

National Chiao Tung University, Taiwan

2013 Summer Program NCTU

► July 3- July 31

Multiple Culture, Different Experience

Center for International Services
Office of International Affairs
National Chiao Tung University
1001 University Rd., Hsinchu, Taiwan 30010, R.O.C.



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About NCTU

- 50th in Engineering & 47th in Computer Science by Shanghai Jiaotong University's Academic Ranking of World Universities 2012
- ESI Publications in Computer Science: NCTU Ranked No. 1 in Taiwan and No. 20 in the world
- 10 depts/institutes accredited by Institute of Engineering Education Taiwan (IEET)
- Best engineering program in Taiwan
- College of Management accredited by AACSB
- 5th best MBA program in Asia (Asia Inc.)
- Strong Academic-Industrial Collaboration
- Two-thirds of the CEOs & general managers in the Hsinchu Science Park are NCTU alumni
- Started as Nanyang College in Shanghai in 1896
- Re-established as NCTU in 1958 in Hsinchu, Taiwan, focusing on electrical & computer engineering
- Situated in Hsinchu, the "Silicon Valley" of Taiwan



Program Introduction

NCTU will host a 4-week intensive summer program in 2013. It starts from July 3, 2013 to July 31, 2013. There are four modules in the program: Basic Professional Courses, Mandarin Course, Management Course and Culture Courses. Each module is 2 credits / 36 hours. All credits are transferable among partner universities. After completion, NCTU will issue certificates for attendees. The Basic Professional Courses are covered in the fields of electrical and computer engineering, computer science, and science respectively. A special designed Mandarin Course will be offered at 3 different levels. The Management Course and Culture Courses will be offered for students who are interested in Chinese culture and the knowledge of business management.

In addition, NCTU will arrange a culture trip on Thursday and a field trip on Friday biweekly. Students will explore the beauty and the hospitality of Taiwan. It is an excellent opportunity for students to experience different cultures.

For further information, please refer to our website at www.ia.nctu.edu.tw and seeking for “2013 NCTU Summer Program”. Students can also contact the program coordinator, Ms. Avis Liu, either via phone or email.

Course Schedule

Course Schedule			
<i>Time</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
<i>Morning 9:00-12:00</i>	Mobile Device Programming	Mobile Device Programming	Mobile Device Programming
	Mandarin Course	Mandarin Course	Mandarin Course
	Emerging Competitiveness of Asian Enterprises	Emerging Competitiveness of Asian Enterprises	Emerging Competitiveness of Asian Enterprises
<i>Afternoon 13:30-16:30</i>	Wonders of the Mathematical, Physical and Chemical Worlds	Wonders of the Mathematical, Physical and Chemical Worlds	Wonders of the Mathematical, Physical and Chemical Worlds
	Experience Taiwan, Taiwan Experience	Experience Taiwan, Taiwan Experience	Experience Taiwan, Taiwan Experience
	New Media and Design in Architecture	New Media and Design in Architecture	New Media and Design in Architecture

Culture trips will be arranged on Thursday biweekly; field trips will be scheduled on Friday biweekly. The exact sightseeing locations for both trips will be determined and announced by the Center for International Services later. For instance, in 2012 Summer Program, the culture trips visited Jiuchong Hu, Xinpu and Persimmon Dyeing Studio; the field trips went to Sun Moon Lake, Shihfen Waterfall, etc.



Fees for Partner Universities

Basic Professional Courses	NTD 3,200
Mandarin Course	NTD 3,200
Management Course	NTD 3,200
Culture Courses	NTD 3,200
Miscellaneous	NTD 8,000
Accommodation	NTD 6,000

Course fee is triple as listed above for non-partner universities. Miscellaneous and accommodation are the same for partner and non-partner universities.

Note: New Taiwan Dollar (NTD) Currency required as the payments



Bank Information

Please kindly scan the bank receipt and email it to Ms. Avis Liu after wiring the fee to the following Bank. Students who fail to make the payments by March 15, 2013 will not be accepted.



Bank Name: E. Sun Commercial Bank, Ltd., Hsinchu Branch

Bank Address: No.34, Minzu Rd., Hsinchu City 300-43, Taiwan (R.O.C.)

Bank Telephone No.: +886-3-523-1313

Bank Fax No.: +886 -3-526-2951

Swift Code: ESUNTWTP

Beneficiary: National Chiao Tung University

BENF A/C No: 0060-466-138899



Program Coordinator: Avis Liu

Email: avisliu@nctu.edu.tw

Tel: +886-3-571-2121 ext. 50661

Fax: +886-3-573-1716

Note: Wiring charge will not be included in the payments; the charge needs to be paid by individual student.



