Departmental Orientation for year 2 students

Dr. Hayden So

2018-09-04

Rundown

1. Welcome speech (by Prof. K. T. Chau)
2. Curriculum structure and programmes (by Prof. S C Tan)
3. OBASL syllabus and Plagiarism (by Prof. S C Tan)
4. Examination matters (by Prof. Wallace Choy)

5. Lab. matters (by Dr. W Y Cheung)
6. Safety matters (by Dr. Anthony Choy)
7. Class representatives selection (CE, EE, ElecE)
8. Electrical and Electronic Engineering Association
9. Food and Refreshments

Class Representative

- Member of the Staff-Student Consultative Committee (SSCC)
- 2 formal meetings per year
- 2 informal meetings per semester
- Certificate of appreciation

Webpage [https://elink.eee.hku.hk/class_reps.html](https://elink.eee.hku.hk/class_reps.html)
Why Are You Here?

- I simply like HKU.
- I like to study EEE.
- I hope to become an engineer in EEE sector.
- I hope to become a researcher in EEE field.
- I was allocated to EEE, which was not my preferred choice.

Our Uniqueness

- The oldest university in HK.
- The oldest EEE related dept in HK.
- The only dept comprising electrical, electronic and computer engineering in HK.

Our Aims

- Nurture you to become an engineer in EEE sector
- Nurture you to become an researcher in EEE field
- Nurture you to become an engineering manager or investor
- Nurture you to become a leader!

What Should You Do?

- Well prepare your study plan
- Well manage your time
- Regularly meet your academic advisor
- Seek advice from Program Directors for queries relating to your program
- Seek advice from Training Manager for queries relating to training/internship
- Work hard while playing hard!
Curriculum structure of CE, EE, ElecE
Presenter name: Prof. S C Tan

Three programmes:
- Computer Engineering (CE)
- Electronic Engineering (ElecE)
- Electrical Engineering (EE)
All programmes share a common first year.

4-Year Curriculum Structure
http://elink.eee.hku.hk/ug_curriculum_charts.html

Course subject groups in EEE
- Group A: Electrical Energy
- Group B: Electronics and Optics
- Group C: Signal Processing, Control and Intelligent Systems
- Group D: Communications and Networking
- Group E: Computer Systems and Data Engineering
- Group F: Complementary Studies
- Group G: Projects
- Group H: General Engineering
- Group I: Mathematics
- Group J: Software and IT Applications

CE suggested study plan

Suggested Study Plan for the 4-year Computer Engineering Program.
EE suggested study plan

1. **Year 4**
   - EE 410: Electron Devices
   - EE 420: Microelectronics
   - EE 430: Digital Signal Processing

2. **Year 3**
   - EE 310: Analog Circuits
   - EE 320: Power Electronics
   - EE 330: Control Systems

3. **Year 2**
   - EE 210: Digital Logic Design
   - EE 220: Communication Systems
   - EE 230: Network Theory

4. **Year 1**
   - EE 110: Introduction to EE
   - EE 120: Scientific Computing
   - EE 130: Circuit Analysis

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ElecE suggested study plan

1. **Year 4**
   - ElecE 410: Computer Architecture
   - ElecE 420: Embedded Systems
   - ElecE 430: Advanced Communication Systems

2. **Year 3**
   - ElecE 310: Digital Signal Processing
   - ElecE 320: Power Electronics
   - ElecE 330: Control Systems

3. **Year 2**
   - ElecE 210: Digital Logic Design
   - ElecE 220: Communication Systems
   - ElecE 230: Network Theory

4. **Year 1**
   - ElecE 110: Introduction to ElecE
   - ElecE 120: Scientific Computing
   - ElecE 130: Circuit Analysis

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Successful stories: EEE alumni

- **Mr. Ken Law** (BEng (EComE) class of 2010, MSc (EEE))
- **Mr. Eric Au-yeung** (BEng (EComE) class of 2010, MSc (EEE))
- **Mr. Alan Chiang** (MSc(EEE))
The Final Year Project turns into a start-up business

