

## **Curriculum Policy of the Graduate School of System Informatics**

### **Master's Program**

#### **Degree: Master of System Informatics**

##### **Department of Systems Science**

Based on the Kobe University Curriculum Policy, the Graduate School of System Informatics adopts the following policies in organizing its curricula.

- To enable students to attain the qualities of “humanity”, “creativity” and “international awareness”, classes on Advanced Science and Technology and Specific Research, are offered.
- The following courses are provided so that students can acquire in-depth academic knowledge in system informatics and develop outstanding specialized skills.
  - A group of general courses on System Informatics are offered to all departmental students, allowing them to acquire important specialist knowledge across this academic field, and to develop the ability to apply this knowledge in practice.
  - A group of courses on the fundamental approaches are offered to enable students to understand these aspects of System Science fields.
  - A group of courses on applied studies of the department's specialized field and specific research are offered so that students can develop the ability to solve problems from a System Informatics point of view, with the progressive and highly specialized perspectives that are particular to the Systems Science field.
  - Courses on Advanced Science and Technology are offered enabling students to develop interdisciplinary perspectives for identifying and understanding issues.

Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.

Learning outcomes are evaluated via multiple comprehensive methods according to the learning objectives.

##### **Department of Information Science**

Based on the Kobe University Curriculum Policy, the Graduate School of System Informatics adopts the following policies in organizing its curricula.

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  - A group of general courses on system informatics are offered to all departmental students, allowing them to acquire important specialist knowledge across this academic field, and

to develop the ability to apply this knowledge in practice.

- A group of courses on the fundamental approaches are offered to enable students to understand these aspects of Information Science fields.
- A group of courses on applied studies of the department's specialized field and specific research are offered so that students can develop the ability to solve problems from a System Informatics point of view, with progressive and highly specialized perspectives that are particular to the Information Science field .
- Courses on Advanced Science and Technology are offered enabling students to develop interdisciplinary perspectives for identifying and understanding issues.

Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.

Learning outcomes are evaluated via multiple comprehensive methods according to the learning objectives.

### **Department of Computational Science**

Based on the Kobe University Curriculum Policy, the Graduate School of System Informatics adopts the following policies in organizing its curricula.

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  - A group of general courses on system informatics are offered to all departmental students, allowing them to acquire important specialist knowledge across this academic field, and to develop the ability to apply this knowledge in practice.
  - A group of courses on the fundamental approaches are offered to enable students to understand these aspects of Computational Science fields.
  - A group of courses on applied studies of the department's specialized field and specific research are offered so that students can develop the ability to solve problems from a System Informatics point of view, with progressive and highly specialized perspectives that are particular to the Computational Science field .
  - Courses on Advanced Science and Technology are offered enabling students to develop interdisciplinary perspectives for identifying and understanding issues.

Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.

Learning outcomes are evaluated via multiple comprehensive methods according to the learning objectives.

## **Degree: Master of Engineering**

### **Department of Systems Science**

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  - A group of general courses on system informatics are offered to all departmental students, allowing them to acquire important specialist knowledge across this academic field, and to develop the ability to apply this knowledge in practice.
  - A group of courses on the fundamental approaches are offered to enable students to understand these aspects of the System Science fields.
  - A group of courses on applied studies of the department’s specialized field and specific research are offered so that students can develop the ability to solve problems from an Engineering point of view, with progressive and highly specialized perspectives in that are particular to the Systems Science field.
  - Courses on Advanced Science and Technology are offered enabling students to develop interdisciplinary perspectives for identifying and understanding issues.

Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.

Learning outcomes are evaluated via multiple comprehensive methods according to the learning objectives.

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  - A group of general courses on system informatics are offered to all departmental students, allowing them to acquire important specialist knowledge across this academic field, and to develop the ability to apply this knowledge in practice.
  - A group of courses on the fundamental approaches are offered to enable students to

understand these aspects of Information System fields.

- A group of courses on applied studies of the department's specialized field and specific research are offered so that students can develop the ability to solve problems from an Engineering point of view, with progressive and highly specialized perspectives that are particular to the Information Science field.
- Courses on Advanced Science and Technology are offered enabling students to develop interdisciplinary perspectives for identifying and understanding issues.

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  - A group of courses on the fundamental aspects are offered to enable students to understand these aspects of Computational Science fields.
  - A group of courses on applied studies of the department's specialized field and specific research are offered so that students can develop the ability to solve problems from an Engineering point of view, with progressive and highly specialized perspectives that are particular to the Computational Science field.
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## **Doctoral Program**

### **Degree: Doctor of Philosophy in System Informatics**

#### **Department of Systems Science**

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  - Courses and specific research are offered focusing on departmental divisions so that students can develop the ability to identify issues and solve problems from a System Informatics point of view, with advanced perspectives in the Systems Science field.

Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.

During the first and second years, an interim research colloquium on students’ research topics, research progress and research plans is held, in which optimal guidance is provided for the preparation of doctoral theses. Furthermore, a research presentation is organized during the final year, where students who present satisfactory research are allowed to proceed to the submission and examination of their doctoral theses (doctoral thesis presentation).

Learning outcomes are evaluated via multiple comprehensive methods according to the learning objectives.

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Learning outcomes are evaluated via multiple comprehensive methods according to the learning objectives.

### **Degree: Doctor of Philosophy in Engineering**

#### **Department of Systems Science**

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### **Degree: Doctor of Philosophy**

#### **Department of Systems Science**

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Learning outcomes are evaluated via multiple comprehensive methods according to the learning objectives.

## **Degree: Doctor of Philosophy in Computational Science**

### **Department of Computational Science (Computational Science Intensive Course)**

- This course aims to give ample support for career development as a researcher specializing in computational science, and provides coherent educational opportunities throughout Master's and Doctoral programs.
- To enable students to attain the qualities of “humanity”, “creativity” and “international awareness”, classes on Specific Research are offered.
- The following courses are provided so that students can acquire in-depth academic knowledge in System Informatics and develop refined and outstanding specialized skills.
  - Courses and specific research are offered focusing on the departmental divisions so that students can develop the ability to identify issues and solve problems with advanced perspectives in the Computational Science field.
  - Cooperative courses are offered through collaborations with other universities to enable students to develop skills in high-performance computation and enrich their broad expertise across various fields of computational science.

Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.

During the first and second years, an interim research colloquium on students' research topics, research progress and research plans is held, in which optimal guidance is provided for the preparation of doctoral theses. Furthermore, a research presentation is organized during the final year, where students who present satisfactory research are allowed to proceed to the submission and examination of their doctoral theses (doctoral thesis presentation).

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