Part-time B.Eng. Electrical & Electronic Engineering Programme

- An Overview -

presented by
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OUTLINE

- Overview of School of Electrical & Electronic Engineering
- General Academic Matters
- Part-time B.Eng. (Electrical & Electronic Engineering) Programme
SCHOOL OF EEE @ NTU

At a Glance

- 1 of 3 founding schools of NTU
- 3000 undergraduate students
- 1000 graduate students
- 250 research staff
- 200 admin and technical staff

- 150 faculty members
- 60 laboratories
- 9 mega research centers
EEE Academic Programmes

Undergraduate Programmes

Bachelor of Engineering
(Electrical & Electronic Engineering)

Bachelor of Engineering
(Information Engineering & Media)

B. Eng (EEE) with a Second Major in Business

Double degree in EEE & Economics and IEM & Economics
EEE Academic Programmes

- Industrial Postgraduate Programme
- Master of Science (MSc) (by Coursework)
- Master of Engineering (MEng) (by Research)
- Doctor of Philosophy (PhD) (by Research)
ACADEMIC CALENDAR 2018/2019

Semester 1: 13 Aug 2018 – 07 Dec 2018
- Recess: 01 Oct 2018 - 05 Oct 2018
- Revision & Examination: 19 Nov 2018 - 07 Dec 2018

Semester 2: 14 Jan 2019 - 10 May 2019
- Revision & Examination: 22 Apr 2019 - 10 May 2019

Special Term: 13 May 2019 - 02 Aug 2019
ACADEMIC UNIT SYSTEM AND CURRICULUM REQUIREMENTS

- Each course is assigned a number of Academic Units (AUs)
- Core Courses - compulsory courses to satisfy programme requirement –technical/non-technical
- Technical Elective Courses – Elective Courses for Specialization
- Unrestricted Elective Courses - Non-technical Courses to broaden learning experience
- Courses with pre-requisites can only be taken after a minimum grade of D has been obtained in the pre-requisite courses
PERIOD OF CANDIDATURE AND AU REQUIREMENT
FOR PART-TIME CANDIDATES

- Standard period of study: 4 years
- Maximum period of study: 6 years
- Maximum on Leave of Absence: 3 years
- AU requirement for graduation: 94 AUs
LEAVE OF ABSENCE (LOA)

- From time to time, part-time students may need to take a leave of absence (LOA) from their studies.
- During LOA, student pays about $53.50 dollars per semester to remain as a student.
- Leave of absence is not counted towards the period of candidature.
- Maximum total LOA period allowed is 3 years.
- LOA will not be granted for fresh students.
CURRICULUM REQUIREMENTS

- Normal Academic Load = 3 to 4 courses
- Students may be allowed to take one more or one less than the normal load, subject to the school’s approval
THE UNDERGRADUATE GPA SYSTEM

<table>
<thead>
<tr>
<th>Letter-Grade</th>
<th>Grade Point</th>
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<tbody>
<tr>
<td>A+</td>
<td>5.00</td>
</tr>
<tr>
<td>A</td>
<td>5.00</td>
</tr>
<tr>
<td>A-</td>
<td>4.50</td>
</tr>
<tr>
<td>B+</td>
<td>4.00</td>
</tr>
<tr>
<td>B</td>
<td>3.50</td>
</tr>
<tr>
<td>B-</td>
<td>3.00</td>
</tr>
<tr>
<td>C+</td>
<td>2.50</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>D+</td>
<td>1.50</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>
THE UNDERGRADUATE GPA SYSTEM
YGPA AND CGPA

- The Year Grade Point Average (YGPA)

\[
YGPA = \frac{\text{GradePoint x AU for Course 1} + \text{GradePoint x AU for Course 2} + \cdots}{\text{Total AU attempted in a year}}
\]

- The Cumulative Grade Point Average (CGPA)

\[
CGPA = \frac{\text{GradePoint x AU for Course 1} + \text{GradePoint x AU for Course 2} + \cdots}{\text{Total AU attempted in all the semesters so far}}
\]
THE UNDERGRADUATE GPA SYSTEM

- All courses including GER-PE and GER-UE carry equal weight, regardless of year of study.

- All courses (including failed courses) are included in the YGPA and CGPA calculations.

