Over the years, our professors have turned many technologies developed in their applied research into marketable products.

- **Compacts Antennas and RF modules for doubles Global Positioning Systems (GPS)**
  By Prof Chi C. Cheung and Prof H K Luk
- **Millimeter-wave Receiving Technology**
  By Prof C H Chan and Prof Q Xue
- **Universal Wireless Battery Charging Platform**
  By Prof Rose Hui
- **Novel design of Miniature ZigBee Transceiver**
  By Prof Chi C. Cheung, Dr Q Xue and Prof H K Luk
- **Dimming Method for ‘Non-dimmable’ Lighting Systems**
  By Prof Henry Chung and Prof Rose Hui
- **Voice and Image Encryption via Chaos-based Techniques**
  By Prof Ron Chen
- **Value and Image Encryption via Chaos-based Techniques**
  By Prof Ron Chen
- **Remote Monitoring System**
  By Dr C T Cheung
- **Facial Animation Entertainment System**
  By Prof Chi C. Cheung
- **Smart Card Technology**
  By Prof Chi C. Cheung

The electronics industry is the largest export earner accounting for 45% of Hong Kong’s total export in 2004. HKSAR Government’s Report on Manpower Projection to 2007

<table>
<thead>
<tr>
<th>Five Major Sectors</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology*</td>
<td>6.1%</td>
</tr>
<tr>
<td>Tourism</td>
<td>5.9%</td>
</tr>
<tr>
<td>IT Related Professional Services*</td>
<td>5.6%</td>
</tr>
<tr>
<td>Financial Services</td>
<td>2.7%</td>
</tr>
<tr>
<td>Logistics and Trading</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

*These include IT management, communications, networking, hardware support, corporate operation support, database, system programming, application systems development, Internet Services, digital media production, etc.
Bachelor of Engineering (Hons) in Electronic Engineering (Electronics and Communications)
電子工程學榮譽工學士（電子及通訊）

Programme Aim
To provide students with a solid education in electronics, communications, and information engineering; and prepare them for employment in different technology sectors. Graduates will possess both the skills and vision to progress further in these rapidly changing high-tech industries; and will be sufficiently equipped for postgraduate studies.

What will you be studying?
The programme offers two streams for students to choose, namely the Electronics and Communications stream, and Information Engineering stream.

<table>
<thead>
<tr>
<th>Stream</th>
<th>Core Courses</th>
<th>Technical Electives</th>
<th>University Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics and Communications</td>
<td>60 credits</td>
<td>21 credits</td>
<td>21 credits*</td>
</tr>
<tr>
<td>Information Engineering</td>
<td>64 credits</td>
<td>18 credits</td>
<td>21 credits*</td>
</tr>
</tbody>
</table>

* Credit transfer of the University Requirements may be granted to holders of the relevant higher diploma or associate degree, based on the academic merits of the applicants and the ND or AD Programmes.

Common core courses of the two streams:
- Theory & Features of Electronic Devices (電子元件)
- Basics & Application of Electronic Circuits (電子電路)
- Engineering Mathematics (工程數學)
- Microprocessor (微電腦處理器) & Assembly Language Programming (組合語言)
- Microcontroller & Embedded Systems (微控制器及嵌入式系統) (組合語言)
- Final Year Project (畢業專題習作)

Electives in the following areas

Information Engineering Stream
Core courses
- Computer Programming: C Language (電腦程式)
- Basic Communication Engineering (基礎通訊工程)
- Electronic Product Design (電子產品設計)
- Computer Networks (互聯網技術)
- Database Management (資料庫設計)
- Object-Oriented Programming: Java (物件導向軟件開發技術)
- Software Development (軟件開發)
- System & Network Administration (系統及網絡管理)
- Business Development Manager and the founder of Tandy Radioshack Ltd.*
(1990 BEng & 1994 PhD)

Electives in the following areas
- Broadband & Mobile Networking (寬頻及移動網絡)
- Computer & Network Security (電腦及網絡保安)
- Digital Signal & Image Processing (數碼訊號及圖像處理)
- Multimedia Technology & Applications (多媒體技術及應用)
- Software Development (軟件開發)
- System & Network Administration (系統及網絡管理)
- Telecommunication Networking (通訊網絡)
- Telecommunication Networking (電訊網絡)
- Wireless & Optical Communications (無線及光纖通訊)

Duration
- Part-time load (< 11 credit units per semester)
  - 3.5 - 6 years
- Full-time load (> 18 credit units per semester)
  - 2 - 3 years

Entrance Requirements
1. A higher diploma or associate degree in an engineering or science discipline; or an equivalent qualification
2. For non-local applicants, most school-leaving qualifications are acceptable. However, applicants from some countries may be required to supplement their studies with additional credits (around 30 CUs) if admitted.

Programme Fee
HKS2,100 per credit unit for taught courses; HK$6,300 - 8,400 for 6 - 8 weeks of industrial training (students with working experience may apply for exemption from industrial training.)

Mr Vincent M T Lam
(1990 BEng and 1993 PhD graduate)
Vice President
Tandy Radioshack Ltd.*

Mr Weng Ka Leung
(2001 BEng graduate)
Business Development Manager and the founder of TeleEye Holdings Ltd.*
(1990 BEng and 1994 PhD)

Dr Wallace Ma
(1990 BEng & 1994 PhD)
Founder and Chief Marketing Officer of TeleEye Holdings Ltd.*

Programme Fees

Our Graduates
In 2004, 97% of EE graduates were engaged in employment and postgraduate studies within a few months after taking the final exam. Among them 13% pursued higher degrees in Hong Kong and overseas institutions.

Job nature of Graduates

Different focuses of the two streams:

Electronics and Communications Stream
Core courses
- Automatic Control Systems (自動化控制系統)
- Application of Electromagnetic Waves (電磁波)
- to Wireless Communications (無線通訊)
- Application of Communication Principles (通訊基本原理)
- to radio, TV, walkie-talkie, etc.

Electives in the following areas
- Computer & Control Systems (電腦及控制系統)
- Microwave & Radio Frequency Techniques (微波及射頻技術)
- Mobile Phone Technology (移動電話技術)
- Power & Industrial Electronics (電力及工業電子)
- Telecommunication Networking (電訊網絡)
- Wireless & Optical Communications (無線及光纖通訊)

Electrical Engineering (Electronics and Communications)
電子工程學榮譽工學士（電子及通訊）

Programme Fees

Duration
- Part-time load (< 11 credit units per semester)
  - 3.5 - 6 years
- Full-time load (> 18 credit units per semester)
  - 2 - 3 years

Entrance Requirements
1. HKALE AS Use of English and Chinese Language and Culture*
2. One AL in Applied Mathematics, or Pure Mathematics, or Physics, or Engineering Science; PLUS One other AL or two AS subjects (excluding * above)

Programme Fees
HKS2,100 per credit unit for taught courses; HK$6,300 - 8,400 for 6 - 8 weeks of industrial training (students with working experience may apply for exemption from industrial training.)

Mr Weng Ka Leung
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