National Taiwan University
Master Program in Nanoengineering and Nanoscience
Degree Regulations

1. Study period: 1 to 4 years
2. Minimum graduation credits: 21 credits. Thesis, Special Topics, and Seminar are not included.
3. At least 12 credits of professional electives are required from the program (courses are approved by an advisor)
4. Online learning of Academic Ethics is a required course, and does not count toward graduation credits.
5. The credits of undergraduate courses do not count toward the minimum credits for graduation requirements.
6. Those who enrolled in the 2022 academic year, 35% of English-taught courses should be registered for graduation requirements.
7. For any matters not covered, please refer to the regulations of Graduate School of Advanced Technology.

- **Required Curriculum**

Course Title	Credit(s)	Note
Internship	3	1 semester
Seminar	1	4 semesters
Special Topics	1	Every semester
Master Thesis	0	Semester of graduation
Academic Ethics	0	Students who fail the Academic Ethics are Not eligible to apply Defense

- **Required Competency (choose one)**

Level	Course Title	Credit(s)
Graduate	近代物理 Modern Physics	3
Graduate	量子力學(一) Quantum Mechanics(I)	3
Graduate	量子力學(二) Quantum Mechanics(II)	3
Graduate	量子物理（上） Quantum Physics (I)	3

Graduate	奈米科技導論 Introduction to Nanotechnology	3
Graduate	奈米科學與工程 Nanoscience and Nanotechnology	3
Graduate	精細元件與精密系統 Precision Elements and Systems	3

- **Elective Curriculum**

Level	Course Title	Credit(s)
Graduate	低維度半導體物理 Low-Dimensional Semiconductor Physics	3
Graduate	材料化學 Materials Chemistry	3
Graduate	高等材料力學 Advanced Strength of Materials	3
Graduate	流體力學導論 Fundamental of Fluid Dynamics	3
Graduate	光學量測系統原理設計 Design Principle of Optical Measurement System	3
Graduate	精密量測 Precision Metrology	3
Graduate	半導體智慧製造系統概論 Introduction to Semiconductor Intelligent Manufacturing Systems	3
Graduate	壓電系統設計與製造 The Design & Construction of Piezoelectric Systems	3
Graduate	壓電振動能量擷取導論 Introduction to Piezoelectric Energy Harvesting	3
Graduate	微感測器特論 Special Topics on Microsensors	3
Graduate	有限元素法 Method of Finite Elements	3
Graduate	資料分析方法 Data Analytics	3
Graduate	微奈米尺度熱傳 Micro/Nanoscale Heat Transfer	3

Graduate	電漿材料製程技術 Plasma Materials Fabrication Technology	3
Graduate	生醫奈微米工程 Nano/micro Engineering in Biomedicine	3
Graduate	細胞微機電及微流體導論 Introduction to Cellular BioMEMS and Biomicrofluidics	3
Graduate	膠體與界面現象 Colloid and Interfacial Phenomena	3
Graduate	應用電化學 Applied Electrochemistry	3
Graduate	半導體製程設備實務 Practice of Semiconductor Equipment	3

※課程非於每學年開授，請依本校課程資訊與選課系統公告規劃選課※

※Please refer to the current course catalog for the actual course offerings each semester.※