# A Fulfilling and Unforgettable Summer Plan in 2022!

This year, National Cheng Kung University (NCKU) is excited to announce that there will be 2 summer schools in a row! In the meanwhile, we are offering a special package to participants of Innovative Semiconductor Summer School.

By joining our on-campus Innovative Semiconductor Summer School, you can get…

- Scholarship:
  TWD 50,000 per student for your approximately two-month stay
  (approximately € 1600)

- Flight Tickets Subsidy:
  Max TWD 30,000 (approximately € 955) *measure standard: Vienne-Taiwan-Vienne

- Innovative Semiconductor On-campus Summer School:
  All Fee Waived (originally € 540)

- Worldwide Universities Network Virtual Summer School:
  All Fee Waived (originally € 110)

- 4-5 credits (8-10 ECTS credits) from summer school depends on courses you select.

- Free online Chinese Class during your quarantine in the hotel.

- Learning and travel experience in Taiwan for over a month!

We have arranged a perfect timeline for you to enjoy and fulfill your summer vacation like never before!

*Arrive Taiwan and start your quarantine by July 28th
( Having virtual Chinese class during the quarantine! )

Innovative Semiconductor On-campus Summer School Aug. 26th – Sep. 2nd

May 20th Application deadline

May 15th Nomination deadline

mid July students apply for VISA for 2 months

Worldwide Universities Network Virtual Summer School Aug. 8th – Aug.18th

Due to the entry restrictions for foreigners to Taiwan, please wait for our notification to apply for your VISA through the Taiwan Representative Office or Embassy in your country.
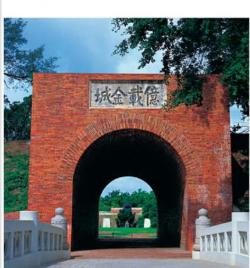
*quarantine regulations : please refer to slide 23

# 台南
## Tainan

## TAINAN, THE OLDEST CAPITAL CITY…

Tainan is the ancient capital of Taiwan. This city continues to host a variety of cultural festivities and religious ceremonies all year round. Traditions have been well sustained in this modernized city. The city's gourmet food culture guarantees one can find delicious food of every kind. Life in Tainan has a charming balance between the new and the old, and the fast and the slow.

# NCKU
## THE TOP UNIVERSITY IN TAIWAN

<u>National Cheng Kung University</u> (NCKU), being established as "Tainan Technical College" in 1931, has transformed into one of the most established, comprehensive universities in Taiwan. With about 21,000 students and 2,000 faculty members in total, NCKU has continued as a leader in the fields of engineering, science, management and medicine. NCKU has always been dedicated to promoting student mobility and welcomes international exchange students from partner universities worldwide every year.

# NCKU IS YOUR TOP CHOICE!

Leading Next-Generation Technology

The Academy of Innovative Semiconductor and Sustainable Manufacturing was the first to launch at a university in Taiwan to address the nation's high-tech talent constraints and the imperative for advancing semiconductor technology during the AI era. With support from the NCKU's well-established research foundation in science and engineering, the Academy also strives to align the university-based R&D work closer to industry needs by allowing greater flexibility in academic infrastructure in faculty hiring of the industry experts, budgeting, research, and training formats. The five program subjects offered are Integrated Circuit Design, Semiconductor Process Technology, Semiconductor Packaging and Testing, Key Materials, and Smart and Sustainable Manufacturing to foster future talents equipped with the "data-driven & energy-sensitive" core competency applicable to the whole spectrum of the semiconductor industry and to continuously support the industry's competitiveness globally.

The Academy is proud and feels responsible to provide an introductory summer program for students who are interested in knowing this fundamentally important semiconductor industry that supports our daily life in an era of chips and automation. The program students will get a big picture of the semiconductor supply chains and the core technologies involved in semiconductor manufacturing with their participation in lectures and the field trips arranged for their first-hand observations in Taiwan.

# NCKU IS YOUR TOP CHOICE!

## Alliance and Integration

**5** graduate degree programs to encompass the full spectrum of technologies of the semiconductor industry

**15** top businesses have joined the Industry Alliance of the NCKU Academy of Innovative Semiconductor and Sustainable Manufacturing. Making the NCKU alliance the most dynamic of this kind with the corporate partners representing the different phases of the industry supply chains.

