

# 管理科學系碩士班

113 學年度

最低修業年限	一年六個月
應修學分數	44 學分(不含先修及個別研究學分，內含本系至少 30 學分—雙聯學位不受此限，遵照合約規範辦理)
應修(應選)課程及符合畢業資格之修課相關規定(如無，則免填)	<p>一、先修課程：</p> <ol style="list-style-type: none"> <li>1. 管理決策分析組：經濟學、會計學、統計學、管理學。</li> <li>2. 商業智慧分析組：統計學。</li> <li>3. 研究生入學後，得憑入學考試成績、大學成績單或其他相關證明，於入學後第一學期之上課開始日第一週結束前提出先修課程之免修申請，由碩委會審核。</li> </ol> <p>二、專業必修課程：</p> <ol style="list-style-type: none"> <li>1. 管理決策分析組 <ol style="list-style-type: none"> <li>(1)必修課程：行銷管理、資訊管理、營運管理、策略管理、財務管理。</li> <li>(2)必選修課程： <ul style="list-style-type: none"> <li>● 組織行為、人力資源管理(二選一)。</li> <li>● 研究方法相關課程(任選一門)。</li> </ul> <p>研究方法相關課程包含研究方法、社會科學研究方法、迴歸分析、統計研究方法、統計方法與資料分析、作業研究或由系務會議認可之課程。</p> </li> </ol> </li> <li>2. 商業智慧分析組 <ol style="list-style-type: none"> <li>(1)必修課程：商業智慧分析。</li> <li>(2)必選修課程： <ul style="list-style-type: none"> <li>● 行銷管理、營運管理、策略管理、財務管理、組織行為/人力資源管理(五選三)。</li> <li>● 機器學習商業應用、文字探勘商業應用、演算法導論、最佳化導論、資料庫概念與實務應用、智慧生產與大數據分析、深度學習、元啟發式演算法、機器學習分類專題、數量研究方法(十選二)。</li> </ul> </li> </ol> </li> </ol> <p>三、研討課程</p> <ol style="list-style-type: none"> <li>(1)「經營講座」或「管理理論與實務討論」必修一學期。</li> <li>(2)「個別研究」擇定指導教授後至少選修兩學期。</li> </ol>
備註	<ol style="list-style-type: none"> <li>1. 本修課規定係依據本系碩士班一般研究生修業規章訂定。</li> <li>2. 碩士生滿足畢業條件，但一般生修業未滿三學期，在職生修業未滿兩年者，應列舉表現優異之事實(例如論文已發表於學術期刊或學期累積平均成績 90 分以上或 GPA4.03 以上)，經系所務會議審議通過，再經教務處核備後方可畢業。</li> </ol>

# Department of Management Science

## Coursework Regulations for Master's Program

### Academic Year 2024

Minimum Required Term	One year and six months of study
Minimum Required Credits	44 Credits (Excluding prerequisite and individual study credits, at least 30 credits from this department are required - double degree programs are exempt from this rule and are subject to the terms of the agreement)
Curriculum and Regulations	<p><b>I. Prerequisite Courses:</b></p> <ol style="list-style-type: none"> <li>1. <u>Management Decision Analysis</u>: Economics, Accounting, Statistics, and Management</li> <li>2. <u>Business Intelligence Analysis</u>: Statistics</li> </ol> <p>With the proof of the entrance examination record or an undergraduate transcript or equivalent, students may apply to waive these prerequisites pending on approval from the Master's Program Committee.</p> <p><b>II. Professional Required Courses:</b></p> <ol style="list-style-type: none"> <li>1. <u>Management Decision Analysis</u> <ol style="list-style-type: none"> <li>(1) <b>Required:</b> Marketing Management, Information Management, Operations Management, Strategic Management, and Financial Management</li> <li>(2) <b>Required Elective:</b> <ul style="list-style-type: none"> <li>● Organizational Behavior or Human Resource Management (1 out of 2)</li> <li>● One of the following research-method courses: Research Methods, Social Science Research Method, Regression Analysis, Statistics Research Method, Statistical Methods and Data Analysis, and Operation Research or any other equivalent courses approved by the Departmental Affairs Meeting</li> </ul> </li> </ol> </li> <li>2. <u>Business Intelligence Analysis</u> <ol style="list-style-type: none"> <li>(1) <b>Required:</b> Data Science for Business</li> <li>(2) <b>Required Elective:</b> <ul style="list-style-type: none"> <li>● Marketing Management, Operations Management, Strategic Management, Strategic Management, Financial Management and Organizational Behavior / Human Resource Management (3 out of 5)</li> <li>● Machine Learning for Business, Text Mining for Business, Introduction to Algorithms, Introduction to Optimization, Database Concept and Practice, Intelligent Manufacturing and Big Data Analytics, Deep Learning, Meta-Heuristic Algorithm, Machine Learning in Classification Topics, Quantitative Research Methods (2 out of 10)</li> </ul> </li> </ol> </li> </ol> <p><b>III. Seminar Courses:</b></p> <ul style="list-style-type: none"> <li>● “Lectures on Business“ or “Lectures on Management Theories and</li> </ul>

