



CHIEN HSIN UNIVERSITY

OF SCIENCE AND TECHNOLOGY

— Introduction —





CHIEN HSIN UNIVERSITY
OF SCIENCE AND TECHNOLOGY

INDEX

ADMINISTRATION

Welcome to UCH	4
Words from the President	6
Organization	10
Academic Information about Programs	11
Division of Continuing Education	12
The Introduction of Hsueh-Li School	13

ACADEMICS

General Education Center	14
College of Electrical Engineering and Computer Science	16
■ Department of Electronic Engineering	18
■ Department of Electrical Engineering	20
■ Department of Computer Science and Information Engineering	22
College of Engineering	24
■ Department of Mechanical Engineering	26
■ Department of Civil Engineering	28
■ Department of Applied Geomatics	30
■ Department of Vehicle Engineering	32

College of Business and Management	34	Research Centers	57
■ Department of Industrial Management	36	■ Digital Earth and Disaster Reduction Research Center	58
■ Department of Business Administration	38	■ Center for Spatial Modeling Application Research	60
■ Department of Marketing and Distribution Management	40	■ Green Energy Research Center	62
■ Department of Information Management	42		
■ Department of Finance	44	Our Location	63
College of Human Ecology and Design	46		
■ Department of International Business	48		
■ Department of Interior Design and Management	50		
■ Department of Hospitality Management	52		
■ Department of Digital Multimedia Design	54		
■ Department of Applied Foreign Languages	56		

*CHIEN HSIN UNIVERSITY OF
SCIENCE AND TECHNOLOGY*

Welcome to

Chien Hsin University of Science and Technology

Founded over half a century ago, Chien Hsin University of Science and Technology (UCH) is turning 57 and moving toward another successful 50 years. As Confucius said, "at 50s, I was fully aware of the decree of my fate", the institution, from this decade forward, will reach a period of accomplishment. Recollecting the past, the school's founder Mr. Yang Yung-kui worked his fingers to the bone under conditions of scant resources and insufficient faculty. In spring 1965, he built a five-year vocational school. On the 3rd of March 1966, he formally established "Jianxing Vocational University", a model private university in Taiwan and a contemporary name in educational excellence.

Changing times and popularization of higher education have caused universities to be a place affordable for most people in Taiwan. However, paralleling with this advancement, the declining birth rate has made student recruitment more difficult. Furthermore, the growing competitiveness of internationalization has forced universities to face the rigorous challenge of globalization. The direction Chien Hsin should move becomes an important issue for those who were concerned for the development of the University. Recognizing that this "crisis" is simply a transition, Chien Hsin University of Science and Technology now is standing at a turning point in its trajectory in history. How to take a vision of excellence in education and create a sophisticated university, implementing Chien Hsin's next transition, has been an issue for all school members to seriously deliberate.

Education lies principally in the nurturing of talent. Nurturing talent, however, is not just the promotion of professional competence. Chien Hsin University of Science and Technology also emphasizes the cultivation of character. Thus, in addition to focusing its determination and strength upon the cultivation of students' professional expertise, Chien Hsin also conscientiously guides students beyond technology, to the furthering of ideals, determination, and well-rounded pragmatism. Chien Hsin University of Science and Technology believes that the values of humanities underline all technological innovations, therefore; in envisioning the next turn in Chien Hsin's future, the University is in a constant pursuit of "Excellence in Instruction," "Excellence in Research," and "Excellence in Service."





In addition to improving educational environment and enhancing quality of study, the “Excellence in Instruction” places focus upon the realization of student potentials. In order to reach the educational ideal of “according with talent and nature,” the university emphasizes consolidation of fundamentals, activation of potential, shaping of elites, and guidance for those in need. This is done based on the establishment of an actively learning and sincerely caring campus environment. The ideal, at the same time, responds to contemporary social alienation and apathy. It actively promotes “life education” and endeavors to assist students in their search for existential meaning. This education cultivates an optimistic attitude in the face of challenges and difficulties.

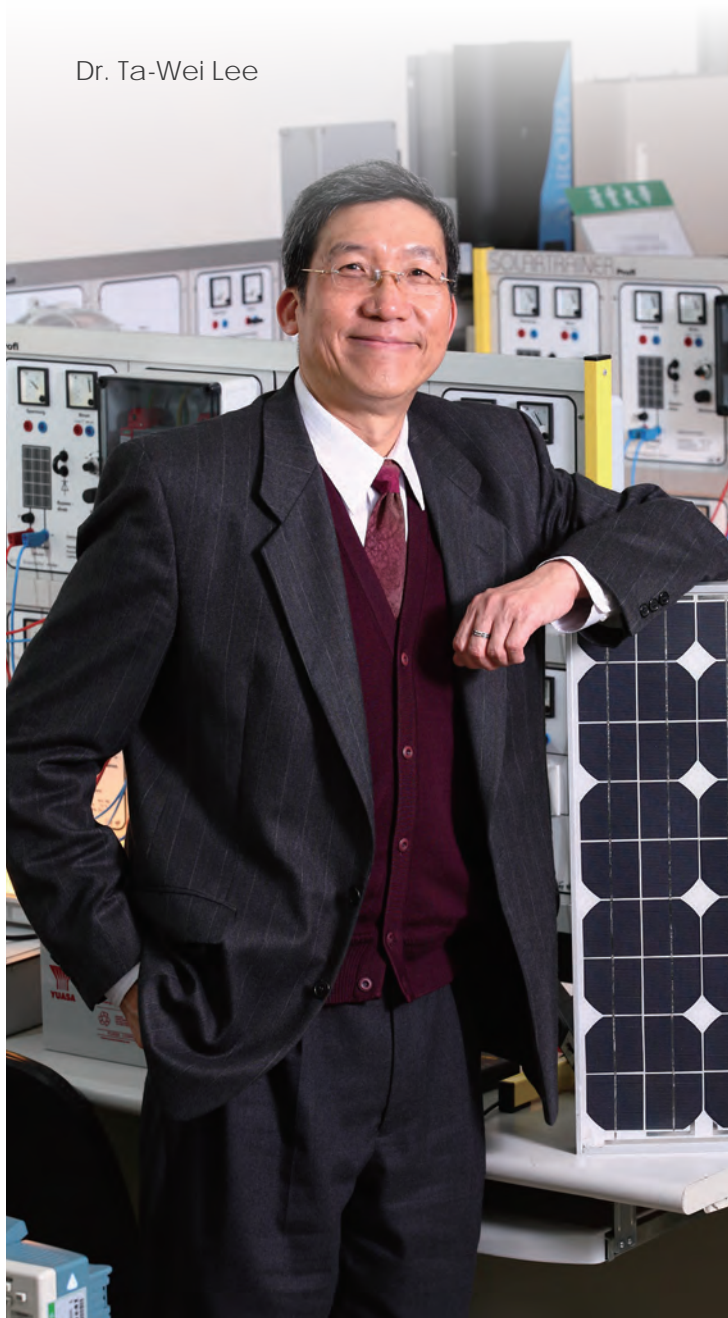
With respect to “Excellence in Research,” the University aims to establish itself as a top-tier technological research center capable of making technological breakthroughs in specialized research fields. The University has a strong foundation in cultivating research strengths that result in major contributions to the industry and in-training, highly-qualified students. The University seeks to constantly strengthen this foundation, and to moreover, transform the development of research into innovative solutions in response to the changing demands of the industry and society.

