Bachelor of Engineering
(Electrical and Electronic Engineering)

One Degree, A World of Opportunities
ELECTRICAL & ELECTRONIC ENGINEERING

1st
ELECTRICAL & ELECTRONIC ENGINEERING SCHOOL IN ASIA*

6th
AMONG ELECTRICAL & ELECTRONIC SCHOOLS WORLDWIDE*

*Based on the QS World University Rankings by Subject 2019

PROGRAMMES WE OFFER:
• Bachelor of Engineering in Electrical and Electronic Engineering (EEE)
• Double Degree in Bachelor of Engineering (EEE) and Bachelor of Arts (Economics)
• Bachelor of Engineering (EEE) with a Second Major in Business
• Bachelor of Engineering (EEE) with a Second Major in Society and Urban Systems

ADMISSION REQUIREMENTS
GCE “A” Level
• Pass in H2 Level in Mathematics, and
• Pass in H2 Level in Physics/Chemistry/Biology/Computing, and
• Pass in H1 Level/GCE “O” Level Physics/equivalent*

Polytechnic Diploma
Applicants with Polytechnic Diploma or Final Year students with relevant diplomas from a local polytechnic in Singapore will be considered for direct entry into the second year**

*Pass in GCE “O” Level Physics is required for applicants who have not taken Physics at H2 or H1 Level.
**The list of acceptable diplomas is available at https://wis.ntu.edu.sg/webexe/owa/adm_appl.relevant_diploma?student_type=

SPECIALISATION:

BIOMEDICAL ELECTRONICS
INTELLIGENT SYSTEMS & CONTROL ENGINEERING
ELECTRICAL POWER & ENERGY
INTEGRATED CIRCUIT DESIGN
MICROELECTRONICS
COMMUNICATION ENGINEERING
COMPUTER ENGINEERING
DATA INTELLIGENCE & PROCESSING

EEE CURRICULUM AT A GLANCE

1st YEAR
Mathematics 1 & 2
Physics
Physics Foundation for EEE
Introduction to Engineering & Practices
EEE Laboratory I
Engineers & Society
Introduction to Computational Thinking

2nd YEAR
Circuit Analysis
Analog & Digital Electronics
Semiconductor Fundamentals
Engineering Mathematics I
Introduction to Data Science & AI
Signals & Systems
Data Structures & Algorithms
Introduction to EEE Design & Project
Electrical Devices & Machines

3rd YEAR
Engineering Electromagnetics
Microprocessors
Design & Innovation Project
Internship
Technical Electives 1 & 2**
Engineering Mathematics II

4th YEAR
Final Year Project
2 Design & 3 Technical Electives**

** Students will choose courses depending on the specialisation.

TOP 5 INDUSTRIES WHERE OUR GRADUATES EXCEL

1. Electrical Products
2. Information & Communication
3. Public Administration & Defence
4. Finance & Business
5. Engineering Manufacturing

CAREER PROSPECTS FOR EEE

A bachelor’s degree from EEE will open up a world of opportunities. Some industries EEE graduates can enter include:

- AVIATION
  - Rolls-Royce, Boeing
- BANKING & FINANCE
  - DBS, OCBC
- BIOMEDICAL & HEALTHCARE ENGINEERING
  - Siemens AG, NUH
- CONTROL & AUTOMATION
  - Molex, Continental
- COMPUTER ENGINEERING
  - Intel, IBM
- ELECTRONIC PRODUCTS
  - Apple, Samsung
- ELECTRONICS, SEMICONDUCTORS & IC DESIGN
  - ST Electronics, NXP Semiconder
- INFORMATION & COMMUNICATION
  - Google, Facebook
- INTERNET SERVICES
  - AT&T, Singtel
- MACHINERY & EQUIPMENT
  - Siemens, Continental
- MANUFACTURING
  - National Instruments, Singapore Technologies
- POWER & CLEAN ENERGY
  - Energy Market Authority, Singapore Power
- PUBLIC ADMINISTRATION & DEFENCE
  - DSTA, HDB

For more information

For more information
The EEE Design & Innovation Project (DIP) is a practical programme that allows students to explore innovative and creative solutions for engineering challenges. Through DIP, students will learn to design, develop, construct and test innovative electronic, electrical or IT prototypes in a group project environment.

**INTERNERSHIP PROGRAMMES**

**A Broad Range of Inroads To Industry Experience**

There is no better way to experience the working world than through internships. The School’s impeccable reputation is often an inroad to the companies that our students want to intern with. With a wide array of industry networks, students have ample opportunities to secure their internships.

**OUR INTERNSHIP PROGRAMMES INCLUDE:**

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<tr>
<th>PROFESSIONAL INTERNSHIP (PI)</th>
<th>PROFESSIONAL ATTACHMENT (PA)</th>
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<td>20 weeks</td>
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<td>single, double-degree &amp;</td>
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**CORPORATE LABORATORIES**

**A Vast Advantage Of World-Class Facilities & Industry Mentors**

Our programmes provide students confidence in industries and is instrumental in attracting some of the world’s biggest multinationals to set up corporate laboratories at NTU EEE for joint research.

**OUR CORPORATE LABORATORIES OFFER STUDENTS AN OPPORTUNITY TO WORK IN A TOP-NOTCH ENVIRONMENT AND GAIN INSIGHT TO INDUSTRY TRENDS AND DEVELOPMENTS.**

**CUTTING-EDGE FACILITIES**

**MENTORING BY BOTH FACULTY AND CORPORATE LEADERS**

Therefore students gain hands-on technical skills and work on real-world problems.