半導體製程學位學程
Semiconductor Process Technology

晶片設計學位學程
Integrated Circuit Design

半導體封測學位學程
Semiconductor Packaging and Testing

關鍵材料學位學程
Key Materials

智能與永續製造學位學程
Smart and Sustainable Manufacturing

# NCKU IS YOUR TOP CHOICE!

What does algae have to do with water quality? How can cities become more sustainable? You can learn the answers to these questions and more at the 2022 Worldwide Universities Network Virtual Summer School. Leading academics will offer interactive classes, exploring sustainability issues, offering hands on learning to address the challenges, opportunities and solutions to Sustainable Development. Under the theme of "Act for Sustainability," classes will address issues which correlate to specific UN Sustainable Development Goals (SDGs). Experts will equip students with the skills necessary to navigate the complex global challenges of today's world. Students will work closely in a diverse cohort comprised of students from around the world, through project-based activities, highlighting the importance of collaboration, creativity, storytelling and critical thinking skills. Join us for eight days of innovative, practical and exciting learning! Get involved and be a part of the change!

# RANKING & PERFORMANCE

**2022 QS World Ranking**

## 252

**2021 Impact Rankings in Taiwan**

## Top One

**GLOBAL SCORE**

## 48.4

**2017 CEO of NCKU**

## 48

**March, 2022 UPDATED**

NCKU INTERNATIONAL SUMMER SCHOOL

2022

成功大學

PROGRAM OVERVIEW

Date: Aug. 26th – Sep. 2nd, 2022

Application Deadline: May 20th, 2022

Language: All courses are offered in English

Number of Participants: Maximum of 30 students

Format: On-campus

- **Core Course – 2 credits (4 ECTS credits)**
  Learn about semiconductor supply chains and the core technologies involved in semiconductor manufacturing.

- **Research Institute/Company Visit**
  Provide hands-on activities through onsite visits to research institutes and companies.

- **Exploring Tainan – 0.5 credits (1 ECTS credit)**
  Explore the most historical city of Taiwan in a fun-filled day to witness the beauty of it.

- **Chinese Class (Optional)**
  Useful survival Chinese for daily use and experience Chinese culture firsthand.

NCKU INTERNATIONAL SUMMER SCHOOL
2022
成功大學

# TIMETABLE

| Time Interval (GMT+8) | Fri. Aug. 26 | Sat. Aug. 27 | Sun. Aug. 28 | Mon. Aug. 29 | Tue. Aug. 30 | Wed. Aug. 31 | Thur. Sep. 1 | Fri. Sep. 2 |
|---|---|---|---|---|---|---|---|---|
| 9:10-10:00 | Open Ceremony | Firld Trip Exploring Tainan | Free | IC Design Overview （積體電路設計的綜述） | Digital Twin and IC Packaging （數位孿生與IC封裝） | VLSI Process Integration and Device Measurement （積體電路製程整合與元件量測） | Field Trip: *Southern Taiwan Science Park (STSP) *NCKU Research & Development Center at STSP *Museum of Archaeology, Tainan Branch of National Museum of Prehistory | Techniques of nanomaterials and nanacomposites （奈米材料與合成科技） |
| 10:10-11:00 | Intro of NCKU | | | | | | | |
| 11:10-12:00 | | | | | | | | |
| 12:10-13:00 | Lunch | | | | Lunch | | Lunch at Tree Valley Park （農家刈稻飯） | |
| 13:10-14:00 | Fundamentals of Device Physics and Fabrication （元件物理與製程概論） | | | TSRI tour-IC | TSRI tour- advanced packaging technology | VLSI Process Integration and Device Measurement （積體電路製程整合與元件量測） | enterprise experience sharing- CORETECH SYSTEM CO., LTD. 科盛科技股份有限公司 | Techniques of nanomaterials and nanacomposites （奈米材料與合成科技） |
| 14:10-15:00 | | | | | | | | |
| 13:10-16:00 | | | | | | | | |
| 16:10-17:00 | Chinese Class (optional) | | | | | Chinese Class (optional) | Chinese Class (optional) | Presentations & Farewell |
| 17:10-18:00 | | | | | | | | |

