Guidelines for Students Enrolling in the Non-Degree Conferring Program in Nano Science and Technology

Approved by a meeting of the NCU Center for Nano Science and Technology Curriculum Committee on April 22, 2004

Amended and approved by a meeting of the NCU Center for Nano Science and Technology Curriculum Committee on June 8, 2004

Approved by a meeting of the Academic Affairs Committee on June 17, 2004

Amended and approved by a meeting of the NCU Center for Nano Science and Technology Curriculum Committee on Sept. 27, 2004

Amended and approved by a meeting of the National Central University Curriculum Committee on October 7, 2004

Amended and approved by a meeting of the Academic Affairs Committee on October 14, 2004

Amended and approved by a meeting of the National Central University Curriculum Committee, March 16, 2006

Amended and approved by a meeting of the National Central University Curriculum Committee on May 29, 2006

Amended and approved by a meeting of the Academic Affairs Committee on June 14, 2006

- 1. The aim of this program is to provide an interdisciplinary curriculum in nano science and technology that will integrate physics, chemistry, biology, electrical engineering, photonics, and materials.
- 2. Students studying in any college in the University may apply for entry into this program.
- 3. This program has been jointly planned by the NCU Center for Nano Science and Technology and related departments and institutes of the University.
- 4. University students will be regarded as having completed this program after earning 21 or more course credit hours from the program curriculum. They shall have the name of the program as well as the number of credit hours earned clearly indicated on their transcript and shall also be awarded a certificate of completion.
- 5. Whether courses with similar titles and content offered by nano science and technology programs at other institutions participating in the University System of Taiwan can be accepted in lieu of courses offered by this program shall be left to the discretion of the Center, but there is no limit to the number of credit hours that can be waived in this manner.
- 6. Whether courses with similar titles and content taken in other University programs can be accepted in lieu of courses offered by this program shall be left to the discretion of the Center.

- 7. Courses that have the same course content but different course codes shall be regarded as equivalent courses.
- 8. This program's courses are divided into basic and core courses as follows:

Categories	Course Titles	Credit Hours	Course Code	Remarks
Basic Courses	Quantum Physics	6	PH3001and PH3002	Any 15 credit
	Introduction to Solid State Physics	3	PH3042 or CH3055	hours from this category
	Surface Physics	3	PH7015	(at least three of
	Electronics I	3	EE2001	which must be
	Introduction to Solid State Electronics	3	EE3029	from earned from other
	Solid State Electronic Devices	3	EE3034	departments.)
	Introduction to Quantum Mechanics	3	EE4028	
	Materials Science	3	ME2051	
	Advanced Materials	3	ME3048	
	Precision Machine Design (I)	3	ME3043	
	Physical Metallurgy	3	ME3046	
	Introduction to Chemical and Materials Engineering	6	CH1013 and CH1014	
	Inorganic and Materials Chemistry	6	CH2023 and CH2024	
	Electronics and Ceramic Materials	3	CH4051	
	Low Temperature Physics	3	PH6040	
	Solid State Optics	3	PH8022	
	Solid State Physics	3	PH6033 or EE8035	
	Nanoelectronics	3	EE8020	
	Processes for Advanced Materials	3	ME4096	
	Nano/Micro Processing Theory and Experiments	3	ME7038	
	Solgel Science and Application	3	CH8048	
	Materials Physics	3	PH6066 or CH8069	
	Solid State Chemistry	3	CM6063	
	Special Topics in Catalytic Chemistry	3	CM6048	

	Physical Chemistry	8	CM3041and CM3042	
	Catalytic Chemistry	2	CH2015	
	Physical Chemistry	6	CH2005 and CH2006	
	Bio-nanotechnology	3	CH8091	
Core Courses	Nanoelectronics and Photonics	3	EE8037	
	Devices			
	Nano Materials	3	CM6067	Any six credit hours from this category.
	Introduction to Nano Materials	3	ME3021	
	Nano Science	3	PH7007	
	Nano Materials and Technology	3	PH4038	

9. These guidelines shall be implemented and entered into force upon approval by a meeting of the Academic Affairs Committee. The same procedure applies to any amendment of these guidelines.