PROGRAMME OBJECTIVES

This programme is designed for hardware and software designers, R&D managers, practicing engineers, and industry planners who seek an understanding of current approaches and evolving directions for DSP technologies. It is also intended for engineers who anticipate future involvement in this area.

ADMISSION REQUIREMENTS

For those with a good bachelor’s degree in electrical/electronic/computer engineering or equivalent degree in other relevant disciplines as the Board of Graduate Studies may approve.

PROGRAMME STRUCTURE

FIRST YEAR - CORE (Compulsory)

Semester 1
Advanced Digital Signal Processing
Real-Time DSP Design and Applications

Semester 2
Distributed Multimedia Systems
VLSI Digital Signal Processors

SECOND YEAR - ELECTIVE (Choose 4 only)

Semester 1
Statistical Signal Processing
Digital Audio Signal Processing
Speech Analysis and Processing
Image Processing and Pattern Recognition

Semester 2
Array Signal Processing
Probability and Random Process
Video Signal Processing
Adaptive Signal Processing

The requirements for the postgraduate degree include satisfactory completion of four cores and four electives as well as a project. The project is examined by dissertation. The project may be undertaken either in NTU or in industry. There is an alternative to replace a dissertation project by taking one additional elective course plus one smaller-scale project, called Independent Study Module (ISM), which is to be completed in one semester.

PROGRAMME DURATION

The programme is run during evenings. The examinations require attendance during office-hours. Part-Time candidates are expected to obtain their employer’s permission for this before admission to the programme. The coursework and project may normally be completed in one year for full-time students or two years for part-time students, respectively.

Semester 1 (Aug-Dec); Semester 2 (Jan-May)

Weeks 1-14* Lectures
Weeks 16-17 Examinations
Others Vacations
* One week recess

COURSE CONTENTS

Advanced Digital Signal Processing:

Real-Time DSP Design and Applications:

Distributed Multimedia Systems:

VLSI Digital Signal Processors:
Scheduling, assignment and allocation.


**FEES**

Every year, tuition fees are reviewed and subject to revision. As and when fees are revised, the new fees will be applicable to all existing and new students. All fees listed are in Singapore dollars (S$) and are inclusive of Goods and Services Tax (GST) unless otherwise stated. For more update, please refer to [http://www.ntu.edu.sg/GradStudies/Coursework+Programmes/Fees+and+Financial+Assistance/](http://www.ntu.edu.sg/GradStudies/Coursework+Programmes/Fees+and+Financial+Assistance/).

**APPLICATION FOR ADMISSION**

Applications for admission are normally announced through the local press and NTU webpage, twice per year — in January for the coming Semester 1 and in September for the coming Semester 2, respectively. Applications forms are to be submitted **electronically only** (any other form of submission will not be considered) via our web page at: [http://www.ntu.edu.sg/GradStudies/Coursework+Programmes/](http://www.ntu.edu.sg/GradStudies/Coursework+Programmes/).

**REQUIRED TOEFL OR EQUIVALENT**

For the non-English speaking countries, TOEFL or an equivalent examination is required. The minimum TOEFL score is 570 (paper-based) or 230 (computer-based).

**CONTACT INFORMATION**

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