Extend the graduation project to start their IT business

3 EEE Graduates earned over $1M in 8 months

Win HK Information and Communication Technology Award

Successful stories: EEE alumni

- Dr. Miles Wen (BEng(CE) class of 2011, PhD (EEE))
- Start-up business on Artificial Intelligent received millions dollars of investment
- Won the 2018 Hong Kong ICT Awards
**Start-up business on Artificial Intelligence**

Received millions of investment


**Successful stories: EEE alumni**

- Mr. SUNDERRAMAN Shravan (BEng(EComE), class of 2013)
  - Full Video: https://www.youtube.com/watch?v=rFYAc8xt24E&t=615s
  - Shorter Section (with Chinese captions): https://www.youtube.com/watch?v=UagpD9-eq5E

His Startup received over HK$500k from HKU Technology Startup Support Scheme (TSSSU) and admitted to the Accelerator Program of the Entrepreneurship Centre of the University of Cambridge


**DreamCatchers 100K**

- HKU DreamCatchers 100K Competition
- http://www.dreamcatchers.hku.hk/
- 2017 – BEng (CE) graduate Chiu King Yuen + 2 BEng (CS) students won $100K for their start-up company "Weava"

http://startupbevat.hkej.com/?p=49290
Thank You!

www.eee.hku.hk
OBASL Syllabus

Presenter name: Prof. S C Tan

What is OBASL?

- Outcomes Based Approach to Student Learning (OBASL)
- An approach to programme and course design
- Focus on what students are expected to learn and do in terms of statements of Learning Outcomes

What is OBASL?

Learning Outcomes:
- Statement or a set of statements

T&L Activities:
- Teaching and learning methods

Assessment:
- An on-going evaluation process

OBASL Syllabus in EEE

Each course syllabus contains:

- Course learning outcomes (CLOs)
- Programme learning outcomes (PLOs)

Course Learning Outcomes

- Different courses have different course learning outcomes (CLOs)
- They are what you are expected to learn from each course
- E.g. Master the operation principle, mathematical analysis and practical application of major electromechanical motion devices and systems

Programme Learning Outcomes

- Standardized
- What abilities that you are expected to have when you finished the course and the programme
- 12 programme learning outcomes (PLOs)
- Matched with "HKIE Abilities for Engineering Graduates"
12 PLOs

• (1) an ability to apply knowledge of mathematics, science, and engineering appropriate to the degree discipline
• (2) an ability to design and conduct experiments, as well as to analyse and interpret data
• (3) an ability to design a system, component or process to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability

12 PLOs

• (4) an ability to function on multi-disciplinary teams
• (5) an ability to identify, formulate and solve engineering problems
• (6) an ability to understand professional and ethical responsibility
• (7) an ability to communicate effectively
• (8) an ability to understand the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public

12 PLOs

• (9) an ability to stay abreast of contemporary issues
• (10) an ability to recognize the need for, and to engage in life-long learning
• (11) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the degree discipline
• (12) an ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations

Where You can Find OBASL Syllabus?

Each course OBASL syllabus can be found in the “Course Information” in HKU Portal
Plagiarism Policy

- Plagiarism is defined as the unacknowledged use, as one’s own, of work of another person, whether or not such work has been published. Acts of plagiarism include copying parts of a document in whatever media, using or extracting another person’s concepts, experimental results or conclusions.
- Students who willingly provide the source for copying encourage plagiarism and will be penalized in the same light.
- The University views plagiarism as a serious academic misconduct, leading to the imposition of heavy penalties, including expulsion from the University.

Penalty Guidelines Inside Dept

- If a student is found engaged in plagiarism for the first time, then his particular work in question (such as an experiment report, assignment, exercise or examination/test) will be awarded a mark of zero percent.
- Where the case of repeated plagiarism is substantiated, the student’s name will be forwarded to the University Disciplinary Committee via the Department Head, in addition to the penalty as stated above.

