## Applied Learning

### 2022-24 Cohort; 2024 HKDSE

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Course Title</td>
<td>eSports Technology</td>
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<td>2. Course Provider</td>
<td>School of Professional and Continuing Education, The University of Hong Kong</td>
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<td>3. Area of Studies/ Course Cluster</td>
<td>Engineering and Production/Information Engineering</td>
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<td>4. Medium of Instruction</td>
<td>Chinese or English</td>
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<td>5. Learning Outcomes</td>
<td>Upon completion of the course, students should be able to:</td>
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<td>(1) describe the functions of various job roles in the eSports industry;</td>
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<td>(2) apply technology knowledge and skills in the production of eSports digital media contents and network infrastructure configurations;</td>
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<td>(3) integrate problem-solving, analytical and communication skills to solve eSports business and technology related problems;</td>
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<td>(4) appraise the work ethics and positive values required by the eSports industry; and</td>
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<td>(5) develop self-understanding for further studies and career development in the related field.</td>
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6. Curriculum Map – Organisation and Structure

Overview of eSports Business Ecosystem (30 hours)
- History, origin and development of eSports
- Stakeholders of eSports industry
- Framework of eSports business ecosystem
- Ethics and legal issues related to eSports
- eSports game classification and mechanism
- Successful elements of eSports
- Skills in dealing with gaming addiction

eSports Communication Skills and Event Planning (45 hours)
- eSports event planning
  - eSports financial control and sponsorship
  - eSports franchised model
  - Safety measures and crisis handling
  - eSports event implementation
  - eSports marketing
- eSports Communication Skills
  - Reporting skills
  - Skills of introducing eSports games
  - Narrating skills
  - Contingencies and its handling skills

Devices and Network Infrastructure for eSports (39 hours)
- eSports devices
- Impacts by network latency on eSports competition
- Network specifications for eSports
- Network security measures
- 5G technology and its impacts on eSports

eSports Streaming Technology (66 hours)
- Principles of live streaming
- Computer Graphics for eSports
- Live streaming platform & tools
- eSports live streaming setup and configuration
- eSports event live streaming production
- Troubleshooting for live streaming setup

Knowledge integration and application

Experiential learning

- Practical exercises on eSports narration, event planning, network infrastructure setup and online streaming
- Case studies
- Visits
- Industry talks
7. The Context

- The information on possible study and career pathways is provided to enhance students’ understanding of the wider context of the specific Applied Learning course. Students who have successfully completed Applied Learning courses have to meet other entry requirements as specified by the institutions.
- The recognition of Applied Learning courses for admission to further studies and career opportunities is at the discretion of relevant institutions. The Education Bureau and the course providers of Applied Learning are exploring and seeking recognition related to further education and career development opportunities for students successfully completing the Applied Learning courses.

### Possible further study and career pathways

#### Further studies

- e.g. eSports, digital media and entertainment, business management, sports and recreation management, IT

#### Career development

- e.g. eSports junior event planners & marketing officers, eSports competition narrators, junior technical support officers

### Relations with core subjects and other elective subjects

**Enhancing and enriching, e.g.**

- **Chinese Language and English Language**: enhance students' learning in verbal and written communication through eSports event narration
- applying the common knowledge of this course and Information and Communication Technology such as technology knowledge and skills and software application reinforces learning of the course and the subject

**Cross-fertilisation, e.g.**

- **Business, Accounting and Financial Studies**: the knowledge and skills in eSports event planning and management could be related to the contents of business related areas

**Expanding horizons, e.g.**

- **Students taking Personal, Social and Humanities Education Key Learning Area**: can expand their horizon about the global development trend of gaming industry

**Consolidating and synergising students’ studies, e.g.**

- multi-disciplinary knowledge and practical activities provided in this course help students reflect on their learning and develop related knowledge and skills for application in other subjects

### Cluster of professions/trades/industries related to the course

- e.g. eSports, digital media and entertainment, business management, sports and recreation management

### Future global and local outlook

- in recent years, eSports have become one of the most rapidly growing forms of new media. eSports spectators watch TV or live streaming on the internet, where they could also participate in social interaction such as forums and live chat rooms. These eSports activities have brought economic benefits
- the Government highlighted eSports as a new sector with great economic development potential which could help boost the local eSports and IT industries
- given the growing trend of eSports industry, there is an opportunity to nurture the new generation to arouse their interest and equip them with knowledge and skills in the eSports area

#### Beginners’ skill set to facilitate entry to further studies and/or work

- understand fundamental knowledge and skills of eSports ecosystem
- apply technical skills in eSports digital media content production and network infrastructure setup
- apply knowledge in planning and implementing eSports event
- understand the responsibilities of eSports industry, copyright and intellectual property rights

### Relations with other areas of studies/ courses of Applied Learning

**Business, Management and Law**

- enhance students’ understanding of the business requirements of event planning and implementation

### Foundation knowledge developed in junior secondary education and Secondary 4

The course is built upon the foundation knowledge students acquired in, e.g.

