

## PERINCIAN PROGRAM

IPTS	:	KOLEJ UNIVERSITI LINCOLN
NO PENDAFTARAN PREMIS	:	DKU016 (B)
PROGRAM	:	INTRODUCTION TO JAVA
TENAGA PENGAJAR	:	2
KAEDAH PEMBELAJARAN	:	BERSEMUKA

### LATAR BELAKANG / LIPUTAN KESELURUHAN

This course is designed for applications programmers and designers planning to develop applications using the Java Programming Language.

### HASIL PEMBELAJARAN

At the end of this course, the student should be able to:

- Compile and run a Java application.
- Navigate through the API docs.
- Use the Object Oriented paradigm in Java programs.
- Use Exceptions to handle run time errors.

	PERINCIAN MAKLUMAT	PELAKSANAAN	PENILAIAN	PERINCIAN KOS	CATATAN
	MODUL (Penerangan)	HARI (Tempoh Jam)			
1.	<b>COMMUNICATION AND SOFTSKILL:</b> a. Introduction to Communication b. Communication techniques c. Business Communication	2 (18 Jam)	Ujian Penilaian Awal	RM 200	Kelas
		3 (27 jam)	Kuiz/ Pembentangan	RM 250	Kelas
		1 (9 Jam)	Latihan	RM100	Makmal
2.	<b>INTRODUCTION</b> <ul style="list-style-type: none"> <li>● What is Java?</li> <li>● Versioning</li> <li>● The Java Virtual Machine</li> <li>● Writing a Java Program</li> <li>● Packages</li> <li>● Simple Java Programs</li> </ul>	1(6 hours)	Written Tests,	RM150	Class

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	MODUL (Penerangan)	HARI (Tempoh Jam)			
3.	<b>LANGUAGE COMPONENTS</b> <ul style="list-style-type: none"> <li>• Primitive Data Types</li> <li>• Control Flow Statements</li> <li>• The if Statement</li> <li>• The switch Statement</li> <li>• The while and do while Statements</li> <li>• The for Statement</li> <li>• The break Statement</li> <li>• The continue Statement</li> <li>• Operators</li> <li>• Casts and Conversions</li> </ul>	1(6 hours)	Written Tests,	RM150	Class
4.	<b>OBJECT-ORIENTED PROGRAMMING</b> <ul style="list-style-type: none"> <li>• Defining New Data Types</li> <li>• Constructors</li> <li>• The String Class</li> <li>• String Literals</li> <li>• Documentation</li> <li>• Packages</li> <li>• The StringBuffer Class</li> <li>• Naming Conventions</li> <li>• The Date Class</li> <li>• The import Statement</li> <li>• Deprecation</li> <li>• The StringTokenizer Class</li> <li>• The DecimalFormat Class</li> </ul>	1(6 hours)	Assignment	RM150	Lab
5	<b>METHODS</b> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Method Signatures</li> <li>• Arguments and Parameters</li> <li>• Passing Objects to Methods</li> <li>• Method Overloading</li> </ul>	2(12 hours)	Lab Experiments	RM260	Lab

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	<ul style="list-style-type: none"> <li>• Static Methods</li> <li>• The Math Class</li> <li>• The System Class</li> <li>• Wrapper Classes</li> </ul>				
6	<b>ARRAYS</b> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Processing Arrays</li> <li>• Copying Arrays</li> <li>• Passing Arrays to Methods</li> <li>• Arrays of Objects</li> <li>• The Arrays Class</li> <li>• Command Line Arguments</li> <li>• Multidimensional Arrays</li> </ul>	2(12 hours)	Lab Experiments	RM250	Lab
7	<b>INHERITANCE &amp; POLYMORPHISM</b> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• A Simple Example</li> <li>• The Object Class</li> <li>• Method Overriding</li> <li>• Polymorphism</li> </ul>	2(12 hours)	Lab Experiments	RM250	Lab
8	<b>ABSTRACT CLASSES AND INTERFACES</b> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Abstract Classes</li> <li>• Abstract Class Example</li> <li>• Extending an Abstract Class</li> <li>• Interfaces</li> </ul>	2(12 hours)	Lab Experiments	RM200	Lab
9	<b>EXCEPTIONS</b> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Exception Handling</li> <li>• The Exception Hierarchy</li> <li>• Checked Exceptions</li> <li>• Advertising Exceptions with throws</li> </ul>	2(12 hours)	Assignment	RM200	Per-Student