- Students are not allowed to repeat any courses taken except those with an “F” grade.
<table>
<thead>
<tr>
<th>CGPA Range</th>
<th>Classes of Honours</th>
</tr>
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<tbody>
<tr>
<td>4.50 – 5.00</td>
<td>Honours (Highest Distinction) *</td>
</tr>
<tr>
<td>4.00 – 4.49</td>
<td>Honours (Distinction)</td>
</tr>
<tr>
<td>3.50 – 3.99</td>
<td>Honours (Merit)</td>
</tr>
<tr>
<td>3.00 – 3.49</td>
<td>Honours</td>
</tr>
<tr>
<td>2.00 – 2.99</td>
<td>Pass</td>
</tr>
</tbody>
</table>

* FYP: must be at least 4.5 (A-)

* A student can take more than 4 years and still be eligible for Honors (Highest Distinction), subject to maximum number of years allowed.
THE UNDERGRADUATE GPA SYSTEM
ACADEMIC WARNING, PROBATION & TERMINATION

- Academic Warning – if the CGPA falls below 2.00 for any given semester.

- Academic Probation – if the CGPA falls below 2.00 for the subsequent semester.

- Academic Termination – if the CGPA falls below 2.00 for 3 consecutive semesters, or at the end of the final semester of study. A letter of termination will be issued.
The exemption from GPA computation applies for up to 6 courses that students do not pass on their first attempt in their Freshmen Year (first two semesters). This mitigates the impact on GPA of unsuccessful first attempts so that students focus on learning rather than on grades. It serves to ease freshmen in their transition into university life and help those who may need more time to adjust to the rigours of university education.
COURSE EXEMPTIONS FOR POLYTECHNIC DIPLOMA INTAKE

- Exemption Courses
  - EE2001 Circuit Analysis
  - EE2002 Analog Electronics or EE2004 Digital Electronics
  - MH2810 Mathematics A
  - PH1012 Physics A

Criteria for Exemption
- Certificate of Merit
- Grade A and above in relevant courses
- Maximum of 3 courses exempted

- Opt-in Scheme
COURSE EXEMPTIONS FOR PART-TIME STUDENTS

- Design and Innovation Project (DIP) - 2 AUs
- Professional Internship (PI) - 8 AUs

Students are exempted from DIP and PI if they can fulfil one year of industrial work experience on a technical job, i.e., half a year each for DIP and PI.
CONVERSION

- Students may be allowed to convert their candidature from part-time to full-time after Year 2 (four semesters of part-time studies)
- Consideration for conversion is on a case-by-case basis
- Students who have converted to full-time study will not be allowed to revert to part-time study
1. Choice of Breadth or Depth in the Final Year.

2. Choose from a pool of final year courses.

3. Choice of 3 broad disciplines or 5 depth specializations.
B ENG Part-time (EEE) Curriculum

- Electrical & Systems Engineering
- Electronic Engineering
- Infocommunication Engineering
- Power & Clean Energy
- Intelligent Systems & Control Engineering
- Integrated Circuit Design
- Computer Engineering
- Communication Engineering
Year 1 - Curriculum

**Sem 1**
- HW0001 English Proficiency
- MH2810 Mathematics A
- PH1012 Physics A
- GC0001 Sustainability: Seeing Through The Haze

**Sem 2**
- EE2001 Circuit Analysis
- EE2004 Digital Electronics
- EE2006 Engineering Mathematics I

**Special Term**
- EE1002 Physics Foundation for EEE
Year 2 - Curriculum

Sem 1
EE2002 Analog Electronics
EE2007 Engineering Mathematics II
EE2008 Data Structures & Algorithms
HY0001 Ethics and Moral Reasoning

Sem 2
EE2003 Semiconductor Fundamentals
EE3xxx Technical Elective 1
HW0188 Engineering Communication I
EE0040 Engineers & Society

Special Term
EE2010 Signals & Systems
Year 3 - Curriculum

Sem 1
EE2073  Introduction to EEE Design & Project
EE3001 Engineering Electromagnetics
EE3xxx  Technical Elective 2
HW0288 Engineering Communication II
ET0001 Enterprise and Innovation

Sem 2
EE4080 Final Year Project
EE4xxx  Design Elective 1
EE4xxx  Technical Elective 1

