

Curricular planning for Doctorate-degree program
Department of Information Management, Chaoyang University of Technology
(applicable to day division students enrolled in 2021)

Academic Year	First Year						Second Year						
	First Semester			Second Semester			First Semester			Second Semester			
	Subject	Hours	Credit	Subject	Hours	Credit	Subject	Hours	Credit	Subject	Hours	Credit	
Required Courses	資訊講座 Speeches in Information Technology	1	1	資訊講座 Speeches in Information Technology	1	1							
	研究方法 Research Methods	3	3										
	資訊管理研究議題 Information Management Research Subject	3	3										
Subtotal		7	7		1	1		0	0		0	0	
Elective Courses				行動網路研究專題 Special Topics in Mobile Network	2	2	無線網路研究專題 Special Topics in Wireless Network	2	2	知識管理研究專題 Special Topics in Knowledge Management	2	2	
				多媒體應用研究專題 Special Topics in Multimedia Application	2	2	決策支援研究專題 Special Topics in Decision Support	2	2	行動多媒體研究專題 Special Topics in Mobile Multimedia	2	2	
				智慧型系統研究專題 Special Topics in Intelligent Systems	2	2	多媒體安全研究專題 Special Topics in Multimedia Security	2	2	多媒體資料庫研究專題 Special Topics in Multimedia Databases	2	2	
				整合式商務系統研究專題 Special Topics in Integrated Information Systems	2	2	多媒體技術研究專題 Special Topics in Multimedia Technique	2	2	資料壓縮與應用研究專題 Special Topics in Data Compression and Applications	2	2	
				資訊隱藏技術研究專題 Special Topics in Information Hiding Techniques	2	2	網際網路商務系統研究專題 Special Topics in Web-Based Information Systems	2	2	跨平台商務系統研究專題 Special Topics in Cross-platform Business Systems	2	2	
	管理類												
		高等軟體工程 Advanced Software Engineering	3	3	供應鏈管理 Supply Chain Management	3	3	網路公民素養 Netizen Literacy	3	3	資訊產業經營與管理 Advanced Information Industry Operation and Management	2	2
		知識管理 Knowledge Management	3	3	多變量分析 Multivariate Analysis	3	3	流程改善方法 Process Improvement Methodologies	3	3	管理心理學 Management Psychology	3	3
		高等電子商務 Advanced Electronic Commerce	3	3	多準則決策 Multiple Criteria Decision Making	3	3	企業資源規劃 Enterprise Resources Planning	3	3	軟體品質管理 Software Quality Management	3	3
		協同式數位學習 Collaboration E-Learning	3	3	管理資訊系統 Management Information Systems	3	3						
		資訊管理研究專題 Special Topics in Information Management	3	3	資訊科技管理 Information Science and Technology Management	3	3						
		企業資訊管理實務 Practices in Business Information Management	3	3									
	科技類												
		高等演算法 Advanced Algorithm	3	3	密碼學 Cryptography	3	3	資訊隱藏 Information Hiding	3	3	網路安全 Networking Security	3	3
		作業研究 Operations Research	3	3	人工智慧與機器學習 Artificial Intelligence and Machine Learning	3	3	平行計算 Parallel Computing	3	3	數位學習系統 E-Learning Management System	3	3
		資料探勘 Data Mining	3	3	代理人系統 Agent Systems	3	3	增強式學習 Reinforcement Learning	3	3	多媒體資料庫 Multimedia Database	3	3
		高等電腦網路 Advanced Computer Networks	3	3	類神經網路 Neural Networks	3	3				資訊安全管理 Information Security Management	3	3
		進階雲端運算 Advanced Cloud Computing	3	3	物件導向技術 Object Oriented Programming	3	3				多媒體壓縮技術 Multimedia Compression Technique	3	3
		物聯網與大數據分析 Internet of Things and Big Data Analysis	3	3	企業應用程式開發 Enterprise Application Development	3	3				產學實務研究 Industry Research Practice	6	6
		高等資料庫系統 Advanced Database System	3	3	資訊科技研究 Information technology in Information Management	3	3						
	模糊理論與應用 Fuzzy Theory and Application	3	3	資訊融入教學設計 ICT in Teaching Design	3	3							

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	數位學習發展與趨勢 The Evolution of E-Learning	3	3									
	數位多媒體應用類課程											
	3D遊戲程式 3D Game Programming	3	3	多人線上遊戲程式設計 Multi-player Online Game Programming	3	3	影像處理 Image Processing	3	3	圖形識別與機器學習 Pattern Recognition and Machine Learning	3	3
				數位視訊處理 Digital Video Processing	3	3	數位藝術創作 Digital Arts Creative Project	3	3	動畫研究與應用 Animation Research and Application	3	3
										產學實務研究 Industry Research Practice	6	6
Subtotal		48	48		55	55		34	34		51	51
University Requirements												
Required Courses				3 Courses 8 Credits								
Elective Courses				Minimum elective 18 Credits								
Recognition limit of credits provided by other departments				0 Credits								
Total Requirement				32 Credits 32 credits (incl. 6 credits on doctorate-degree seeking theses)								

一、全校性規定：學生需修習並通過「學術研究倫理教育」相關課程後，始得申請學位考試。

二、全院性規定：

(一)課程名稱相同者得在本院各系碩士班及研究所修習。

三、本系之規定：

(一)經指導教授及所長同意所修習他所之課程，得列為本所之專業選修課程。

(二)「研究專題」課程每學期至多得修習 2 學分。

(三)「產學實務研究」為選修6學分校外實習課程。

1. University-level regulations: Students are required to take and pass "Ethics Education Course" before applying for the entrance exam.

2. College-level regulations:

Courses with the same names as courses in other departments should be taken in this department.

3. Department regulations:

(1) The advisor and head of the department agree that the course is classified as a professional elective course.

(2) The "Research Topics" course can be taken for up to 2 credits per semester.

(3) "Industry Research Practice" is an optional 6-credit internship completed outside of the school.