Modules Descriptions

1. Basic Professional Courses

In this module, there are two basic professional courses offered by the following Colleges. Students can select one of the courses listed below. The class will be scheduled on every Monday, Tuesday, and Wednesday.

Basic Professional Courses	
College	Course Name
College of Electrical & Computer Engineering	Mobile Device Programming
College of Computer Science	
College of Science	Wonders of the Mathematical, Physical and Chemical Worlds

• Mobile Device Programming

In this course, you will learn how to develop application on Android-based platforms. Android applications are composed of one or more application components (activities, services, content providers, and broadcast receivers). First, these four components and fundamentals of Android programming will be introduced. Then, advanced applications will be discussed including map applications, augmented reality application, and so on.

Learning Objective:

1. To understand the system architecture of Android
2. To understand the components of Android Apps
3. To learn how to develop Apps on Android-based platforms

Course Requirement & Grading:

Students should have the basic concepts of Object-Orientation Programming and programming experiment.

1. Class participation	40%
2. Assignments and tests	30%
3. Final oral presentation	30%



• Wonders of the Mathematical, Physical and Chemical Worlds

Building Interactive 3D Vibrational Molecule and Atomic Orbital Homepage
Fundamental sciences such as mathematics, physics and chemistry are of key importance in understanding engineering sciences and other practical sciences.

The goal of this course is to share with students the intrinsic beauty of fundamental sciences. This will be done via a series of lectures on some selected highlights from the mathematical, physical and chemical worlds.

Topics covered by the course will include the following.

- Mathematics:
 1. Mathematical software;
 2. Group testing;
 3. Public key cryptography;
 4. Elementary differential geometry.
- Physics:
 1. Introduction to Synchrotron Radiation;
 2. Physics Demonstration;
 3. Introduction to Ultrafast Laser;
 4. Introduction to Nanoscience.
- Chemistry:
 1. Basic Homepage Editing (HTML language) and Chemical 2D Drawing
 2. Building Interactive 3D Chemical molecule Homepage
 3. Building Interactive 3D Crystal and Biochemical molecule Homepage

Learning Objectives

Getting acquainted with some of the key ideas and key developments that shape mathematics, physics and chemistry.

Course Requirement & Grading

- Background knowledge in elementary mathematics, physics, and chemistry.
- General interest in natural sciences.

1. Attendance	50%
2. In class performance	50%

2. Mandarin Courses

NCTU offers 3 different levels of courses to meet students' needs.

• Introductory Chinese I

Briefly introduce the characteristics of Chinese, teach the rules of pinyin system, and practice pronunciation and tones. Learn how to greet, how to read numbers, and how to buy things. Also, build the concept about measure words.

Learning Objective

1. To learn the rules of pinyin, pronunciation tips, and tones.
2. To learn to exchange greetings, introduce oneself, count in Chinese, and use common measure words.

Course Requirement & Grading:

1. Class Participation & Performance	30%
2. Homework + Quiz	20%
3. Midterm (Pinyin + L1~L2)	25%
4. Final (L3~L4)	25%

Note:

1. Students are expected to preview before class, complete the assigned homework, and review the covered contents after class.
2. A quiz on vocabulary will be taken after teaching.
3. Attending class is very important. One might fail due to low class participation.

• Introductory Live Chinese I

< Far East Everyday Chinese> Book 1 Lessons 1~3

1. To read and write with the Pinyin Romanization system.
2. To learn more than 150 Traditional Chinese characters, phrases and grammar structures.
3. To be familiar with the Chinese numbering system; to apply the content taught in class to hold simple daily conversations, such as exchanging telephone numbers and shopping.

Learning Objective

Whenever new materials are to be introduced in class, there will be a vocabulary quiz at the beginning of class. There will be no make-up quizzes, so be there on time.

This course will be aimed at these two following objects:

1. To enable you to communicate (listen, speak, read, write) accurately and appropriately in simple Chinese for common everyday purposes.
2. To lay a good foundation for you by helping you to speak Chinese with correct pronunciation and intonation and to know the structures of Chinese characters, the stroke order and basic radicals.

Course Requirement & Grading

1. Homework	25%
2. Quizzes	10%
3. Tests	15%
4. Preparation and Participation	25%
5. Final Exam (written)	15%
6. Final Exam (oral)	10%

• Intermediate Practical Chinese Conversation

This is a Chinese conversation course meeting the needs and interests of intermediate level students and above. The course is designed to encourage active learning through group discussion, with an emphasis on development of their scope of learning.

The course consists of various topics to facilitate learning of practical vocabulary in different fields. Through a deeper understanding of Chinese thought and culture, the course is particularly beneficial for international students who wish to attain native Chinese oral skills and consolidate their Chinese communicative competence.

