

2022/2023 UEA Bachelor's Degree Programme (Taught in Chinese)

Xi'an Jiaotong University
Big Data Management and Application

** The information below is extracted from the existing curriculum, which is subject to change. Please refer to the curriculum used in the year of entry as final curriculum.*

1. Program Overview

University/School: School of Management, Xi'an Jiaotong University (XJTU)

Major: Big Data Management and Application

Awarding Degree: Bachelor of Management

Duration: 4 Years

Credit requirement for graduation: For graduation, students should complete all modules with 145 credits and practice with 8 credits as required in the curriculum, passing the PE test. Students, who have met the criteria as required by the university regulation on undergraduate student registration and degree awarding, will be awarded with degree certificate.

2. Teaching Outcomes

This program aims to develop international talents into management talent, who are capable of business analysis by using big data, with understandings about the management foundation and techniques and methods for big data management.

Teaching Methods:

Management theory and practice will be combined in program delivery. In the first four semesters, students will receive general education to complete foundational modules in social science, mathematics, English and computer science, as well as core modules in the Science and Engineering category. In Semesters 5, 6 and 7, students will learn modules and practices in ecommerce and big data management and application. Students will complete graduation design (thesis) and defense in Semester 8.

3. Curriculum

Module Title	Category	Hours	Credits	Semester
Chinese Listening and Speaking	Chinese Language and China	64	4	1-1, 1-2
Chinese Laws		32	2	1-2
Chinese Reading		192	12	1-1, 1-2
China Overview		32	2	1-2
Ethics and Conduct			3	2-2
Sub-total			23	
PE 1	PE	32	0.5	1-1
PE 2		32	0.5	1-2
PE 3		32	0.5	2-1
PE 4		32	0.5	2-2
Sub-total			2	
Advanced Mathematics I -1	Platform Foundational Modules	110	6.5	
Advanced Mathematics I -2		110	6.5	
Linear Algebra		32	2	
Probability Theory		32	2	
University Physics III		64	4	
University Computer Science II		48	3	
Database Foundation and Application		48	3	
Python Data Processing		48	3	
Life Science Foundation II		2	2	
Introduction to Mechanical Engineering		2	2	
Electrical Techniques		2	2	
Data Structure and Algorithm		2	2	
Sub-total				38
Operational Research	Subject Introductory Modules	48	3	
Management		48	3	
Microeconomics		48	3	
Macroeconomics		48	3	

Applied Statistics		48	3	
Marketing		32	2	
Corporate Finance		32	2	
Organizational Behaviour		32	2	
Technical Economics		32	2	
Operational Management		32	2	
Human Resources		32	2	
Management Information System		32	2	
Sub-total			29	
E-commerce	Subject Core Modules	32	2	
Introduction to Big Data Technology		32	2	
Online Transaction and Payment		32	2	
Machine Learning		32	2	
Optimization Theory and Algorithm		32	2	
Social Network Analysis		32	2	
Data Analysis Language Foundation		32	2	
Data Resource Management		32	2	
Data Quality Management		32	2	
Sub-total				18
Consumer Behaviour	Subject Optional Modules	32	2	
Business Data Analysis		32	2	
Video Data Analysis		32	2	
Logistics and Supply Chain Management		32	2	
Accounting		32	2	
System Engineering		32	2	
Big Data Analysis in Finance		32	2	
Big Data Analysis in Health		32	2	
Big Data Analysis in Telecommunication		32	2	
Project Management and Decision Making		32	2	

Sub-total			14	
Operational Research Practice	Practice		1	
Applied Statistics Practice			1	
Management Information System Practice			2	
Website Development and Design			2	
Data Video Production			2	
Practice for Big Data Analysis in Finance			1	
Practice for Big Data Analysis in Health			1	
Individual Behaviour Analysis based on Telecommunication Data			2	
Internship			4	
Graduation Design (Thesis)			10	
Sub-total			26	
Total			138	

Notes:

1. The number of total credits does not include the 8 credits for Practice.

Please refer to the requirement and implementation methods from the student management department for the 8 credits.

2. Requirement

In principle, the total credits to be achieved by students in this program for each semester should not be more than 24 credits. Students who have achieved 90 in the previous semester will be able to acquire additional 2 credits as appropriate.