The University’s “Service Excellence” has been a mandate since its inception. Chien Hsin has long been a community bastion of cultural spirit and a guardian angel of rational society: one that says what should be said and does what should be done.

With the University envisions be of first of its kind in the nation, Chien Hsin welcomes a new century as it continues its 50 years of brilliance.

Words from the President

Dr. Ta-Wei Lee



Half a century ago, it is Mr. Yung-kui Yang, the school founder, who established the Chien Hsin College of Technology at the present campus location. Originated from I Ching (Book of Changes): "while the heavens are in motion ceaselessly, the enlightened exert themselves constantly.", the school's name "Chien Hsin" stands for hard work, innovation, and persistence, which also serves as the cherished school spirit. Since the school's inauguration, Chien Hsin University has undergone several stages of growth and development; from Junior College, to the institute of technology, and eventually to the current state: a university of science and technology with a scale of 4 colleges, which are composed of 17 departments and 10 graduate programs, with approximately 10,000 students. These glowing results are derived from the solid guidance of the school board and fully devoted faculty members. In recent years, the school has received multiple outstanding achievements from student cultivation activities. For instance, a student was proudly selected as one of the National Ten Outstanding Young Persons, and, subsequently, some received the National President Education Prize. Evidenced by the increasing student quality and quantity, the school has accumulated a great deal of reputation and affirmation from parents of students. The school has performed exceptionally



well within the past decade in the areas of teaching and researching. A government conducted University Assessment and Evaluation in 2020 concluded that every department in the university passes the assessment standards. Moreover, on account of teaching excellence, the school has been honored to obtain grants every year from "Teaching Excellence Project" and the "Higher Education Sprout Project" sponsored by the Ministry of Education (Taiwan) (Hereafter MOE) Incentive Grants. Furthermore, numerous prizes from various international invention competitions were received as a product of joint efforts between professors and students. As we move forward towards the future, we will continuously devote ourselves in not only maintaining the research momentum but also enhancing the quality of teaching and developing industry-university cooperative projects.

As a community member of universities of science and technology, we recognize that it is our responsibility to equip students with strong competencies in dealing with practical works. When such competencies are established, our students will have a favored advantage over other students in landing a job and entering the workforce after graduation. To keep that advantage functioning, we will not only teach students the theory aspect of the courses, but also highlight the practical part as a whole. While encouraging students to obtain certificates and licenses in different fields, we continue to strive to develop various industry university cooperative research projects in order to provide good opportunities for students to get ample hands-on experience from practical works.

Currently, more than 300 companies from various industries have ongoing cooperation projects with our school, including TSMC(Taiwan Semiconductor Manufacturing Company Limited), ASE(Advanced Semiconductor Engineering, Inc.), Taiwan High Speed Rail, Chang Gung Hospital, PCHOME, Evergreen Aviation Technologies Corp., MetroWalk, Sigurd, UNIQLO, Zig Sheng Industrial Co. Ltd, ACE Electronics, Hotel Kuva Chateau, Partner E-Commerce, Unimicron Technology, Compuware Technology, Wafer Works, San Jing Information, G-SHANK Enterprise, HannStar Board, I-MEI Foods Co., Ltd., Hotels and Resorts, My humble House Group, Fleur de Chine Hotel, The Ambassador Hotel, Hotel Royal Group, Fortune Motors, Kuozui Motors, Baotek Industrial Materials, Shin Kong Life Insurance, Cathay Life Insurance, Taichung Commercial Bank, Bank Sinopac Co., Ltd., Union bank of Taiwan, Chuan Lian Enterprise Co., Ltd, Pacific Hospital Supply, and more.

Simultaneously, we recognize the importance of education infrastructure, which is why updating teaching equipment and campus environments is another non-negotiable focus of the school. In addition to annual budgets relocated to renew and repair teaching facilities, the school has also made important investments on education infrastructure improvements. A new teaching building with 11 stories was recently completed, as well as a sports field with 2 stories of underground parking. Grants obtained from the "Rebuilding the Technological and Vocational Education Project" and subsidies received every year from MOE contribute a great deal to the modernizing of school infrastructure and teaching environments. Within the past five years, the school

received grants as much as 269 million dollars from the MOE's "Higher Education Sprout Project". Also, the school received the grants more than 87 million dollars from the PV Module and System Installation Technical Talent Training Plan and 3D Modeling and Vision Application Talent Training Plan. Apart from that, the school also received subsidies more than 310 million dollars over the past five years. The grants and subsidies play a critical role in school performance enhancement through resources and infrastructures.

Besides, we can appreciate that globalization is an international trend unavoidable in the university education system, which is why we strive to educate and prime our students on having an extensive view on international perspectives. To reach that end, we have strategies in place for execution. First, we are committed to teach English courses in accordance to a student's grade and level. Conversant programs are in place to allow students to practice oral speaking capabilities. Second, campus events such as "English reporter competition" and "English Tutors" have been designed and executed to encourage students to partake in and exercise English. Next, a series of books titled "Practical English for Internships" were compiled and published within the school as a handbook for students to improve their English competency for industry specific linguistics. We are also actively engaged in signing contracts with sister universities from other countries. We actively

encourage students to build connections with the world by joining student exchange programs, joint-venture research projects, and diploma programs, and so on. Presently, contracted sister universities in the Russia and Vietnam include: Lomonosov Moscow State University (LMSU), Vietnam Hungary Industrial University, Phuong Dong University, Ha Tinh University, University of Languages & International Studies Vietnam National University, Hanoi, Dong Do University, Hanoi University of Culture, Hanoi Architectural University and Halong University and so on totally eight schools, etc.. Additionally, we have joined and contracted with many universities in France and Italy, including "A Taste of France for I international Students courses" in France, and Italian Culinary Institute for Foreigners (ICIF). These sister universities dramatically increase the opportunity for students to partake in programs like overseas studies and internships in Japan, Singapore, France and other countries. As for domestic relationships, we have a solid strategic alliance with many vocational high schools in the northern Taiwan area. Many programs are aimed to strengthen mutual interaction and information sharing between these partnering high schools. Chien Hsin is a prestigious university with a long, reputable history and an excellent cohort of teachers and students. With the existing successes and achievements to this date and the endeavors contributed from every committed faculty member, we passionately believe that the university is moving towards an even brighter future.