Possible Penalty Outside Dept

- If a student is found engaged in plagiarism even for the first time, his particular work in question will be awarded a mark of zero percent, and his name will be forwarded to the University Disciplinary Committee in addition to the penalty as stated above.

How to Avoid Plagiarism

- Re-write in your own words and acknowledge your sources of information.
- Clearly indicate what is copied (using separate paragraphs or quotation marks), and where it is copied (acknowledging your sources).

Source of information:
David Gardner, Plagiarism and How To Avoid It. Centre for English Studies, The University of Hong Kong. [http://www4.caes.hku.hk/plagiarism/]

Latest Development

- Some teachers have used the Turnitin (http://www.turnitin.com/) which is a worldwide recognized plagiarism detection software to online identify plagiarism cases.
- Some teachers have used dedicated software to identify plagiarized programming works.
- Our teaching assistants and demonstrators have paid attention to identify plagiarized lab reports and assignments.
Some Cases

- Some students were found engaged in plagiarism in only 1 lab report, they all got zero marks in that lab report, leading to fail the PW component and also the whole course.
- A student engaged in plagiarism two times, and the Disciplinary Committee suspended his/her studies for 6 months.
- A student was found engaged in plagiarism in the other department course for the first time, he/she was forwarded to the University Disciplinary Committee.

Recent Cases in EEE

- Some students were found engaged in plagiarism in course assignments.
- Some students were found engaged in plagiarism in lab reports.
- Some students were found engaged with different levels of similarity in Senior design project reports.
- Some students were found engaged in plagiarism in MSc course assignments.
- Some students were found engaged with different levels of similarity in MSc dissertations.
Examination Matters

Department of Electrical and Electronic Engineering
The University of Hong Kong

Wallace Choy
chchoy@eee.hku.hk
2857-8485

ASSSESSMENT

Practical Work (PW) Examination (EX)
In-course Assessment (IA)
Examination & Assessment (EA)
Combined Mark (CB)

ASSESSMENT

To pass a course, a student must pass both PW and EA components separately.
• Note not all courses have all the three components.
• Students will be informed by the Faculty/Department of the relative percentage assigned to the different components early in the academic year.

GRADES & GRADE POINTS

• COURSE MARKS (0...100 %)
  > GRADES (F, D, ..., A+)
  > GRADE POINTS (0.3, ..., 4.3)

<table>
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<tr>
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<th>F</th>
<th>D+</th>
<th>D</th>
<th>C+</th>
<th>C</th>
<th>B+</th>
<th>B</th>
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<td>3</td>
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Except Workshop Training & Industrial Training (P or F only and not accounted in GPA calculation)

Standard Grade Grade Point
A+ 4.3
Excellent
A 4.0
A- 3.7
B+ 3.3
Good
B 3.0
B- 2.7
C+ 2.3
Satisfactory
C 2.0
C- 1.7
D+ 1.3
Fail
D 1.0
F 0

GRADE POINT AVERAGES (GPA)

• Grade Point Average (GPA)
  \[ \text{GPA} = \frac{\sum \text{Course grade point} \times \text{Course credit value}}{\sum \text{Course credit value}} \]

where \( I \) stands for all passed and failed courses taken by the student over a specified period

• Semester Grade Point Average (SGPA)
The GPA in respect of courses attempted by a candidate during a given semester.

• Year Grade Point Average (YGPA)
The GPA in respect of courses attempted by a candidate during a given academic year.

• Cumulative Grade Point Average (CGPA)
The GPA in respect of courses attempted by a candidate at the time of calculation.

