



浙江大學

**INFS555**

**Business Intelligence & Data Analytics**

# INFS555

## Business Intelligence & Data Analytics

### Instructor Contact Details

Lecturer-in-charge: Mingzheng WANG (TBD)

Email: wlwyxy\_29@zju.edu.cn

Office location: Huajiachi Campus, Zhejiang University, Hangzhou, China

Consultation Time: Book appointment by sending email to: wlwyxy\_29@zju.edu.cn

### Teaching Times, Modes and Locations

Course Duration: 23 Dec 2024 to 10 Jan 2025

Modes: Online/Face-to-face

Location: Anywhere via online, or Huajiachi Campus, Zhejiang University via face-to-face

### Academic Level

Undergraduate

### Credit Points:

The course is worth 6 units of credit point.

### Credit Hours

The number of credit hours of this course equals to the credits of a standard semester-long course.

### Contact Hours

The course contains a total of 53 contact hours, which consists of orientation, lectures, seminars, quiz, discussion, research, case study, small tests, assignments, on-site field trip(s), in-class and after-class activities, revision, self-study, and final exam. Students will receive an official transcript which is issued by Zhejiang University when completing this course.

### Enrolment Requirements

Eligibility requires enrollment in an overseas university as an undergraduate or postgraduate student, proficiency in English, and pre-approval from the student's home institution.

### Course Description:

This course provides an in-depth understanding of Business Intelligence (BI) and its role in business decision-making, emphasizing Information Systems' support of human intelligence. Students will learn how to utilize BI for data discovery and analysis and gain hands-on experience with commercial BI tools. The course is designed to introduce students to the basics of business research and information management, equipping them with the skills to design research instruments, collect and filter information, and effectively communicate valuable insights to decision-makers for strategic planning. Additionally, students will explore various facets of marketing research, develop essential research skills, and can apply these in practical settings. They will also study a variety of data sources and advanced research methodologies and techniques.

### Prerequisite:

N/A

### Learning Resources

Ramesh Sharda, Dursun Delen, and Efraim Turban. Business intelligence and Analytics: Systems for Decision Support (3rd edition. Pearson, 2014

### Learning Objectives

By the end of this course, you should be able to:

- Describe the organizational issues related to a business intelligence-based management approach and propose solutions to overcome the issues.
- Use appropriate conceptual frameworks to analyze the role of different business intelligence applications in supporting day to day business and improving organizational and competitive advantage.
- Relate business intelligence to business performance management, business process management and information management in an enterprise.

### Course Delivery:

- Online Lecture mode includes lectures, seminars, quiz, discussion, research, case study, small tests, assignments, online field trip(s), in-class activities, revision and final exam.

- Face-to-face Lecture mode includes lectures, seminars, quiz, discussion, research, case study, small tests, assignments, on-site field trip(s), in-class and after-class activities, revision, and final exam.

The following course will be taught in English. There will also be guest speakers and optional field trips available for students who would like to enhance their learning experience. All courses and other sessions will be run during weekdays.

Topics and Course Schedule:

<b>WK</b>	<b>Topic</b>	<b>Activities</b>
1	Introduction	Lecture; Tutorial
1	An Overview of Business Intelligence	Lecture; Tutorial
1	Foundations and Technologies for Decision Making	Lecture; Tutorial
1	Data Warehousing	Lecture; Tutorial
1	Data Integration and the Extraction, Transformation, and Load(ETL) Processes	Lecture; Tutorial
2	Data and Information Visualization	Lecture; Tutorial
2	Business Performance Management	Lecture; Tutorial
2	Data Mining	Lecture; Tutorial
2	In-class Test	Closed book
2	Techniques for Predictive Modeling	Lecture; Tutorial
2	Model-Based Decision Making: Optimization and Multi-Criteria Systems	Lecture; Tutorial
3	Problem-Solving Search Methods	Lecture; Tutorial
3	Knowledge Management and Collaborative Systems	Lecture; Tutorial
3	Big Data and Future Directions for Business Analytics	Lecture; Tutorial
3	Review	Tutorial
3	Final exam	Closed book

### Assessments:

Class participation	15%
In-class Test	15%
Assignments	20%
Final exam	50%

### Grade Descriptors:

HD	High Distinction	85-100
D	Distinction	75-84
Cr	Credit	65-74
P	Pass	50-64
F	Fail	0-49

#### **High Distinction 85-100**

- Treatment of material evidences an advanced synthesis of ideas Demonstration of initiative, complex understanding, and analysis.
- Work is well-written and stylistically sophisticated, including appropriate referencing, clarity, and some creativity where appropriate.
- All criteria addressed to a high level.

#### **Distinction 75-84**

- Treatment of material evidences an advanced understanding of ideas Demonstration of initiative, complex understanding and analysis Work is well-written and stylistically strong.
- All criteria addressed strongly.

#### **Credit 65-74**

- Treatment of material displays a good understanding of ideas
- Work is well-written and stylistically sound, with a minimum of syntactical errors.
- All criteria addressed clearly.

#### **Pass 50-64**

- Treatment of material indicates a satisfactory understanding of ideas Work is adequately written, with some syntactical errors.
- Most criteria addressed adequately.

#### **Fail 0-49**

- Treatment of ideas indicates an inadequate understanding of ideas Written style inappropriate to task, major problems with expression.
- Most criteria not clearly or adequately addressed.

### Academic Integrity

Students are expected to uphold the university's academic honesty principles which are an integral part of the university's core values and principles. If a student fails to observe the acceptable standards of academic honesty, they could attract penalties and even disqualification from the course in more serious circumstances. Students are responsible for knowing and observing accepted principles of research, writing and any other task which they are required to complete.

Academic dishonesty or cheating includes acts of plagiarism, misrepresentation, fabrication, failure to reference materials used properly and forgery. These may include, but are not limited to: claiming the work of others as your own, deliberately applying false and inaccurate information, copying the work of others in part or whole, allowing others in the course to copy your work in part or whole, failing to appropriately acknowledge the work of other scholars/authors through acceptable referencing standards, purchasing papers or writing papers for other students and submitting the same paper twice for the same subject.

This Academic Integrity policy applies to all students of the Zhejiang University in all programs of study, including non-graduating students. It is to reinforce the University's commitment to maintain integrity and honesty in all academic activities of the University community.

### Policy

The foundation of good academic work is honesty. Maintaining academic integrity upholds the standards of the University. The responsibility for maintaining integrity in all the activities of the academic community lies with the students as well as the faculty and the University. Everyone in this community must work together to ensure that the values of truth, trust and justice are upheld.

Academic dishonesty affects the University's reputation and devalues the degrees offered. The University will impose serious penalties on students who are found to have violated this policy. The following penalties may be imposed:

- ✓ Expulsion
- ✓ Suspension
- ✓ Zero mark /fail grade
- ✓ Marking down
- ✓ Re-doing/re-submitting of assignments or reports, and
- ✓ Verbal or written warning.