▲ Accepted as a Joinery Delegate Representation for National Competitions, THE 47th World Skills Competition



▲ The Second Place Winner in Taiwan and Asia-Pacific, 2023 APJC NetAcad Riders



▲ The Third Place Winner in Taiwan, 2023 APJC NetAcad Riders

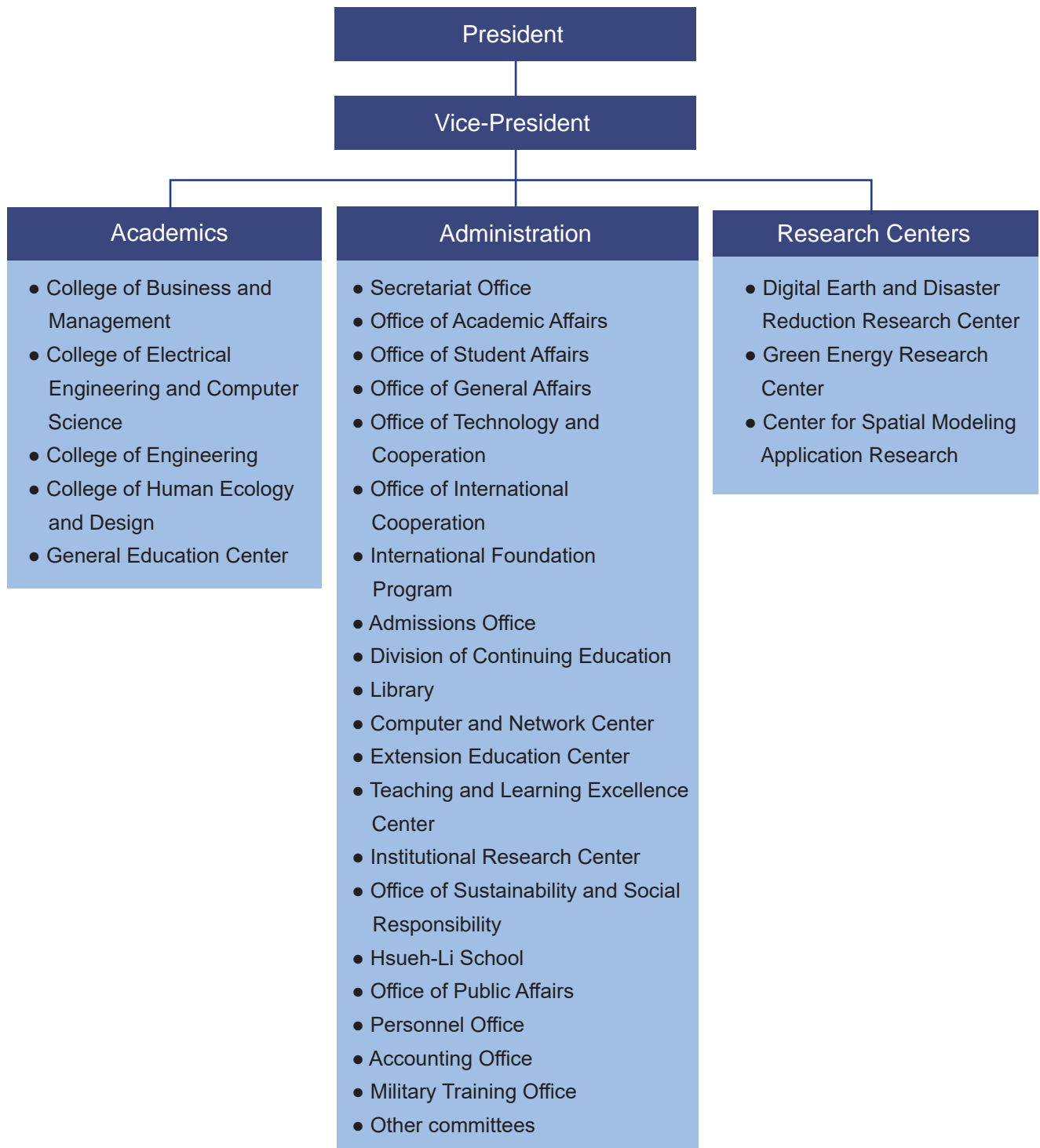


▲ The Runner-up, Concours de Taiwan des Jeunes Sommeliers, 2023



▲ The First Place Winner in Micronet Star, Nation EC STAR, 2023

Organization



Academic Information about Programs

College	Departments	4-year Undergraduate Program (Bachelor)		2-year Undergraduate Program (Bachelor)		Masters Program
		Regular Program	Continuing Education Program	Regular Program	Continuing Education Program	
College of Engineering	Department of Civil Engineering	•	•			
	Geoinformatics and Disaster Prevention Technology					•
	Department of Mechanical Engineering	•	•		•	•
	Department of Vehicle Engineering	•	•			
	Department of Applied Geomatics	•				
College of Human Ecology and Design	Department of Interior Design and Management	•	•			
	Department of International Business				•	•
	Department of International Business Program of Aviation and Marketing	•				
	Department of International Business Program of Tourism and Leisure	•	•			
	Department of Digital Multimedia Design	•	•			
	Department of Hospitality Management	•	•			
	Department of Applied Foreign Languages Program of English	•	•		•	
	Department of Applied Foreign Languages Program of Japanese and Korean	•				
College of Business and Management	Department of Industrial Management	•	•		•	•
	Department of Business Administration	•	•	•	•	•
	Department of Business Administration Fashion Industry Management Group	•	•			
	Department of Marketing and Distribution Management	•	•			
	Department of Marketing and Distribution Management Program of Sports Marketing	•				
	Department of Finance		•		•	•
	Department of Finance Program of Investment and Finance	•	•			
	Department of Finance Program of Financial Management	•				
	Department of Information Management	•	•	•	•	•
College of Electrical Engineering and Computer Science	Department of Computer Science and Information Engineering	•	•			•
	Department of Electronic Engineering	•	•			•
	Department of Electrical Engineering	•	•			•

Division of Continuing Education



Introduction

The Continuing Education School established in 1971. It responds to social needs and provides on-the-job learning channels for social youth.

At present, there are 4-year and 2-year technical programs in the school. There are Department of Electronic Engineering, Department of Electrical Engineering, Department of Computer Science and Information Engineering, Department of Digital Multimedia Design, Department of Mechanical Engineering, Department of Vehicle Engineering, Department of Civil Engineering, Department of Interior Design and Management, Department of Industrial Management, Department of International Business, Department of Information Management, Department of Business Administration, Department of Finance, Department of Marketing and Distribution Management, Department of Hospitality Management, Department of Applied Foreign Languages, providing professional, diverse and lifelong learning opportunities that meet the needs of the times.

Feature

1. There are 18 departments, which can meet the diverse needs of students.
2. Provide working and social people with opportunities for further study and lifelong learning at night, during the day on weekdays or during holidays to acquire professional knowledge

and degrees.