If you fail a course

• Candidates are required to make up for failed courses in the following manner
  1. Undergoing re-assessment/re-examination in the failed course to be held no later than the end of the following semester (not including the summer semester); or
  2. Re-submitting failed coursework, without having to repeat the same course of instruction; or
  3. Repeating the failed course by undergoing instruction and satisfying the assessments; or
  4. For elective courses, taking another course in lieu and satisfying the assessment requirements.
UNSATISFACTORY PROGRESS

- A student will be warned (through a warning letter)
  - if the number of credits passed \( \leq 18 \) for current semester, or
  - if the SGPA \( \leq 1.5 \) for current semester, or
  - one semester prior to the maximum period of registration if he/she has not graduated

- A student will be recommended for discontinuation if any one of the following 3 situations occurs
  - failed to complete at least 36 credits in two consecutive semesters except where they are not required to take such a number of credits in the two given semesters,
  - failed to achieve an average of SPGA of 1.0 or higher for two consecutive semesters,
  - exceeded the maximum period of registration specified in the regulations of the degree *(not including the summer semester)*.

Examination arrangement

- All examination dates and venues are arranged by the University examination office
- Exam timetable will not be changed because of personal reasons
- Students who are absent from examination of a course due to illness with certified medical certificates are required to attend a supplementary examination

Assessment period

Sem 1 = Dec 8-Dec 22, 2018
Sem 2 = May 6-May 25, 2019

BEng DEGREE CLASSIFICATION

The classification of honours shall be determined by the Board of Examiners for the degree in accordance with the Cumulative GPA (CGPA), with all courses taken (including failed courses) carrying equal weighting

- First Class Honours
- Second Class Honours, Division One
- Second Class Honours, Division Two
- Third Class Honours
- Pass

Honours classification may not be determined solely on the basis of a candidate’s CGPA and the Board of Examiners has its discretion.
Introduction

- To pass the course, student has to fulfill all requirements:
  - Course work
  - Examination
  - Practical work (Lab)
  - etc.
- Please be noted the marks may not be compensate for the other session
- Have to pass both Exam and Lab session **BOTH**

Lab Session Registration

- Login the lab sign-in page with the EEE/HKU portal account

**All the lab information are on: [www.eee.hku.hk/~ugsnews](http://www.eee.hku.hk/~ugsnews)**
• Lab time schedule can be downloaded as reference

• All lab sessions are offered on Wed and Sat morning

Course Information

Register Lab Sessions

Registered Lab Information

View and Manage the Registered Sessions
Lab Grading

- Lab performance (40%)
  - Students will be assessed during the laboratory period according to their performances, attitudes, understandings of the work and experimental results
    - Attend on time
    - Pre-lab works
    - Result records

- Laboratory reports (60%)
  - Students are required to submit reports for each experiment
    - There are two types of format,
      - i.e., formal and informal types
    - Informal format should be used unless further requested

Submission

- Submitting Laboratory Reports via the Moodle system:
  - Lab report should be submitted by 2 weeks after the lab
  - File size

Lab Regulations Highlights

Ref: http://www.eee.hku.hk/~ugsnews/lab-material/lab-guidance.htm

- No student may work on experiments unless there is at least one other person in the laboratory.
- Great care should be taken in handling meters and apparatus. A good deal of these apparatuses are of high quality, expensive and difficult to replace. You will be held responsible for any damage resulting from non-observance of the instructions.
- A student presenting himself at a laboratory class late may be subjected to a deduction of marks in that particular experiment/mini-project. Moreover, a student may not be allowed to participate in the experiment/mini-project (unless with strong reasons) if he/she is more than 30 minutes late.
- Please be aware plagiarism is strictly prohibited and every student should finish their report by themselves. Even student with the same group should be expected to finish the report individually and identical report should not be submitted even for the same group.

