundamental theory and practical skills adaptable to a workplace environment;
- analytical thinking, problem solving, interpersonal and communication skills;
- the ability to develop as creative learners who can work with abstract ideas and implement them in a practical environment; and
- the necessary knowledge and skills to enable them to function in a variety of professional roles.

Upon graduation, students should have acquired sufficient knowledge to commence their careers in the following areas:

- Digital entertainment industry – designing computer games, creating digital effects for movies, planning, installing, configuring and maintaining digital broadcasting equipment.
- Internet-related business – developing applications with multimedia features on networks, particularly on the Internet.
- Data network centres – planning, installing, configuring and maintaining general computer networks.

- Mobile communications and computing – developing applications particularly for the current and future mobile systems that involve much multimedia contents, such as mobile games, mobile video streaming systems, and mobile information systems.

- Electronic industry – developing embedded electronic products with multimedia features, such as electronic toys, electronic educational units, and personal entertainment units.

2.2 Programme outcomes

Programme Outcomes are the attributes of the graduates who have completed the Programme successfully. These qualities are classified into two broad categories. Category A embraces such attributes as knowledge, skills, abilities, attitudes that are related to Internet and multimedia technologies. Category B embraces all-roundedness attributes possessed by the graduates to support their further development as a person.

Category A: Professional/academic knowledge and skills

On successful completion of the Programme, students should be able to:
(i) identify the different aspects of Internet and multimedia systems;
(ii) design and implement digital systems related to Internet and multimedia technologies;
(iii) design and develop digital electronic products related to Internet and multimedia technologies;
(iv) identify, analyze and solve technical problems related to Internet and multimedia technologies;
(v) apply computer programming techniques to solve practical engineering problems;
(vi) apply mathematical techniques to model and solve problems;
(vii) appreciate and identify factors/issues related to product/industrial design; and generate and evaluate design solutions to solve a specific problem; and
(viii) appreciate computer games' designs and complexities; and design, analyze, implement and evaluate computer games.

Category B: Attributes for All-Roundedness

On successful completion of the Programme, students should be able to:
(i) communicate effectively, and present ideas and findings clearly in oral and written forms;

(ii) think critically and creatively;

(iii) demonstrate self-learning and life-long learning capability;

(iv) collaborate effectively with other members in a team, and demonstrate leadership capability;

(v) understand the essence of entrepreneurship;

(vi) realize and appreciate cultural diversity and globalization; and

(vii) recognize social responsibility and ethics.