3. Focus on the training of practical skills and meet the needs of the industry.
4. Encourage students to obtain professional certificates and accumulate competitiveness in the workplace.
5. The professional classrooms of each department are equipped with novel equipment to enhance the learning effect of students.
6. Adjacent to Zhongli Railway Station and various external roads, the railway, highway and public transportation systems are convenient.

Organization and Responsibilities

There are three administrators' groups in the headquarters: Academic Affairs, Student Affairs, and General Affairs. The services provided by each group are as follows:

1. Academic Affairs Group: courses, examinations, registration, enrollment and other temporary services.
2. Student Affairs Group: students' life counseling, rewards and punishments, student loan, military services, scholarships, student insurance, job-seeking counseling, student associations, student activity management, etc.
3. General Affairs Group: parking lot management, environmental sanitation maintenance, campus safety management, electrical appliance management, cashier services, equipment management.



The Introduction of Hsueh-Li School



13

Introduction

Chien Hsin University of Science and Technology is aware of the importance of workplace ethics and attitude toward work for the business circle and community, so the "Hsueh-Li School" was set up in 2017. The school has one dean, appointed by the president, and several academic faculty and staff, to help all faculty, staff, and students to fulfil the university motto: learning and politeness.

Faculty/staff to set good example as their own conduct

The board of director encourages all faculty and staff who should not only acquire self-learning persistently, but also set good examples, to practice what you preach. By do that, to establish a campus culture with "modest communication and courteous interaction". It is said that habit becomes second nature; therefore, once showing good manners toward others becomes a use, it forever is a custom. That is the reason why the school addresses the matters of ethics in classrooms, elevators, and campus.

Self-development activity and Association communication

Hsueh-Li School holds self-development activities for all faculty and staff, to share the working experiences of learning and the attitude of politeness. As said in Confucian Analects', "when we see a man of virtue and talent, we should think of equaling them; when we see a man of a contrary character, we should turn inwards and examine ourselves." This is one of good ways of "self-learning and development". In addition, Hsueh-Li School also establishes various types of associations for all faculty and staff, not only to grow up the interpersonal affection in campus, but also to create the politeness of the working atmosphere and environment.

Assessment, Reward and Improvement

By the end of each semester, a qualitative and quantitative survey is carried out in each class, academic and administrative department. The result of evaluation is considered not only as a piece of evidence for the group incentives, but also as a piece of feedback for self-improvement.

General Education Center

find out more at <https://web.uch.edu.tw/language/>



Purpose of Establishment

The university currently has 17 professional departments. The General Education Center operates alongside these professional departments and provides students with a wide range of courses that encompass intellectual, personal, and cultural perspectives. These courses aim to enhance students' fundamental literacy skills, preparing them for future career development and social life. The establishment of the General Education Center at the University of Science and Technology emphasizes the importance of integrating a liberal arts education into students' pursuit of skills and professions. Students are encouraged to uphold the core value of 'people,' and to understand that humanities, societies, environments, and languages are integral to their professional growth. The General Education Center is dedicated to promoting the ideals of education.

Educational Goals

Based on the above beliefs, the educational goal of the General Education Center is to cultivate various aspects of students' basic skills in interacting with the living world during their professional development, which in turn nurtures the abilities they should possess for future work and social life. Students are taught to have the following competencies:

- 1.the ability to think independently and communicate internationally
- 2.the recognition of the interaction between science & technology and humanities
3. cultural competence to improve the quality of life
4. the values and moral judgment of the world
5. the practical ability to care for social development and the natural environment

Curriculum Design

To achieve the above-mentioned educational goals, the curriculum of the General Education Center is divided into five areas: (1) Literature and Contemporary Society, (2) Concern of Life and Society, (3) Science and Society, (4) History and Art, and (5) Foreign Languages. Students must take 4 credits from each of the four areas (Literature and Contemporary Society, Concern of Life and Society, Science and Society, History and Art) for a total of 16 credits.

Foreign language courses are worth 8 credits: English (1) and English (2) are compulsory courses in the first year, while in the second year, students have the option of choosing ESP courses or foreign language courses such as Japanese, Korean, Russian, French, German, Spanish, Malaysian, Vietnamese, Thai, etc.

Faculty Members

The Faculty is divided into four academic groups: Humanities, Social Sciences, Natural Sciences, and Foreign Languages. Faculty members hold professional master's and doctoral degrees. The General Education Centre offers a wide range of courses each year to develop students' basic skills before they graduate. These courses include basic foreign language skills, knowledge of the rule of law, ethical values, the promotion of gender equality, work ethics, respect for life, the promotion

of optimistic attitudes, the appreciation of art and literature, and the development of international perspectives.

Teaching and Research

Since 2006 (the 95 academic years), the General Education Center has promoted various general education activities, including "promoting cultural and creative general education courses", "enhancing Chinese reading and writing skills", "strengthening life education and civic awareness", "promoting diversified foreign language courses", and "enhancing professional English proficiency and certification" to effectively improve the instructional quality of general education. In addition, teachers have also actively implemented the High-Quality General Education Curriculum Project proposed by the Ministry of Education to deepen the connotation of general education courses and increase students' motivation and interest in learning general education courses. In terms of research, faculty members have consistently received projects from the National Science and Technology Council, covering in the fields of literature and earth sciences, fully demonstrating the General Education Center's diverse research capabilities.



College of Electrical Engineering and Computer Science

- Department of Electronic Engineering
- Department of Electrical Engineering
- Department of Computer Science and Information Engineering

About the college

The College of Electrical Engineering and Computer Science (EECS) was established on August 1, 2003. At present the EECS consists of three departments. They are the Department of Electrical Engineering, the Department of Electronic Engineering, and the Department of Computer Science and Information Engineering. All departments offer M.S. and B.S. degrees. Currently, the EECS has 56 full-time faculty members. The Green Energy Research Center of the University is closely related to the Department of Electrical Engineering. For purpose of long-term development, more research centers in the college are planned to be established in the future.

Under the management guidance of Chien Hsin University, the college strives to ensure that students learn core technology, construct core capability and cultivate core essence, which enable students to compete against others with confidence after graduation. The college expects to become the frontrunner in areas based on excellent academic achievements. Service, innovation and resource integration are the principle values of the college, allowing the integration of disciplines and departments and the collection and allocation of external resources. The college devotes every effort to enhance the quality of teaching and research.

Education Goals of the College

1. Educating students as outstanding engineers of electrical, electronic and information engineering.
2. Training students with engineering ethics and leadership.
3. Cultivating students for meeting the requirements of national construction and technology development.

One of the college educational goals is to cultivate students with knowledge and skills in order to meet the needs of industrial development of the country. Therefore, the course system has been designed to have a full spectrum ranging from engineering technologies to social science. For sustainable development of the college and for creation of distinguished graduates, five important ingredients have been included in courses offered by the college: major expertise training, minor professional training, employability skills training, social science learning, and personal characteristic development.