Important Date

<table>
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<th>Proposed Date</th>
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<td>Sign-in system open in</td>
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<td>9:00-17:00 for Mon-Fri</td>
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<td>Open for 24 hours for all days</td>
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<td>5 Sept – 13 Sept</td>
<td>1st – 2nd</td>
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<td>14 Sept – 28 Sept</td>
<td>3rd – 4th</td>
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<td>Lab session starts</td>
<td>24 Oct – 21 Nov</td>
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<td>7th – 11th</td>
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Noted:
- The lab sign-in system is served based on the first-come-first-serve basis
- The link of the lab sign-in system will be posted in the course Moodle.
- Submission of report by 2 weeks after the lab is done
Safety “Matters”

In any event, safety comes first!
How to define safety?
- Nothing is absolutely safe!
- Risk judgment: a thing is safe if its risks are judged to be acceptable

How to assess risk?
- Risk = probability of occurrence \times consequence of occurrence
Always assess the risk when doing something new!
- For example, without the supervision of a qualified and trustworthy personnel (e.g., a technician or a lab supervisor), the risk of performing any potentially hazardous action is HIGH.

Common Sense Safety Precautions
- MUST follow technicians’ guidance while working in laboratories
- NEVER perform unauthorized experiments
- NEVER try to repair any machines yourselves
- NEVER perform experimental work ALONE in a laboratory
- BEWARE of electric shock—treat all circuits as “alive” all the time
- ALWAYS earth any electric machines/circuits
- NEVER use any electronic device (e.g., cell phone) when you suspect there is a gas leak.
- NEVER touch any unknown chemicals
- ENSURE a tidy work place even when you are working in a computer lab
- ALWAYS be sure to locate fire exits

Details about safety: http://www.eee.hku.hk/InternalInformation/index.html
In Important Notice, click HKUEEE Safety Notes.

Fire Assembly Point

Composite Building
Podium of Kadoorie Biological Sciences Building
Outside G/F Entrance

Haking Wong Building
(Podium to LG/F)

Yam Pak Building
任白樓

Podium of Kadoorie Biological Sciences Building
嘉道理生物科學大樓地下

Chow Yei Ching Building
周亦卿樓

Podium of Kadoorie Biological Sciences Building
嘉道理生物科學大樓地下

Podium of Kadoorie Biological Sciences Building
嘉道理生物科學大樓地下

Podium of Kadoorie Biological Sciences Building
嘉道理生物科學大樓地下

Podium of Kadoorie Biological Sciences Building
嘉道理生物科學大樓地下
First-Aid Certificate Holders:

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<th>Name</th>
<th>Office</th>
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<tr>
<td>Mr. Thomas T.O. Kwan</td>
<td>CB-LG301A</td>
<td>2859-2694</td>
<td><a href="mailto:tokwan@eee.hku.hk">tokwan@eee.hku.hk</a></td>
</tr>
<tr>
<td>Mr. Michael, C.W. Chan</td>
<td>CB-LG301</td>
<td>2859-2694</td>
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Fire Wardens:

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<tr>
<td>LG</td>
<td>Mr. Wong Sue Hang</td>
<td>LG305</td>
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<td>Mr. Ray C.W. Lam</td>
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<td>Miss Lily Y. Lo</td>
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<td>Dr. N. Wong</td>
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<td>Mr. James A.C. Koo</td>
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<td>Mr. Nature C.W. Cheung</td>
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<td>Mr. Andrew S.C. Ho</td>
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<td>Mr. Jimmy J.K. Ko</td>
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<td>Dr. N. Wong</td>
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<td>Mr. Tommy C.W. Lam</td>
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Want to learn/know more?

- Browse the departmental safety homepage:
  - go to HKUEEE homepage
  - click "Safety and Emergency"
- Home page of Hong Kong Occupational Safety and Health Association
- University Safety Office
- Labour Department


In Important Notice, click HKUEEE Safety Notes.

Any Uncertainty, please contact us

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(CB Room 716)

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Technical Manager,
First aid support
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(CB Room LG301)

Michael C.W. Chan
Support for handling Chemical materials
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Phone: 2859-2694
CVC Room LG301