Learning Objective

The lessons are based on sharing ideas, group discussions, and question and answer sessions. They are conducted as follows:

1. Students will choose the topic and discussion leader before the class.
2. The assigned student will be responsible for:
 - *Preparing information for the topic and/or presenting their personal opinion.
 - *Posing questions and leading the discussion.
 - *Each discussion leader will be expected to speak for 5-10 minutes.

Course Requirement & Grading

Students need to well prepare before the class in order to achieve the best learning result.

1. Class participation	40%
2. Assignments and tests	20%
3. Discussion leading	20%
4. Final oral presentation	20%

3. Management Course

The course will be lectured in Mandarin and English sessions scheduled at the same time. Students need to select either one.

• Emerging Competitiveness of Asian Enterprises

The world's economic centre of gravity is continuously shifting east, and it will be in Asia probably in 2025, given the speeding-up pace. This course consists of a series of speeches, case discussions, and field trips with the theme on the competitiveness of Asian enterprises, which play a much more crucial role in shaping today's world economy. It is concluded by the presentation of the group projects for Asian-related management issues to share the findings of the participating students with various backgrounds. The focused issues in the course include the followings.

- Management under Globalization, the Asian Aspects
- Entrepreneurship and Innovation Management in the Emerging Economies
- Extended Global Supply Chain and the World's Factory
- Governments and Business Organization across the Taiwan Strait
- From Copycats to Global Leaders - the Cases of Korean Companies
- Business Ethics, Social Responsibility and Social Issues Affecting Business Competitiveness in Asia

Learning Objectives:

1. Provide the business major students with in-depth knowledge and diversified perspectives for an specialized management topic with rising importance, the management in Asia.
2. Motivate the non-business major students to explore the area of management and to seek more extensive and formal training in management.

Course Requirement & Grading:

1. Class Participation	60%
2. Group Project Presentation	40%

4. Culture Courses

There are two culture courses offered at the same time: one is “Experience Taiwan, Taiwan Experience”; another is “New Media and Design in Architecture”. Students need to select either one as interested.

• Experience Taiwan, Taiwan Experience

This course aims to lead students experience the cultural diversity of Taiwan at the first line. During the four week’s stay, we will have classes on every Wednesday afternoon and a thematic field research tour on Thursday. The planned 4 main topics are Hakka Lifestyle, Delicacy & Taste, Art & Craft and Aboriginal Culture. The students are required to prepare reports, photos and presentation. The instructor will have topic talks and lead class discussions so that the students can have real insight understanding on the Taiwan’s culture.

Course Objectives:

1. To reflect and compare the cultural differences and find possible innovations
2. To experience people’s real cultural and social lives in Taiwan
3. To interact and communicate with local people
4. To understand the history and developing problems of Taiwan

Course Requirement and Grading

- | | |
|----------------------------------|-----|
| 1. Class Presentation | 30% |
| 2. Field Study Report | 30% |
| 3. Field Report and Presentation | 40% |

• New Media and Design in Architecture

An introductory course for latest development and applications of new media in design – ranging from computer to the Internet and from CNC to parametric design tools – as well as how they affect/impact the modern architecture industry. The course is conducted by lectures, workshops and field-trips, so students can not only learn in class but also learn-by-doing and site-visiting.

Learning Objective

1. Understanding current development and applications of new media in design worldwide.
2. Knowing Taiwanese modern architecture, urban/rural environment and related technology industries.
3. Learning digital design and production process, as well as getting hands-on practices.

Course Requirement & Grading

- No background requirements.
- Interested in design, architecture, and new technology.
- Basic computer skills and willing to learn more about it.

1. Class Participation	60%
2. Assignments and Presentations	40%

How to apply the Program

Registration via email

Step 1: Please download the application form (2013 Summer Program Application Form) at our website www.ia.nctu.edu.tw

Step 2: Fill out the application form and email it to Ms. Avis (avisliu@nctu.edu.tw)

Step 3: Additional materials need to email to Ms Avis (avisliu@nctu.edu.tw); the materials are mandatory

- ID photo in JPG file format (236 × 301 pixels) including your full name by **March 1, 2013**
- The scanned bank receipt by **March 15, 2013**
- Flight schedule by **June 1, 2013**

Note:

NCTU will issue an admission letter after received the payments

Students have NOT received the letter by **March 1, 2013**; please contact Ms. Avis Liu via email





Airport Pickup Service

There is no individual airport pick up service. NCTU will arrange 3 shuttles at Taiwan Taoyuan International Airport.

Pick-up Schedule	
Date	Leaving
July 1	07:00 PM
July 2	01:00 PM
July 2	07:00 PM



For other arrivals can take the Taiwan High Speed Rail (THSR)



Contact Information

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