Contact Information

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1. Major expertise and minor professional trainings: Core technologies learning and practicing.
2. Employability skills training: Problem-solving, communication and technology skills.
3. Social science training: Cultivation of core competence.
4. Personal characteristic development: Core essence is formed by team work, aggressive learning attitude and respect for others.

Furthermore, to cope with the trend of internationalization and to emphasize the importance of experiences gained from practical work in the industry, the college demands the students to meet the following requirements before graduation:

1. Students must pass the basic level foreign language test.
2. Level B technician certificates must be obtained.
3. Minimum credits in practical training must be earned.
4. General courses such as "Engineering Ethics" and "Innovative Inspiration" must be taken.
4. General courses such as "Engineering Ethics" and "Innovative Inspiration" must be taken.

Department of Electronic Engineering



find out more at www.et.uch.edu.tw



▲ Many Awards from Internet of Things Application Contest

Teachers

There are 16 professional teachers, including: 1 professors, 8 associate professors, 5 assistant professors, and 2 lecturers. The ratio of assistant professors to teachers is 87.5%.

Teaching Fields

The Department of Electronic Engineering offers various programs in which students can pursue a Bachelor Degree of Science or Master's Degree of Science. These programs provide our students with outstanding training in research. Core Courses for graduate students:

1. Electronics and Integrated Circuit Technology
2. Internet of Things (IOT) Technology
3. E-Sports Industry.

Teaching Contents

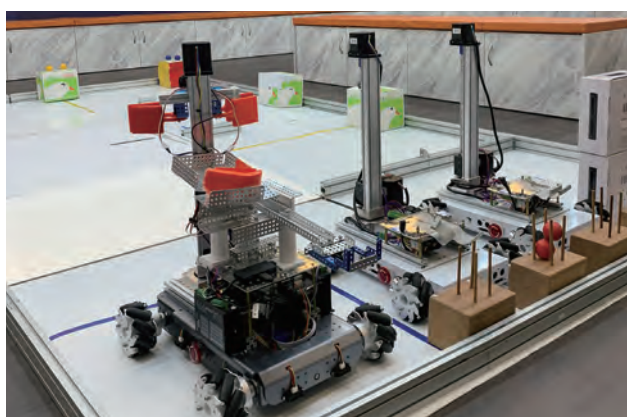
At the Department covers the areas of solid-state physics, electronic materials, semiconductor device modeling and simulation, electro static discharge and protection, sensors and transducers, nano-science and technology, photo-electronics devices and systems, digital and analog VLSI design, Computer-Aided Design of VLSI circuits and systems, VLSI for signal processing and communication, FPGA, SOC, SOPC, ARDUINO applications, IRA robot applications, APP INVENTOR applications, ANDROID applications,

intelligent computation, data warehouse, visual/acoustic signal processing and training of skill test.

Teaching and Researching Characters

The Department of Electronic Engineering has five teaching and researching characters:

1. *Opto-electrical Technologies* - The main purpose is to provide students knowledge of optoelectronic devices, opto-electronic systems, and optical fiber communication for information transmission, processing, display, and storage. Research areas include optical design, soft electronics for display, solar cells, optical fiber sensors, high density data storage, optical display and photonic crystals.
2. *Integrated Circuit Technology* - The Department fosters talent with digital and analog integrated circuit design and processing technology background. It also increases graduate students attention to digital and analog integrated circuit design, communications integrated circuits design, and various aspects of knowledge. The main research contents are VLSI circuit design, RISC design, ASIC design, integrated optics, communications integrated circuit design, VLSI communication signal processing, embedded system design and applications, semiconductor device processing technology, and Electrostatic Discharge (ESD) protection design.
3. *Internet of Things (IOT) Technology* -Cultivate students' abilities in information technology, Android App,remote care system,digital convergence integration,....
4. *E-Sports Industry* Cultivate students' practical abilities with diversified e-sports industry practice capabilities. Curriculum design includes "E-sports credit course ". Graduating students are suitable for e-sports industries such as e-sports hardware design industry, network erection, game analysis and tester, live master, net red, live broadcast, event planning and arrangement.
5. *Industry Cooperation* - Industry experts are invited to participate in the Department's curriculum planning. The Department provides the latest software to students, such as ADS of RF circuit design, CCS of DSP chip system, and simulation of design software of Altera and Xilinx FPGA. The Department is a member of the System-on-Chip Consortium of the Ministry of Education.