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	MODUL (Penerangan)	HARI (Tempoh Jam)			
	<ul style="list-style-type: none"> <li>Developing Your Own Exception Classes</li> <li>The finally Block</li> </ul>				
10	<b>INPUT AND OUTPUT IN JAVA</b> <ul style="list-style-type: none"> <li>Introduction</li> <li>The File Class</li> <li>Standard Streams</li> <li>Keyboard Input</li> <li>File I/O Using Byte Streams</li> <li>Character Streams</li> <li>File I/O Using Character Streams</li> <li>Buffered Streams</li> <li>File I/O Using a Buffered Stream</li> <li>Writing Text Files</li> </ul>	2(12 hours)	Lab Experiments	RM200	Lab
11	<b>ENCAPSULATION</b> <ul style="list-style-type: none"> <li>Constructors</li> <li>The this Reference</li> <li>Data Hiding</li> <li>public and private Members</li> <li>Access Levels</li> <li>Composition</li> <li>Static Data Members</li> </ul>	2(12 hours)	Lab Experiments	RM200	Lab
12	<b>COLLECTIONS</b> <ul style="list-style-type: none"> <li>Vectors</li> <li>Hashtables</li> <li>Enumerations</li> <li>Properties</li> </ul>	2(12 hours)	Lab Experiments	RM200	Lab
13	<b>COLLECTIONS</b> <ul style="list-style-type: none"> <li>Collection Framework Hierarchy</li> <li>Lists</li> <li>Sets</li> <li>Maps</li> <li>The Collections Class</li> </ul>	2(12 hours)	Lab Experiments	RM200	Lab

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14	<b>NETWORKING</b> <ul style="list-style-type: none"> <li>• Networking Fundamentals</li> <li>• The Client/Server Model</li> <li>• InetAddress</li> <li>• URLs</li> <li>• Sockets</li> <li>• A Time-of-Day Client</li> <li>• Writing Servers</li> <li>• Client/Server Example</li> </ul>	2(12 hours)	Lab Experiments	RM200	Lab
15	<b>THREADS</b> <ul style="list-style-type: none"> <li>• Threads vs. Processes</li> <li>• Creating Threads by Extending Thread and Implementing Runnable</li> <li>• Creating Threads by Daemon Threads</li> <li>• Thread States</li> <li>• Thread Problems</li> </ul>	2(12 hours)	Lab Experiments	RM200	Lab
	PENGINAPAN (sekiranya ada)	30 Hari		RM420	Per-Pelajar
	PENGANGKUTAN (sekiranya ada)	30 Hari		RM300	Per-Pelajar
	MAKAN & MINUM (sekiranya ada)	30 Hari		RM1200	Per-Pelajar
	<b>JUMLAH</b>	<b>30 Days</b>		<b>RM5280.00</b>	

## RUJUKAN

### 1. Tambahan:

1. Latihan mesin dan amali
2. Latiham visual dan komunikasi digital
3. Certificate of Attendance

## 2. Laman Sesawang:

1. Lincoln University College ([www.lincoln.edu.my](http://www.lincoln.edu.my))
2. Java tutorial: Learn Java Programming (<https://beginnersbook.com/java-tutorial-for-beginners-with-examples/>)
3. Java Tutorial (<https://www.javatpoint.com/java-tutorial>)
4. PHP Tutorial (<https://www.w3schools.com/php/DEFAULT.asp>)
5. Tutorial Points (<https://www.tutorialspoint.com/php/index.htm>)
6. PHP Tutorial for Beginners (<https://www.guru99.com/php-tutorials.html>  
<https://www.phptpoint.com/php-tutorial/>)
7. Communication skills (<https://corporatefinanceinstitute.com/resources/careers/soft-skills/communication/>)
8. Communication Training Industry (<https://trainingindustry.com/blog/leadership/5-important-communication-skills-for-leaders/>)
9. Effective Communication in Workplace (<https://www.hrtechnologist.com/articles/employee-engagement/effective-communication-in-the-workplace-how-and-why/>)
10. Business Communication (<https://www.finsmes.com/2019/03/the-importance-of-communication-in-business-how-to-improve-it.html>)

Disediakan oleh:

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