

## 材料科學與工程學系奈米科技碩士班

106 學年度

最低修業年限	一年
應修學分數	24 學分
應修(應選)課程及符合畢業資格之修課相關規定	<ol style="list-style-type: none"> <li>1. 本系研究生畢業前須修滿<u>二十四學分</u>(不含論文及書報討論學分);其中至少包括在 本系修讀的<u>十五學分</u>。不足學分可選修其他理、工、電機、資訊、生物科技、光電、國際半導體產業學院相關課程,但需經指導教授同意。</li> <li>2. 下列課程為本班基礎核心課程:「表面科學及工程」、「奈米科技導論」、「奈米材料簡介」、「近代物理」、「固態熱力學」、「表面分析技術」共六門。本班研究生畢業前至少需選修其中二門。</li> <li>3. 書報討論為碩士班一年級每學期之必選課程,至少修滿二學期並達及格標準,境外學生修讀雙聯學位得免修書報討論課程。</li> </ol>
備註	其他未盡事宜,依據本系「碩士班研究生修業規章」辦理。

## Graduate Program for Nanotechnology Department of Materials Science and Engineering(Master)

Academic Year 2017

Minimum Term of Study	one Year
Minimum Credits	24 Credits
Curriculum and Regulations	<ol style="list-style-type: none"> <li>1. Master's students shall take at least twenty-four (24) credits before graduation (exclusive of thesis and seminars), which should include eighteen (15) credits taken in the Department. Subject to the advisor's consent, in case of insufficient credits, students may take courses offered by College of Science, College of Engineering, College of Electronic Engineering, College of Biological Science and Technology.</li> <li>2. There are five fundamental courses of the Department listed as follows: "Surface Science and Engineering", "Introduction to Nanotechnology", "Introduction to Nanostructure Materials", "Modern Physics", "Thermodynamics of Solid", "Surface Analysis Techniques" from which graduate students are required to take at least two courses.</li> <li>3. All first-year master's students are required to take seminars each semester, for at least up to two (2) semesters and satisfy the relevant passing criteria. Foreign students who read for the dual-degree program are waived from the seminars.</li> </ol>
Notes	Please refer to the "Graduate Program for Nanotechnology Department of Materials Science and Engineering Master's Program Academic Regulations".

## 材料科學與工程學系奈米科技博士班

106 學年度

最低修業年限	二年
應修學分數	12 學分(含本所專業課程至少九學分,不含論文及書報討論學分)
逕博應修學分數	30 學分(含碩士班已修的學分且本所專業課程至少二十七學分)
應修(應選)課程及符合畢業資格之修課相關規定	<ol style="list-style-type: none"> <li>1. 基礎學科包括: 量子力學、分子生物學、表面科學及工程、奈米製造與量測技術、電子顯微鏡、X光繞射學、固態物理、表面分析技術、奈米科技導論、奈米材料簡介、近代物理等十一門基礎學科。 (1)一般生及在職生應選修至少六學分之基礎學科。 (2)直升生應修過至少十八學分之基礎學科。</li> <li>2. 書報討論為博二(含)以前每學期必選之課程。畢業前須修滿四學期之書報討論且達及格標準。</li> <li>3. 博士班研究生修讀課程的評定採百分計分法,以七十分為及格;未達七十分者</li> </ol>

	<p>不計學分。</p> <p>4.適用畢業學分之科目，由課程委員會認定之。唯應隸屬理工學院研究所的科目，所需加修大學部相關學系科目者，其學分不得列入畢業學分內計算。</p> <p>5.入學兩年或四學期內(即博二升博三之前，不含休學期間)須通過資格考試。</p>
備註	其他未盡事宜，依據本系「博士班研究生修業規章」辦理。

## Graduate Program for Nanotechnology Department of Materials Science and Engineering(PHD)

Academic Year 2017

Minimum Term of Study	Two Year
Minimum Credits	12 Credits (including at least nine (9) professional course credits of the Department)
admitted through the direct route PhD Students Minimum Credits	30 Credits ((including the credits already received in the master's program, which shall at least include 27 credits of the professional courses of the Department).)
Curriculum and Regulations	<p>1.The ten (11) core courses are listed as follows: Quantum Mechanics, Molecular Biology, Surface Science and Engineering, Nanofabrication and Characterization, Transmission Electron Microscopy, X-ray Diffraction, Solid State Physics,Surface Analysis Techniques,Introduction to Nanotechnology, Introduction to Nanostructure Materials”,and” Modern Physics”.</p> <p>(1)Full-time and on-job postgraduates shall take at least six (6) core course credits.</p> <p>(2)Students who are admitted through the direct route PhD application shall take at least eighteen (18) core course credits.</p> <p>2. Seminars are compulsory courses each semester for all doctoral students in and before their second year. It is required to take seminars for four (4) semesters and meet the passing criteria.</p> <p>3. Numeric grades on a scale from 0-100 are used by the Department for all PhD program courses: 70 is the passing grade; in case of any grade below 70, no credit shall be granted.</p> <p>4. The courses that may be recognized for the purpose of graduation shall be determined by the Curriculum Committee of the Department. However, in the event that any subject that belongs to the post-graduate program of College of Science, College of Engineering, College of Electronic Engineering, College of Biological Science and Technology turn out to be courses offered to undergraduate students, such course credits shall not be counted toward graduation.</p> <p>5.It is permitted to sit the qualifying exam for up to three (3) times within the two (2) years or four (4) semesters (excluding the period of suspension) after enrollment in the program.</p>
Notes	Please refer to the " Graduate Program for Nanotechnology Department of Materials Science and Engineering PhD Program Academic Regulations " .