▲ Artificial intelligence robot base

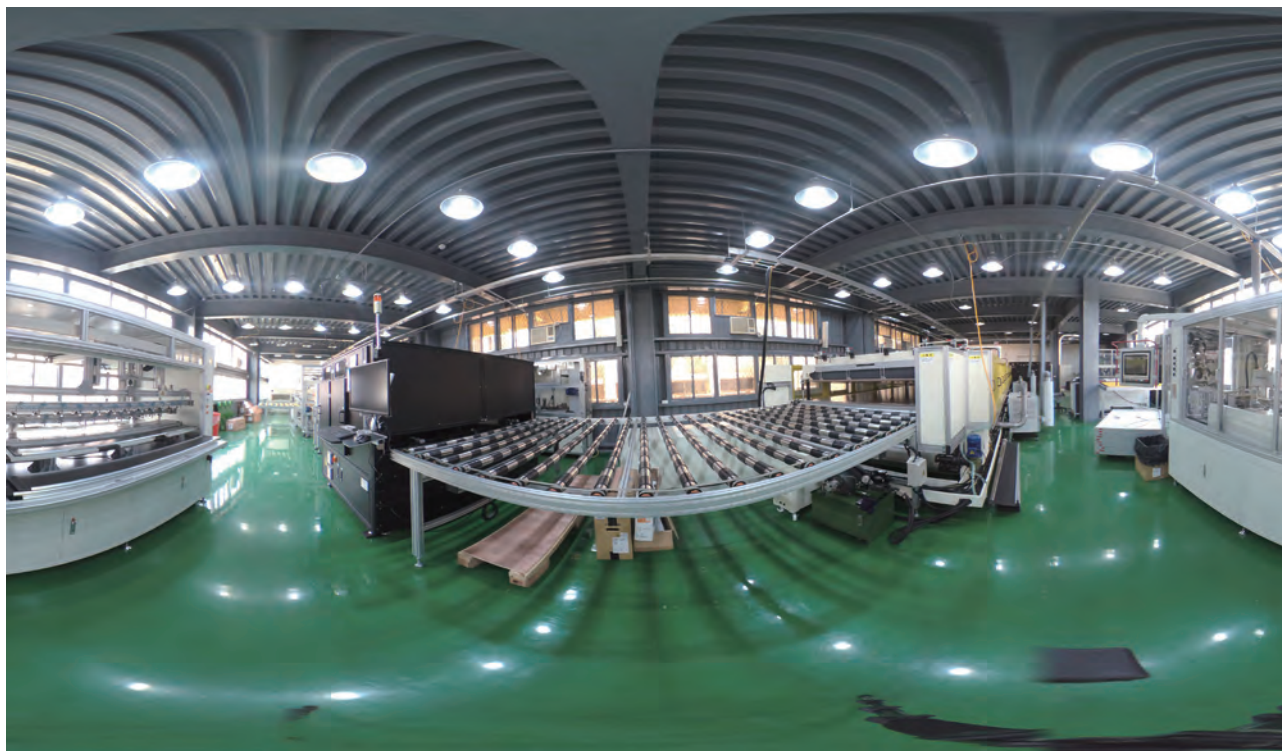


▲ The Talent Training Base of E-Sports Industry

Department of Electrical Engineering



find out more at www.ee.uch.edu.tw



Objectives

The educational objectives of the EE Department is to cultivate professional electrical engineers with competence in analysis, design, manufacturing and maintenance in the fields of green energy, power distribution system, refrigerating and air-conditioning, industrial automation, AIOT applications. In addition to traditional courses in the fields of Power and Control, the Department also offers Green Energy and 3C (Computer, Communication, and Consumer Electronics) courses designed to enhance students' professional knowledge and skills. At present, the Department offers both undergraduate and graduate programs. Based on the academic cooperation agreement with the Moscow State University (MSU), the Department provides scholarships (about NT\$50,000 for each student) every year for students who attend the summer school organized by MSU to extend their global vision.

Course Structure

The courses of the Department are classified into two professional groups as follows,

1. *Green Energy Group:*

The courses of this group focus on renewable energy technology, solar photovoltaic system design and installation, solar photovoltaic module encapsulation, wind power technology, fuel cell technology and energy conservation technologies.

2. *General Group:*

The courses of this group focus on industrial power systems, industrial and building wiring, refrigerating & air-conditioning, manufacturing automation, intelligent control, mechatronics and AIOT applications.



Core Courses

Introductions to Computers Science, Calculus, Sensors Theory and Practicum, Digital Systems, Digital Systems Lab., Computer Programming, Electric Circuits, Electronics, Electronics Lab., Microcontroller Application and Practicum, Engineering Mathematics, Electrical Machinery, Electrical Machinery Lab, Control Systems, Control Systems Lab.

Graduate Program (M. S.)

The graduate program consists of two major areas: Power and Control, and 3C (Computer, Communication, Consumer Electronics). To obtain the Master degree in Electrical Engineering, graduate-level coursework of at least 36 credits (including thesis) are required.

Faculty

The Department of Electrical Engineering has 3 professors, 10 associate professors, 6 assistant professors and 2 lecturers.

Facilities

The Department has 13 laboratories to support teachings and research. Some crucial facilities include wind and photovoltaic array power generation systems, solar energy vehicles, fuel cell experimental systems, level B technician certification labs for photovoltaic system installation, industrial and commercial wiring, refrigerating & air-conditioning, computer maintenance, and power electronics.

Department of Computer Science and Information Engineering



find out more at www.csie.uch.edu.tw



The Department of Computer Science and Information Engineering (CSIE) was founded in 2002. The program of continuing education was established in 2003, the master's program was offered in 2008. The goal of the Department is to nurture professionals in information, internet, security, big data, and e-sports industry that meet the needs of the society after graduation.

The Department currently has 19 full-time faculty members, including 4 professors, 5 associate professors, 9 assistant professors, and 1 lecturer. There are 18 full-time teachers who have doctoral

degrees with expertise covered in computer hardware and software, computer programming, network technology, and information security.

Presently, there are over 550 students in the undergraduate program and 30 students in the master's program.

Facilities

There are eight technical laboratories and eight research labs in CSIE. These technical laboratories include (1)Cisco Networking Academy Lab., (2)



Advanced Cyber Security Lab., (3)Information Security Lab., (4)IT Certification Training Lab., (5) Information Technology Lab., (6)Mobile Commerce Lab., and (7)E-Sports Industry Lab (8)Level C network installation Lab.

Features of the Program

The main educational goal of the CSIE is to emphasize a thorough blending of theory and practice. To complete the undergraduate program, students are required to implement a practical project, including project development, report writing, results presentation and demonstration, and participation of worldwide competitions, with the purpose of leading students to enter a wider field of engineering ethics.

The Department provides academic advice, counseling, and emotional guidance for all students, and helps students obtain information technique certifications such as Cisco Certified Network Associate (CCNA), Cisco Certified Network Professional (CCNP), Red Hat Certified System Administrator (RHCSA), Red Hat Certified Engineer (RHCE), Fluke Networks Certified Cabling Test Technician (CCTT), EC-Council CEH, CHFI, ECSA, Microsoft MCP, MCSA, and Information Technology

Expert Certification (ITE).

After graduating, students can engage in technology research and development, software or firmware engineers, system analysts, network engineers, information security auditors, electric game planners, e-sports players/coaches/managers, etc. The graduates have successfully entered the services of National Chung-Shan institute of science and technology, Acer Group, Holy Stone Enterprise, etc.; the admission to Information Engineering Institute of National Universities including Taiwan University of Science and Technology, Central University and Donghua University.



College of Engineering

- Department of Mechanical Engineering
- Department of Civil Engineering
- Department of Applied Geomatics
- Department of Vehicle Engineering

The College of Engineering was founded in 2003. Currently, this college consists of the Department of Mechanical Engineering (with master course), the Department of Civil Engineering (with master course), the Department of Applied Geomatics, the Department of Vehicle Engineering. This college is featured with the solid and practical technology, driven by diversely excellent teaching and oriented to providing technical services to the industry, to implement the practical operation of technical education.

The education objectives of this college are based on the applied science and engineering knowledge to cultivate students with adequate professional skills, to train students with the capability of communication, integration and innovation, to enhance students' professional ethics and teamwork spirit, and to develop students' outlook of self-growth.