Special Term
EE3002  Microprocessor
EE4080 Final Year Project

2nd & 3rd Year Technical Electives (choose 2)
EE3010  Electrical Devices and Machines
EE3011  Modelling & Control
EE3012 Communication Principles
EE3015  Power Systems & Protection
EE3017  Computer Communications
EE3019  Integrated Electronics
Year 4 - Curriculum

**Sem 1**
EE4080 Final Year Project
EE4xxx Technical Elective 2
EE8061 Innovation & Technology Management

**Sem 2**
EE4080 Final Year Project
EE4xxx Design Elective 2
EE4xxx Technical Elective 3
ASSESSMENT AND ABSENCE FROM LAB SESSION

• Continuous assessment throughout all lab sessions

• Absence without Official Leave
  – Zero marks will be awarded for that session

• Absence with Official Leave
  – Make up session must be arranged. Zero marks will be awarded for NO or MISSED make up
ACCREDITATION

- Engineering Accreditation Board, Singapore (EAB)
  Recognised worldwide under the Washington Accord

- Professional Engineers Board, Singapore (PEB)
  Eligible for Professional Engineer Registration

- The Institution of Engineers, Singapore (IES)
### MOE Tuition Fee Subsidy

#### (A) Tuition Fees payable per academic unit for AY2018/19

<table>
<thead>
<tr>
<th></th>
<th>Fees before subsidy (SGD) per academic unit</th>
<th>Fees after subsidy payable by students (SGD) per academic unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>$470.00</td>
<td>$202.00</td>
</tr>
<tr>
<td>SPR</td>
<td>$470.00</td>
<td>$370.00</td>
</tr>
<tr>
<td>International</td>
<td>$470.00</td>
<td>$470.00</td>
</tr>
</tbody>
</table>

Above fees exclude GST.
(B) To qualify for the tuition fee subsidy, a Singapore citizen (SC) or permanent resident (PR) must:

1. Be at least 21 years of age; and
2. Have either 2 years of full-time work experience or is currently employed on a full-time basis;
3. Have not previously received a government subsidy/sponsorship for a first degree;
4. Males have completed the 2 years full-time National Service liability.

*(Part-time employment will not be considered as full-time work experience. A part-time employee is one who works for less than 35 hours a week, under contract of service with an employer.)*
Financial Assistance Schemes

- P/T students may not pay tuition fees from the CPF Education schemes.
- P/T students in financial difficulty can appeal to pay their tuition fees on a monthly instalment.
- Tuition fee loan schemes and financial assistance are administered by NTU Shared Services (NSS):

### LIST OF STUDENT ADVISORS/MENTORS

<table>
<thead>
<tr>
<th>Group</th>
<th>Venue</th>
<th>Name of Mentor</th>
<th>Office</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT11</td>
<td>TR +29</td>
<td>Assoc Prof Tan Eng Leong</td>
<td>S2.2-B2-24</td>
<td>6790 6190</td>
</tr>
<tr>
<td>(A to H)</td>
<td></td>
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</tr>
<tr>
<td>PT12</td>
<td>TR +30</td>
<td>Dr Foo Yi Shyh Eddy</td>
<td>S1-B1c-89</td>
<td>6790 4519</td>
</tr>
<tr>
<td>(J to Ma)</td>
<td></td>
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</tr>
<tr>
<td>PT13</td>
<td>TR +31</td>
<td>Asst Prof Zhang Xinan</td>
<td>S2-B2b-57</td>
<td>6790 4003</td>
</tr>
<tr>
<td>(Me to T)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PT14</td>
<td>TR +32</td>
<td>Assoc Prof Seongwoo Yoo</td>
<td>S2-B2b-50</td>
<td>6592 7597</td>
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<td>(V to Z)</td>
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(TR +29, TR +30, TR +31 & TR +32 are located at NS2-2 level 5)
All part-time students must send all academic enquiries to the following email address:

**eeept-beprog@ntu.edu.sg**

**Important**: Emails received from personal email addresses will not be addressed to preserve the confidentiality of all communications. Students must use their NTU email (**USERNAME@e.ntu.edu.sg**) for all correspondences.
EEE

Bachelor of Engineering
(Electrical and Electronic Engineering)
One Degree, A World of Opportunities

http://www.eee.ntu.edu.sg