ISIT312

Big Data Management

SIM S4 2025

Lecturer and Tutor

Lecturer: **Dr Fenghui Ren**
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Subject Schedule

Session: **SIM S4 2025**

Lecture schedule:

Date	Time	Class Grp	Venue
27/9/2025	8:30:00 AM	L01_F,L02_P	A.1.09A (376pax)
27/9/2025	12:00:00 PM	L01_F,L02_P	A.1.09A (376pax)
29/9/2025	3:30:00 PM	L01_F	A.1.09A (376pax)
29/9/2025	7:00:00 PM	L02_P	A.3.09C (80pax)
30/9/2025	3:30:00 PM	L01_F	B.3.17 (296pax)
30/9/2025	7:00:00 PM	L02_P	A.3.09C (80pax)
2/10/2025	3:30:00 PM	L01_F	B.4.17 (296pax)
2/10/2025	7:00:00 PM	L02_P	A.2.17B (80pax)
4/10/2025	8:30:00 AM	L01_F,L02_P	A.1.09A (376pax)
4/10/2025	12:00:00 PM	L01_F,L02_P	A.1.09A (376pax)

Subject Schedule

Session: SIM S4 2025

Lab schedule:

3/10/2025	8:30:00 AM	T01	HQ BLK A LAB A.5.20A/A.5.20B		3/10/2025	3:30:00 PM	T04	HQ BLK A LAB A.5.20A/A.5.20B
10/10/2025	8:30:00 AM	T01	HQ BLK A LAB A.5.20A/A.5.20B		10/10/2025	3:30:00 PM	T04	HQ BLK A LAB A.5.20A/A.5.20B
17/10/2025	8:30:00 AM	T01	HQ BLK A LAB A.5.20A/A.5.20B		17/10/2025	3:30:00 PM	T04	HQ BLK A LAB A.5.20A/A.5.20B
24/10/2025	8:30:00 AM	T01	HQ BLK A LAB A.5.20A/A.5.20B		24/10/2025	3:30:00 PM	T04	HQ BLK A LAB A.5.20A/A.5.20B
31/10/2025	8:30:00 AM	T01	HQ BLK A LAB A.5.20A/A.5.20B		31/10/2025	3:30:00 PM	T04	HQ BLK A LAB A.5.20A/A.5.20B
5/11/2025	3:30:00 PM	T01	HQ BLK A LAB A.5.17A/A.5.17B		8/11/2025	8:30:00 AM	T04	HQ BLK A LAB A.5.17A/A.5.17B
7/11/2025	8:30:00 AM	T01	HQ BLK A LAB A.5.20A/A.5.20B		11/11/2025	8:30:00 AM	T04	HQ BLK A LAB A.5.17A/A.5.17B
14/11/2025	8:30:00 AM	T01	HQ BLK A LAB A.5.20A/A.5.20B		14/11/2025	3:30:00 PM	T04	HQ BLK A LAB A.5.20A/A.5.20B
3/10/2025	12:00:00 PM	T02	HQ BLK A LAB A.5.20A/A.5.20B		6/10/2025	3:30:00 PM	T05	HQ BLK A LAB A.5.17A/A.5.17B
10/10/2025	12:00:00 PM	T02	HQ BLK A LAB A.5.20A/A.5.20B		15/10/2025	3:30:00 PM	T05	HQ BLK A LAB A.5.17A/A.5.17B
17/10/2025	12:00:00 PM	T02	HQ BLK A LAB A.5.20A/A.5.20B		23/10/2025	3:30:00 PM	T05	HQ BLK A LAB A.5.17A/A.5.17B
24/10/2025	12:00:00 PM	T02	HQ BLK A LAB A.5.20A/A.5.20B		3/11/2025	3:30:00 PM	T05	HQ BLK A LAB A.5.17A/A.5.17B
31/10/2025	12:00:00 PM	T02	HQ BLK A LAB A.5.20A/A.5.20B		6/11/2025	12:00:00 PM	T05	HQ BLK A LAB A.5.20A/A.5.20B
7/11/2025	12:00:00 PM	T02	HQ BLK A LAB A.5.20A/A.5.20B		10/11/2025	3:30:00 PM	T05	HQ BLK A LAB A.5.17A/A.5.17B
8/11/2025	3:30:00 PM	T02	HQ BLK A LAB A.5.17A/A.5.17B		13/11/2025	3:30:00 PM	T05	HQ BLK A LAB A.5.17A/A.5.17B
14/11/2025	12:00:00 PM	T02	HQ BLK A LAB A.5.20A/A.5.20B		1/10/2025	7:00:00 PM	T01P	HQ BLK A LAB A.5.17A/A.5.17B
1/10/2025	3:30:00 PM	T03	HQ BLK A LAB A.5.20A/A.5.20B		9/10/2025	7:00:00 PM	T01P	HQ BLK A LAB A.5.17A/A.5.17B
8/10/2025	3:30:00 PM	T03	HQ BLK A LAB A.5.17A/A.5.17B		15/10/2025	7:00:00 PM	T01P	HQ BLK A LAB A.5.17A/A.5.17B
21/10/2025	8:30:00 AM	T03	HQ BLK A LAB A.5.17A/A.5.17B		23/10/2025	7:00:00 PM	T01P	HQ BLK A LAB A.5.17A/A.5.17B
25/10/2025	3:30:00 PM	T03	HQ BLK A LAB A.5.17A/A.5.17B		6/11/2025	7:00:00 PM	T01P	HQ BLK A LAB A.5.17A/A.5.17B
29/10/2025	3:30:00 PM	T03	HQ BLK A LAB A.5.17A/A.5.17B		13/11/2025	7:00:00 PM	T01P	HQ BLK A LAB A.5.17A/A.5.17B
7/11/2025	3:30:00 PM	T03	HQ BLK A LAB A.5.17A/A.5.17B					
8/11/2025	12:00:00 PM	T03	HQ BLK A LAB A.5.17A/A.5.17B					
11/11/2025	12:00:00 PM	T03	HQ BLK A LAB A.5.17A/A.5.17B					

Assessment

ISIT 312 Assignments (individual) **10% + 20% + 20% = 50%**

1 Final examination   **50%**
Exam period

40% TF clause on the final examination !

Topics

Session (3 hours per sesion)	Topic
1	Hadoop: Introduction and Distributed Storage System
2	MapReduce Model and Application Development
3	Hive Conceptual and Logical Data Warehouse Design, SQL for Data Warehousing
4	Physical Data Warehouse Design, Extract, Transform and Load
5	Hbase
6	Spark Fundamentals
7	Data Processing and Advanced Operations in Spark

Tools

The VM: Ubuntu 14.04 LTS VM (run with VirtualBox)
Inside VM:
- **Big data software:**
  - **Hadoop, Hive, HBase, Pig, Spark, Kafka**
- **Tools:**
  - **Linux shell (bash)**
  - **Text editor (gedit)**
  - **Zeppelin**
  - **Other (optional): Eclipse**
- **Programming languages:**
  - **Java**

Subject motto

If we only hear a thing,
           we soon forget it !

If we see it,
           we remember it !

If we do it ourselves,
           we know it !

IMPORTANT:
Read your emails in time and watch closely on the Moodle announcements.

Questions ?