Contact Information

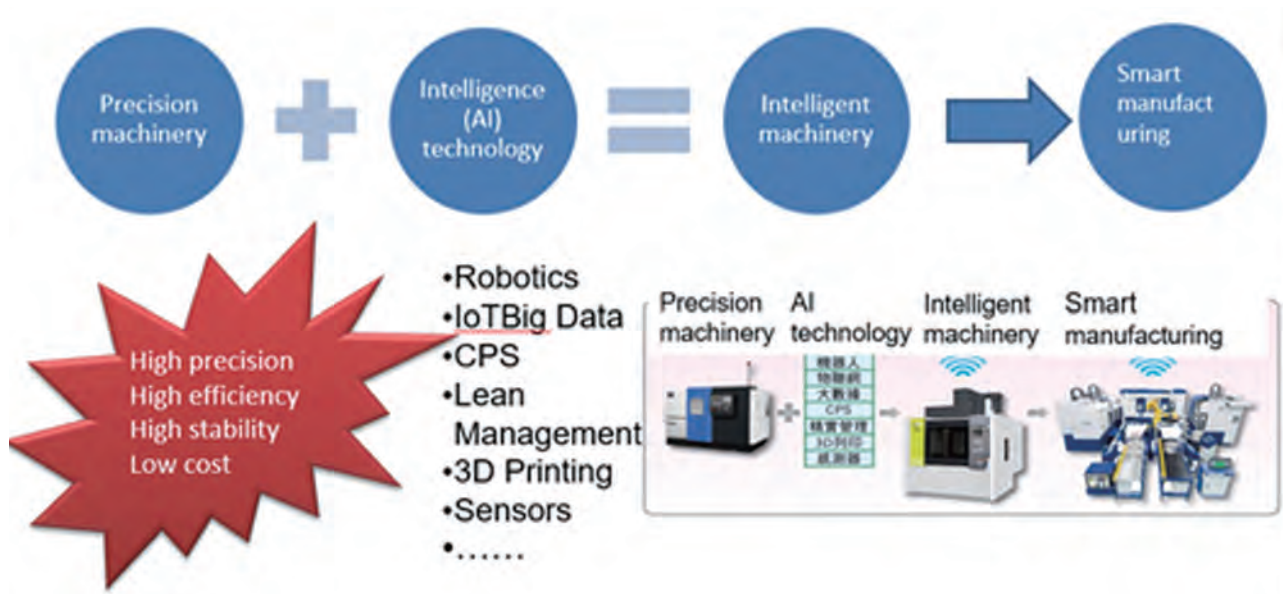
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Department of Mechanical Engineering



find out more at www.me.uch.edu.tw



Target

This department aims to cultivate professional and technical talents with intelligent machinery and manufacturing, precision manufacturing and electromechanical integration. In terms of practical ability, through practical and flexible course planning, students can quickly enter the workplace and provide high-quality manpower for enterprises; the learning process of learning by doing and learning by doing cultivates students' basic and engineering knowledge, and strengthens research and development capabilities. And help students establish the concept of lifelong learning to adapt to a society with rapid technological changes.

Course

The curriculum planning of this department is oriented towards practice and certification to reduce the gap between learning and application. The

courses are divided into two aspects: "Intelligent Machinery and Manufacturing" and "Precision Manufacturing and Electromechanical Integration". In terms of curriculum planning, the department cooperates with the development of local industries and focuses on practical teaching.

1. Intelligent machinery and manufacturing: hydraulic servo, optical-mechanical design, robotics, micro-electromechanical systems, system and signal analysis, electromechanical experiments, CNC machine tools, system dynamic analysis, pneumatic and hydraulic control practice, visual recognition.
2. Precision manufacturing and electromechanical integration: mechanical design, mold manufacturing, micro-machining, electrochemical processing, precision injection molding, reverse engineering integration, tool design, mold development and design, mold flow analysis practice, precision measurement and practice, PLC programming control, servo control, etc.



▲ Wire-cutting machine with smart manufacture



▲ Practical Course

Teachers & Equipment

The faculty of this department is strong, including 7 professors, 3 associate professors, 2 assistant professors, and 1 lecturer. In addition to having professional qualities and rich practical experience, the teachers in this department also have very fruitful research and achievements.

The department currently has more than 20 laboratories. In recent years, the average annual Investing more than tens of millions of dollars, we have successively established companies such as "Super Precision" "Precision machining", "Precision injection molding", "Unmanned vehicle Mechanical and Electrical Laboratory", "Measurement and Sensing Control", "Computing "Computational Mechanics and Mechanism Design" and "Micro-Nano Surface Analysis" and other advanced research laboratories, equipped with CNC lathes, milling machines, 5-axis simulators, laser cutting machines, scanning electron microscopes, multi-function scanning probe microscopes, laser Doppler interferometers, and infrared thermal image analysis Advanced research equipment such as instrument, fully automatic injection molding machine, and nanohardness measurement system, combined with

the original laboratory, will provide students with a more diverse learning environment.

Our department of Mechanical Engineering aims to cultivate professional technical talents equipped with intelligent machinery and manufacturing, precision manufacturing, and electromechanical integration. We enable students to quickly enter the workforce, providing companies with high-quality manpower. Our learning process emphasizes 'learning by doing' and 'doing by learning,' nurturing students' foundational and engineering knowledge, fostering research and development capabilities, and assisting them in developing a lifelong learning mindset to adapt to the rapidly evolving technological society. With the excellent educational environment and facilities, the department cultivates students via the following four aspects.

1. Making you as an excellent mechanical engineer through perfect the curriculum plan and quality of faculty members.
2. Making you as the competitive top designer through the state-of-the-art software.
3. Making you as the competitive specialist in relevant fields through the advancing facilities.
4. Making you as the smooth on the route of pursuing jobs through excellent relations with industrial fields.

Department of Civil Engineering



find out more at www.ce.uch.edu.tw



As one of the oldest programs at UCH, the Department of Civil Engineering has cultivated many brilliant technical professionals in the civil engineering industry and made significant contributions to the local community. The Department provides comprehensive programs to prepare students with the skills, knowledge and hands-on experience they need to carry out planning, documenting, and supervising tasks in various civil engineering projects. In addition to covering traditional specialties in construction technology, the curriculum features nondestructive testing (NDT) and building information modeling (BIM) to reflect current demands of the industry.

Our Visions

The graduates of the programs will be equipped with knowledge and technical skills based on the latest civil engineering technology to meet the challenges of sustainable development.

DEGREES

The Department offers a four-year undergraduate program leading to a bachelor's degree in Civil Engineering as well as a graduate program to a master's degree in Geomatics and Disaster Prevention, which is a joint program with the Department of Applied Geomatics.

Research Activities

The Department makes target research plans supported by the National Science Council and industries, such as Chinese Petroleum Corporation. The topics being studied include NDT, environmental engineering, hydraulic engineering, and GPS application. In 2005, high resolution 3D scanners for precision deformation surveillance was imported and equipped by the Department for studies in spatial analysis. Furthermore, a virtual reference station (VRS) of eGPS Operation Center for navigation and mapping applications in the northern Taiwan area is also under construction for both community service and academic study.

To support the entire program, there are nine faculty members with a wide range of teaching and research interests in the areas of construction, structural, and environmental engineering. The Department has also been actively devoted to fostering long-term, strategic relationships with companies, governmental organizations, and other partners to engage in industrial-academic cooperation.

Facilities

The Civil Engineering Laboratories contain equipment and facilities to support research and teaching in construction materials, structural engineering, soil mechanics, computer applications, and surveying.

1. Soil Mechanics Laboratory:

The Soil Mechanics Laboratory contains equipment for testing soils in shear, consolidation, and compaction and for other physical and chemical tests.

2. Computer Laboratory:

The computer laboratory houses 55 personal computers loaded with a wide array of professional civil engineering software.