- **Chinese Language Education and English Language Education**: verbal and written communication
- **Mathematics Education**: basic calculations, statistics
- **Technology Education**: data handling, information searching and software application
In eSports technology, student-centred learning and teaching activities are designed to enable students to understand fundamental theories and concepts, develop their generic skills, and address their career aspirations in eSports technology.

Different modes of activities are employed to provide students with a systematic understanding about the context (e.g. lectures on the overview of the eSports business ecosystem, eSports network infrastructure and online streaming technology) and eye-opening opportunities to experience the complexity of the context (e.g. visits to local and/or mainland eSports organisations, practical exercises at industry standard and sharing sessions and career talks by the eSports industry practitioners).

Students acquire an understanding of the requirements, fundamental knowledge and skills essential for further learning within the area through learning-by-practising opportunities in an authentic or near-authentic environment (e.g. practical exercises under simulated working environment with industry grade production software and hardware).

Students are also encouraged to develop and apply conceptual, practical and reflective skills to demonstrate entrepreneurship and innovation (e.g. case studies to learn about the eSports business ecosystem and the global development trend of eSports industry). Students are given opportunities to integrate the knowledge and skills acquired and consolidate their learning (e.g. in the projects, students create the eSports digital media content, setup network infrastructure and online streaming. Students are expected to make use of the knowledge acquired and present their works in a systematic way. In the process, students apply practical skills at industry standard to tackle eSports related issues with multi-disciplinary knowledge, and prepare reports and group presentation. In the project, students are also expected to demonstrate the positive values and attitudes required in the industry).
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Curriculum Pillars of Applied Learning in Context – eSports Technology

Upon completion of the course, students should be able to:
- describe the functions of various job roles in the eSports industry;
- apply technology knowledge and skills in the production of eSports digital media contents and network infrastructure configurations;
- integrate problem-solving, analytical and communication skills to solve eSports business and technology related problems;
- appraise the work ethics and positive values required by the eSports industry; and
- develop self-understanding for further studies and career development in the related field.

Through the specific contexts related to the course, students have different learning opportunities, for example:

1. **Career-related Competencies**
   - understand the development trend of the local and international eSports industry through visits, lectures, guest talks and career talks by industry practitioners;
   - explain the functions of various job positions in the eSports industry;
   - enhance understanding of industry competency requirements through practical exercises which are designed with reference to the industry standard; and
   - describe the cultural differences of local and overseas eSports industries.

2. **Foundation Skills**
   - enhance information technology and computing skills through production of eSports digital contents and network infrastructure configuration, doing research and information collection for assignments and projects;
   - apply mathematical knowledge to organise eSports event such as the marketing budget; and
   - strengthen communication skills in both verbal and written forms through participation in oral presentation and preparation of written reports.

3. **Thinking Skills**
   - integrate knowledge from different aspects including business planning, event operation and technology applications required by the eSports industry;
   - apply skills in critical thinking and analytical skill through discussions on real life cases which will stimulate students’ thinking and further understanding of the competency required by eSports industry;
   - enhance creativity through participation in regular class activities including eSports digital content design, presentations and site visits; and
   - develop skills in problem-solving and decision-making through practical exercise and group projects which require information search and filtering, and results analysis and consolidation.
4. **People Skills**  
- apply interpersonal communication and team building skills through participating in group projects and learning;  
- discuss the mental health and stress management of eSports practitioners; and  
- practise time management skills through simulated work environment where students are required to follow industry practices.

5. **Values and Attitudes**  
- develop the sense of responsibility through understanding the ethical requirements in the eSports industry;  
- appraise and respect the intellectual property of other people through eSports media content preparation assignments; and  
- develop self-confidence through successful completion of practical work with feedback by tutors.