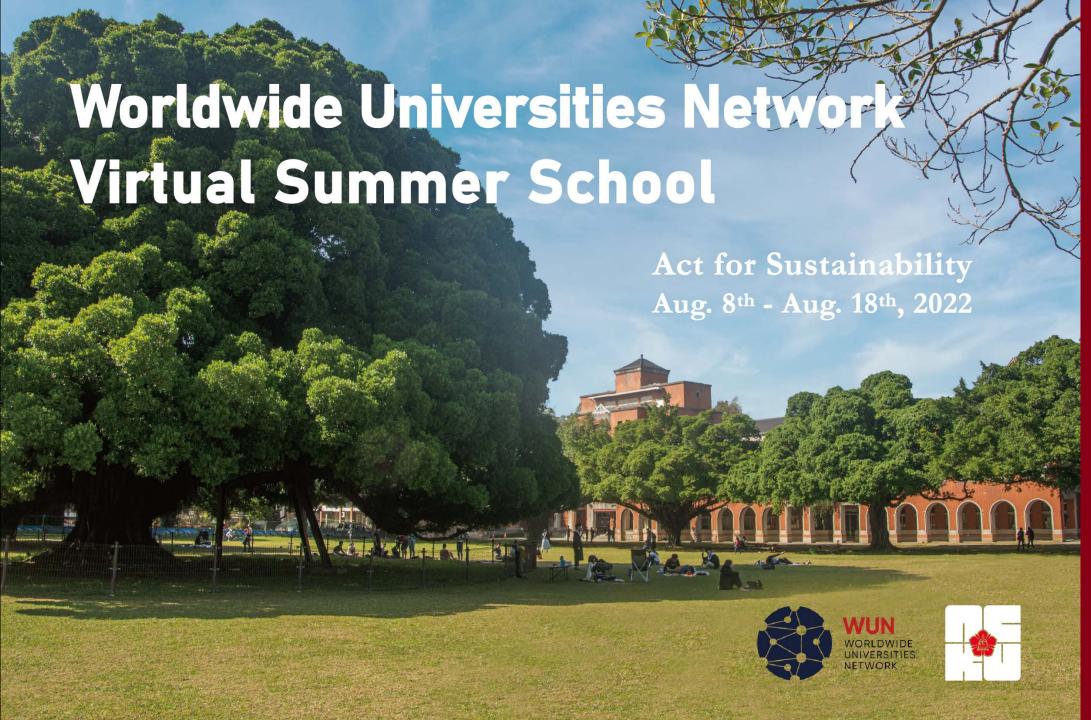Noted: The above courses/schedule are subject to change.

# THE ESSENTIALS OF SEMICONDUCTOR TECHNOLOGY AND SUPPLY CHAINS

## Core Course – 2 credits (4 ECTS credits)

The Academy of Innovative Semiconductor and Sustainable Manufacturing will offer this program with its most comprehensive selection of topics available. A course series with a theme on the essentials of semiconductor technology and supply chains will be delivered by both the Academy's faculty and the industry experts from top-notch research centers and businesses in Taiwan for a balanced presentation of this subject. The topics will include IC design, techniques of nanomaterials and nanocomposites, fundamentals of device physics and fabrication, advanced packaging technology with AI, IoT, and 5G application, digital twin and IC packaging, and VLSI process integration and device measurement.

## Research Institute / Company Visit

The program will arrange field trips to the key industrial hub of high-tech companies in southern Taiwan, Southern Taiwan Science Park (STSP), NCKU Research & Development Center at STSP, and local points of interest nearby. In addition, tours to Taiwan semiconductor Research Institute (TSRI) will be delivered by the invited research experts of the institute. TSRI is part of the National Applied Research Laboratories, is a consolidation of the National Chip Implementation Center (CIC) and National Nano Device Laboratories (NDL) and provides the integrated research environment for related fields of study in Taiwan to enhance the cultivation of quality talents to a large extent. Overall, the onsite visits are to provide hands-on activities for the program students visiting Taiwan from all over the world.

Date: August 8th – August 18th, 2022

Application Deadline: June 1st, 2022

Language: All courses are offered in English

Number of Participants: Maximum of 50 students

Format: Virtual

- **Core Course – 2 credits (4 ECTS credits)**
  Introduction to Sustainable Development Goals and Act for Sustainability.