Joint research laboratories at NTU EEE:
- Rolls-Royce@NTU Corporate Lab
- SMRT-NTU Smart Urban Rail Corporate Lab
- ST Engineering-NTU Corporate Lab
- Delta-NTU Corporate Lab for Cyber Physical Systems
- Satellite Research Centre (SaRC)
- Singapore Power Group (SP Group)
GARAGE@EEE

A makerspace where you can bring your ideas into fruition, with School’s mentorship and financial support.

Garage@EEE Ambassador
Our student ambassadors are passionate about promoting the maker spirit to the EEE/IEM Community. From various hands-on workshops to a make-a-thon camp to the annual Freshmen Orientation Programme, there are endless possibilities to what one can do as part of the Garage@EEE Family.

IN THIS WHITE SPACE, STUDENTS CAN:

- Cultivate entrepreneurial and innovative learning
- Bridge the gap between classroom and experiential learning
- Get financial funding and mentorship to kickstart technopreneurship journey

MLDA@EEE

The Machine Learning and Data Analytics lab (MLDA@EEE) empowers students to pursue the application of Artificial Intelligence (AI) to established EEE disciplines.

Academic

- Acquire relevant MLDA knowledge through specialised workshops and training programmes

Projects

- Work with reputable industry partners, such as Shopee, NVIDIA and OCBC Bank, on a wide variety of AI-related projects

Career

- Network with industry partners through company visits and career sharings

EXCHANGE PROGRAMMES

A Far-Reaching Network of Global Connections
Students at EEE have the advantage of enriching their education and life experience through the myriad global exchange programmes with our renowned partner universities. Students go beyond the classroom, build up life skills and develop new networks.

Academic Projects Career

Duan Jiafei
EEE Year 3
Currently in OGEM Explorer programme at Georgia Institute of Technology (USA)

Khor Kai Sherng
EEE Year 4
Research attachment at Massachusetts Institute of Technology (USA)

Australia Canada China Czech Republic Denmark Finland France Germany Hong Kong Norway UK USA South Korea Spain Sweden Switzerland Taiwan Turkey
EEE CLUB

The Voice of the Students
As part of NTU Students’ Union, the EEE Club strives to enhance the vibrancy of the school, empower voices and build bonds among EEE students. EEE Club serves as a bridge between the students and the school, taking up the responsibility of being the voice and speaking up for our students. Spicing up the campus life of students, the EEE Club organises both academic and non-academic events which includes workshops, welfare initiatives and EEE Week.

EEE LEAD

A Generous Scope For Advancing Talent
LEAD (Leadership Enrichment And Development) develops leadership and managerial skills of EEE students. This programme exposes them to industry best practices and expand their professional networks through guidance from external advisors. Students experience personal growth and satisfaction through community service and humanitarian projects.

EEE OUTREACH

A Rewarding Role in Shaping The Future
The EEE Outreach Ambassadors serves as a bridge between the present and the future students. The EEE Ambassadors participate in events to share their EEE story to prospective students. Leadership skills are honed with various events organised by the committee such as Innovation Challenge, Induction Fiesta, and Open house. EEE Outreach Ambassadors plays a critical role in shaping the future of EEE.
INFORMATION ENGINEERING & MEDIA

When you mix Art, Design and Media with classical Engineering studies, you get a whole new exciting programme called the Bachelor of Engineering in Information Engineering and Media.

By merging art and creativity with information, communications and digital media technology, new breakthroughs have been achieved. Remarkable progress in movies and games, for instance, are made possible with technology working hand in hand with art and creativity.

This new revolution has opened up new possibilities, experiences and business opportunities that will radically change the world. It has created the need for a new breed of infocommunication engineers equipped with sound understanding of the artistic and creative processes in media design and production. Information Engineering and Media (IEM) programme is the new age engineering.

PROGRAMMES WE OFFER:
• Bachelor of Engineering in Information Engineering & Media (IEM)
• Double Degree in Bachelor of Engineering (IEM) and Bachelor of Arts (Economics)
• Bachelor of Engineering (IEM) with a Second Major in Business

CAREER PROSPECTS FOR IEM

GAMING, ANIMATION & INTERACTIVE ENTERTAINMENT

MEDIA

TELECOMMUNICATIONS

RESEARCH & DEVELOPMENT

ELECTRONIC PRODUCTS

DEFENCE

BUSINESS & MANAGEMENT

IT & COMMUNICATIONS

EDUCATION

BANKING & FINANCE

SERVICE & OTHERS

AREA OF INTEREST:

Digital Media Processing

Information Technology

Communications & Networking

Visualisation & Interactive Media

Art, Design & Media Production

For more information
WHERE TECHNOLOGY MEETS ART

BACHELOR OF ENGINEERING
(Information Engineering & Media)

School of Electrical & Electronic Engineering
In collaboration with
School of Art, Design & Media
School of Computer Science and Engineering, and
Wee Kim Wee School of Communication & Information

ADMISSION ENQUIRIES
School of Electrical & Electronic Engineering
Office of Admissions
Nanyang Technological University
Student Services Centre, Level 3
42 Nanyang Avenue
Singapore 639815

adm_local@ntu.edu.sg (for local students)
adm_intnl@ntu.edu.sg (for international students)
http://admissions.ntu.edu.sg/UndergraduateAdmissions

PROGRAMME ENQUIRIES
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