	<p>Practices“: required for one semester.</p> <ul style="list-style-type: none"> <li>● “Individual Study“: select at least take two semesters after having a thesis advisor</li> </ul>
Notes	<ol style="list-style-type: none"> <li>1. The Coursework Regulations are stipulated based on the Academic-Year MBA Program Regulations.</li> <li>2. Students who fulfill the aforementioned requirement for graduation but have not yet completed three semesters of study as a regular student or two years of study as a part-time student may provide the proof of excellence (e.g., academic journal publications or average score above 90 points or GPA above 4.03) to get approval by the Departmental Affairs Meeting and the Office of Academic Affairs for eligibility for graduation.</li> </ol>

## 管理科學系博士班

113 學年度

最低修業年限	二年
應修學分數	36 學分(不含先修及研討課程學分)
直升博士生 應修學分數	78 學分(不含先修及研討課程學分)
應修(應選)課程 及符合畢業資格 之修課相關規定	<p>1. 博士生必修</p> <p>一、先修課程： 經濟學、會計學、統計學、管理學。</p> <p>二、「論文研討」課程兩學期。</p> <p>三、專業選修課程九大領域任選六門：</p> <p>(一) 策略管理</p> <p>(二) 組織理論/行為</p> <p>(三) 人力資源管理</p> <p>(四) 行銷管理</p> <p>(五) 財務金融</p> <p>(六) 資訊管理</p> <p>(七) 營運管理</p> <p>(八) 科技管理</p> <p>(九) 決策科學</p> <p>四、方法類：任選三科。</p> <p>五、主修領域課程：須選修至少三門。</p> <p>六、上述各學分須內含修習「博士班專業課程」三門 9 學分(本院各系所所開授之博士班專業課程均予承認並列入「博士班專業課程」學分之計算)，且皆須於申請博士學位考試前修畢且及格。</p> <p>除「博士班專業課程」外曾於入學前修習通過之課程可申請免修，但不得抵免畢業學分，免(抵)修需在新生入學後第一學期加退選結束前提出申請，逾期不再受理。</p> <p>課程體系表附於後。</p> <p>2. 先修或專業選修課程若曾於入學前修習通過，可申請免修，但不得抵免。</p> <p>3. 博士生修習非本系開授之課程須經系主任或博士班委員會或指導教授同意。</p> <p>4. 博士生擇定指導教授後，除因連續休學一學年、出國參加交換學生、赴國外研究或確定畢業之學年度免修外，每學年應選修「個別研究」課程至少一次。</p> <p>5. 本系外籍生在本系同意下，其所修讀管理學院 IMBA 學程、GMBA 所屬的課程可視同本系所開之課程。</p>
備註	本修課規定係依據本系所博士班研究生修業規章訂定。

# Department of Management Science

## Coursework Regulations for Ph.D. Program

**Academic Year 2024**

Minimum Required Term	Two years of study
Minimum Required Credits	36 Credits (not including prerequisite courses and Thesis Seminar.)
Minimum Required Credits for Students Admitted directly from Master's Program	78 Credits (not including prerequisite courses and Thesis Seminar.)
Curriculum and Regulations	<p>I. All doctoral students must take at least two semesters of Thesis Seminar and complete four prerequisite courses including Economics, Accounting, Statistics, and Management. Students are required to take at least one elective course from each of the six areas selected from the nine professional areas listed in Article V of Policies and Procedures of Ph.D. Program, at least three courses from the methodology-related areas, and three courses at least from their major area of study. In the above required courses, at least three (9 credits) of them need to be the doctoral-level professional courses. All the doctoral-level professional courses offered by NCTU College of Management are accepted by the Department and their credits can be counted as the required PhD-level professional courses. Students are required to fulfill the above coursework requirement before being eligible for the Dissertation Oral Examination. Students can apply to waive the above courses (except the PhD-level professional courses) taken previously before entering the program. They may apply to waive the courses prior to the deadline of the course add-and-drop period in the first semester of entrance. No waived courses can be counted as the credits required for graduation.</p> <p>II. Application for the above waiving of courses after the deadline will not be accepted.</p> <p>III. Approval from the Department Chairperson, the PhD Program Committee, or the dissertation advisor is required before taking any courses offered by other departments.</p> <p>IV. Students should take "Individual Study" for at least once every academic year after choosing dissertation advisor except when taking leave for the whole academic year, studying abroad as an exchange student, doing research overseas, or preparing to graduate in the academic year.</p> <p>V. Upon approval by the Department, international students can take GMBA courses offered by the College of Management or IMBA program to meet the above coursework requirement.</p>
Notes	This Coursework Regulations are stipulated based on the Policies and Procedures of Ph.D. Program