- **Workshop**
  Improve your presentation, leadership, sustainable project management and proposal writing skills.

- **Chinese Class (Optional)**
  Useful Survival Chinese for daily use to enable students to communicate in Chinese.

- **Exploring Tainan – 0.5 credits (1 ECTS credit), Optional**
  Explore the most historical city of Taiwan to witness the beauty of it.

# TIMETABLE

| Time Interval (GMT+8) | Mon. Aug.8 | Tue. Aug. 9 | Wed. Aug. 10 | Thur. Aug. 11 | Fri. Aug. 12 | Sat. Aug. 13 | Sun. Aug. 14 |
|---|---|---|---|---|---|---|---|
| 14:10–15:00 | Open Ceremony | | | | | Exploring Tainan Video + Live (optional) | Free |
| 15:10–16:00 | | Industry, Innovation and Infrastructure | Life on Land | Energy | Cyanobacteria and Drinking Water | | |
| 16:10–17:00 | Intro of NCKU | | | | | | |
| 17:10–18:00 | | Break | | | | | |
| 18:10–19:00 | Break | Health, Clean Water and Sanitation | Conflict of Greens | Sustainable Cities | Responsible Consumption | | |
| 19:10–20:00 | Course Introduction | | | | | | |
| 20:10–21:00 | | Chinese Class (optional) | Chinese Class (optional) | Chinese Class (optional) | Chinese Class (optional) | | |

| Time Interval (GMT+8) | Mon. Aug. 15 | Tue. Aug. 16 | Wed. Aug. 17 | Thur. Aug. 18 |
|---|---|---|---|---|
| 14:10–15:00 | Workshop: Presentation Skills | Workshop: Water Education | Presentation Prep | Farewell Ceremony |
| 15:10–16:00 | | | | |
| 16:10–17:00 | | | Break | |
| 17:10–18:00 | Break | | | |
| 18:10–19:00 | Workshop: Limits to Growth/ Tragedy of the Commons | Workshop: Water Education | Presentations | |
| 19:10–20:00 | | | | |
| 20:10–21:00 | | | | |

Noted:
1. The above courses/schedules are subject to change.
2. The courses start in GMT+8, please notice the corresponding time in your country/ region.

# ACT FOR SUSTAINABILITY

## Core Course – 2 credits (4 ECTS credits)

Under the theme of "Act for Sustainability," nine sessions will address issues which correlate to specific UN Sustainable Development Goals (SDGs). Experts in each field will host the sessions to address the challenges, opportunities and solutions to sustainable development. The session topics include, but are not limited to, Industry, Innovation and Infrastructure, Affordable and Clean Energy, Sustainable Cities and Communities, Life on Land, Health, Clean Water and Sanitation, Responsible Consumption, and Climate Action. The courses aim to be interactive sessions of project–based activities showcasing the need for students to collaborate, create and solve problems.

## Brainstorming for Sustainability!

After collaborating with classmates, students will have opportunities to share their knowledge gained by presenting on sustainability topics of their choice.

## Show Us Your Skills!

Prizes will be awarded for groups showing collaboration, creativity, critical thinking and communication just to name a few!

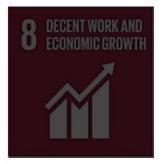# AREAS OF SDGS INVOLVED IN THE CORE COURSES

# CHINESE CLASS (OPTIONAL)

### Great for All Levels!

Learn the basics from NCKU's top Mandarin instructors, communicate in basic Chinese, and experience Chinese culture firsthand.

### Speak Up!

Learn all basic rules of pronunciation and tones.

### Give It a Try and "Survive"!

Students will have the chance to learn useful everyday phrases.

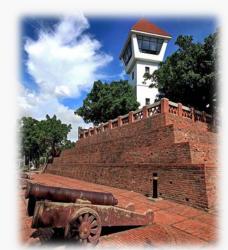# EXPLORING TAINAN!

### 300 Years of History!

From Fort Zealandia to the Eternal Golden Castle! Experience the rich history of Tainan in a fun-filled day tour!

### Remote Learning Opportunity!

Online-learning is provided for overseas students. It's just one screen away. Explore Taiwan's "Ancient Capital" like never before!

