### **H2 Computing FAQ**

#### 1. Do I need to have a programming background to offer H2 Computing and do well?

No, you do not need to have any prior programming knowledge. The course is designed for absolute beginners. However, you would need to pass the selection test in order to offer H2 Computing.

Just like any other A Level subject, students who want to do well in H2 Computing **must** put in consistent effort, strive for mastery and have a strong grasp of the subject to make real-life applications.

#### 2. Is there H1 Computing?

No, Computing is only offered at the H2 level.

#### 3. What will students learn in H2 Computing?

Computing students will learn:

- Programming (Python) Procedural, Object-Oriented and Socket Programming
- SQL Database and NoSQL
- Networking
- Web Application Development with HTML/CSS

#### 4. What are the Subject Combinations offered with H2 Computing?

- H2 Computing / H2 Mathematics / **H2 Physics**
- H2 Computing / H2 Mathematics / H2 Chemistry
- H2 Computing / H2 Mathematics / H2 Economics

## 5. Is H2 Computing with H2 Economics a useful subject combination for my university studies and career options?

Computing is now not just for the Science or Engineering students. Many industries depend on big data and machine learning to help grow their businesses. As such, there are also university courses like Business Analytics with Economics that prepare students for the data analytics required by the growing needs of the industries.

#### 6. Will all 3 subject combinations with H2 Computing be offered in YIJC?

In the event that there is insufficient subscription for a particular subject combination, the college reserves the right not to offer that subject combination.

If you are keen to offer H2 Computing, you are advised to include the subject combinations with Computing in as many of your choices so that you could be offered one of the subject combinations with Computing.

#### 7. How is the Computing Selection Test like?

The Selection Test involves a series of questions which requires simple coding. No prior experience or background is required. This test is designed for students without any prior knowledge.

There will be clear instructions with a worked example preceding each question.

The purpose of the test is to assess the student's ability to:

- follow instructions.
- understand the given examples,
- recognise pattern,
- learn and apply the concepts,
- consolidate and adapt to other scenarios.

#### 8. Does the college provide laptops for Computing students?

No, the college will not allocate laptops specifically for the Computing students.

There are some laptops available for loan to students during lessons so the availability of the laptops will depend on the demand at that time.

Students under financial assistance (either MOE FAS or college FAS) can purchase a laptop and a data plan at a subsidised rate under the NEU-PC programme.

To facilitate learning, Computing students are strongly encouraged to have their own laptops, installed with all the necessary on-course software.

## 9. Can students use their personal learning devices purchased in secondary schools for H2 Computing?

Yes, if it has the recommended laptop specifications. (Refer to Q.10)

#### 10. What are the recommended laptop specifications?

If you are planning to purchase a new laptop, you may wish to consider the following specifications:

1. Operating System (OS): Microsoft Windows 10

#### Rationale:

- i) The GCE A Level Practical eExam will be conducted on laptops with Microsoft Windows OS.
- ii) MOE will provide on-course software installation only for the Microsoft OS platform.

#### "Good to have" Features & Accessories

2. Processor: Intel Core i5 or better

3. RAM (Memory): 4 Gb (min) / 8 Gb (recommended) or above

4. Local Hard Disk: (min) 50 Gb of available storage space

- 5. Large Screen easy to work on
- 6. Light weight easy to carry around
- 7. Long Battery Life
- 8. Touch Screen with Stylus handwriting and drawing
- 9. Mouse easy to work with
- 10. Earphone and Microphone
- 11. Warranty for at least 2 years
- 12. Suitable Carry Bag
- \* There is no need for a CDROM drive. **USB Thumbdrive** will be used for transferring data files.

Please note that the "good to have features" will increase the cost of the laptops. They are just good to have and *not must have*!

# 11. I heard from my parents and others that we can always learn Computing in future on our own. Why should I take H2 Computing now?

The world is very different now. Technology has pervasively changed the world and children are learning digital skills at very young age. By the time you join the university or the workforce, you will be surrounded by people with IT-related skills and knowledge.

Taking H2 Computing at A Level also opens up many opportunities, especially in the choice of courses in the universities and future careers.

For more information, please refer to <a href="https://sites.google.com/moe.edu.sg/yijc-computing">https://sites.google.com/moe.edu.sg/yijc-computing</a>