### Credit Value

0.5 credits ( 1 ECTS credit)

# TERMS AND CONDITIONS

1) Participants will be able to download the participation certificate through ISA system after the completion of the program , and the transcript (including class title, credits, letter grade and scores based on 100-point scale) around February 2023. The recognition of credits received isn't determined by NCKU. For those who need credit recognition, please consult the Office of Academic Affairs of your university before your application.

2) In order to meet the requirement of Taiwan-Europe Connectivity Scholarship:

- Participants must sign up for Innovative Semiconductor Summer School, and Worldwide Universities Network Virtual Summer School is a optional one to attend.

- Participants should at least stay in Taiwan over 5 weeks, and at most 2 months. Participants must arrive Taiwan and start your quarantine no later than July 28th, and leave Taiwan after September 3rd.

- Please fill out the information of which Taiwan Representative Office or Embassy you will apply for VISA to in the application form (in the "Remark" box) of the register system (NCKU Incoming Short Term Activities System). Participants can only apply for VISA through the place you fill out in the application form, it can not be changed in any conditions. For those who don't fill out the above information can not apply for VISA to Taiwan.

# TERMS AND CONDITIONS

4) Participants will need to arrange your own flights, quarantine hotel, hotel/hostel during your stay in Taiwan, and meals. Scholarships and flight tickets subsidy might fully cover your living expense in Taiwan if you use it smart. Lists are the living expense for your reference:

- Quarantine Hotel:
  around € 635 for 8 nights/per student

- Accommodation Fee (Except quarantine hotels, approximately during Aug. 5th – Sep. 3nd )
  bunk bed: around € 480 for 30 nights/per student

- Meals:
  around € 2-4 each meal, depends on habits of each person

Note: For those who need recommendations for quarantine hotels or accommodation, please consult us for further information.

# ENTRY RESTRICTIONS FOR FOREIGNERS TO TAIWAN IN RESPONSE TO COVID-19 OUTBREAK

At this stage, all those entering Taiwan must complete a mandatory quarantine period in a quarantine hotel. According to the current government regulations, the quarantine period is set at 7 days, following by 7 days of self-health management.

The government regulations might be updated, please keep yourself updated via official travel advice from your home country as well as via the official Taiwanese sites:
Taiwan Center for Disease (CDC) Control
Bureau of Consular Affairs, Ministry of Foreign Affairs (BOCA)

May, 2022 UPDATED

# ELIGIBILITY

- Full-time enrolled university students (undergraduate and postgraduate)

- English proficiency (as the courses will be taught in English)

- According to the regulations of Taiwan-Europe Connectivity Scholarships, students from Republic of China (Taiwan), People's Republic of China, Hong Kong or Macau are not eligible to award the scholarship.

- According to the regulations of Taiwan-Europe Connectivity Scholarships, scholarships awardee can not receive other scholarships from other departments or schools in Taiwan during the summer school program.

# APPLY NOW!

Before starting your application, please visit our official summer school website
for more information:
https://summerschool.web2.ncku.edu.tw/

Step 1    Apply Innovative Semiconductor Summer School or two summer schools through our
NCKU Incoming Short Term Activities System by May 20th.
*NCKU provides 100% discounts on all fees for selected participants (ALL FEES WAIVED). Applicants can decide if they
apply for Worldwide Universities Network Virtual Summer School or not.

Step 2    Receive confirmation letter by May 16th.

Step 3    Confirm your admission on ISA system by May 25th .

Step 4    Completion of application process.

Step 5    Receive scholarships and flight tickets subsidy in cash after arriving NCKU.
* The approach to receive scholarships and flight tickets subsidy is tentative and subject to change.

# CONTACT US

## Office of International Affairs

Tel: +886-6-2757575 ext.50965
Fax: +886-6-2752455
Email: em50963@ncku.edu.tw
Available Hours (GMT+8): Monday – Friday 8:30-12:00 / 13:00-17:30
Address: No. 1, University Road, 701 Tainan City, Taiwan (R.O.C.)

Summer School Official Website: https://summerschool.web2.ncku.edu.tw/
Summer School Facebook: https://www.facebook.com/NCKUsummerschool
Apply Now: https://management.oia.ncku.edu.tw/incomingshort/

國立成功大學
National Cheng Kung University

oia NCKU
Office of
International
Affairs

COME JOIN US TO BE PART OF NCKUERS!