3. Civil Engineering Material Laboratory:

The laboratory provides modern testing facilities for conducting tensile test, compressive strength test of concrete, and sieve analysis of aggregates, and measuring physical properties of cement and other common materials.

4. Center for Surveying and Mapping:

Major facilities include optical theodolites, total station instruments, GIS software (ArcView 3.0x, MapInfo V4.5), and Beacon GPS with Pathfinder V2.0 for digital surveying.



Department of Applied Geomatics

find out more at www.ag.uch.edu.tw



Introduction

Geomatics is the discipline of surveying, processing, storing, and delivering geographic and/or geospatial information. As a professional discipline, geomaticians can provide services that meet the needs of society and industry. Geomatics has been applied in many fields such as reducing disaster, exploiting resources, monitoring environment, developing city, and so on. Accordingly, the students of the Department of Applied Geomatics will be indispensable to industries, after a full training

of integrated skills of geographic/geospatial information. In the Department, the core courses, including 3S Technologies (Global Navigation Satellite System (GNSS), Remote Sensing (RS), and Geographic Information System (GIS)), network communication, and mobile computing, provide students with the knowledge of Geomatics. In addition to the knowledge, students will have the capabilities of independent thought, hard work, and full responsibility.

Faculty

The Department faculty consists of 2 full professors, 3 associate professors and 2 assistant professors, all with Ph.D. degree. The topics of research/development includes application of surveying, application of UAV, application of 3-dimensional measuring techniques, digital application of geomatics, etc.

Facilities

The Department owns a variety of experiment/research instruments, such as the GNSS receivers, GNSS data processing software, remote sensing image processing software, web GIS, mobile GIS

SDK, satellite navigation SDK, image sensor, GPS tracker, 3D terrestrial laser scanner, spatial analyzing tool, data base system, programming software, multimedia producing tool, computer graphing software, topographic editing tool, electronic map, PC server, RFID and a UAV fleet.



Department of Vehicle Engineering

find out more at www.ve.uch.edu.tw



Goal

The goal of our department is to train professional and technical personnel with the capabilities of vehicle R&D, design, manufacturing and testing, vehicle maintenance and service management. In terms of practical ability, through practical and flexible curriculum planning and the establishment of vehicle-related technical verification fields, students' majors and work attitudes can be connected with the workplace, providing enterprises with high-quality professional technical manpower; in terms of theoretical foundations, students are trained basic mathematical science and engineering knowledge, deep research and design capabilities, and assist students to establish an international perspective and lifelong learning concepts to adapt to the rapidly changing society of science and technology.

Courses

The courses of our department are divided into three main axes: "Smart Maintenance", "Advanced Control" and "Green Technology". The curriculum planning is based on the current vehicle industry and combined with the development of the local automotive industry chain, teaching is practice-oriented, and adopts problem-solving and cooperative learning strategies. The courses are divided into four areas: "Advanced Vehicle Technology", "Green Electric Vehicles", "Smart Vehicles" and "Mechanical Design Practices". The course plan is as follows:

1. Advanced vehicle technology: Automotive Mechanic Certification, On Board Diagnostic System Practice, Transmission Theories and Practices, Practice of Vehicle Performance

Inspection, Automotive English, Summer off-campus Practice (1) & (2), etc.

2. Green Electric Vehicles: Technology of vehicles for new energies, Thermodynamics and Practical Applications, Mechanical and Electrical Practice, Battery Recharge Technique, Hybrid Vehicle Practice, Design of Eco-friendly Cars, License Counseling for Electric Vehicle Electromechanical Integration Engineers, etc.
3. Smart Vehicles: On Board Diagnostic System Practice, Smart factory and Smart Manufacturing, Remote Diagnostic System of Vehicle, On-Board Diagnostics Principles, Vehicle Telematics System, Intelligent Vehicle Driver Assistance Systems, Summer off-campus Practice (1) & (2), etc.
4. Mechanical Design Practices: Engineering Graphics, Mechanical Drawing, Integrated Application of Science and Technology, Computer-Aided Drawing, Computer-Aided 3D Drawing, Machinery Manufacturing and Processing, CNC Machine Tool Practice, Computer-Aided Vehicle Element Design, etc.



Academic Faculty

Our teaching team includes 3 associate professors, 5 assistant professors and 2 lecturers, and 5 of them have Ph.D. degrees. Our teachers have professional qualities together with rich practical experience, and some of them have certificates of Level A technician for automotive mechanic. The R & D results of our department are also very fruitful. The performance of research and industry projects are leading among departments of vehicle engineering of technical colleges in our country.

Laboratory Facilities

According to the teaching goals, the department currently has 10 laboratories and internship factories. In recent years, more than 20 million NTD has been invested in the establishment of such as the "Hybrid Vehicle Laboratory", "Examination Field of Level B Technician for Automotive Mechanic", "Examination Field of Level B Technician for motorcycle repairing", "Electric Vehicle Laboratory", "Smart Electric Two-wheeled Vehicle Laboratory", "Electronic Sensor Components and Control Laboratory", "Fuel Cell Laboratory", "Heavy Locomotive Maintenance Factory", "Engine Overhaul and Disassembly Factory"

and "Computer-controlled Common Rail Diesel Engine Factory" and other laboratories and practice fields. Advanced equipment includes computer diagnostic equipment, electric vehicle motor performance test bench, automobile brake test bench, hybrid vehicle teaching platform, computer side slip tester, smart electric scooter, Harley heavy-duty locomotive, Chevrolet Camaro "Transformers", electric bicycles and other advanced research equipment, which provide students a diverse learning environment.

Graduate Development

Graduates of our department can be engaged in vehicle research and development and design, electric vehicle design and manufacturing, electric vehicle electromechanical integration technicians, CAD/CAM/CAE, vehicle manufacturing, heavy duty commercial vehicles, supercar and electric vehicle maintenance and marketing, and automatic engineering, etc. related professions. Well-known companies in the industry (such as China Motor., Kuozui Motor, Sanyang Motor, Yamaha Motor and Hyundai Motor., etc.) have graduates from our department for employment services at all levels.

College of Business and Management

- Department of Industrial Management
- Department of Business Administration
- Department of Marketing and Distribution Management
- Department of Information Management
- Department of Finance

The College of Business and Management is a top provider of high quality, affordable business education, and is one of the top comprehensive private business schools in Taiwan.

The College provides leadership in the creation and transmission of knowledge in the following ways:

1. One of the best business colleges in Taiwan, offering diversified learning programs to students.
2. Creates the business leaders and scholars of tomorrow through high quality business programs.
3. Advances knowledge through innovative theoretical and applied research.
4. Links with the business and financial community through active professional development programs and an array of research and outreach centers.
5. Actively pursues new opportunities to meet industry needs.
6. Has state-of-the-art facilities, featuring the latest managerial technology of global operations, reflective of the College's forward-looking vision.

The College of Business and Management includes five academic departments and four graduate MBA programs. The five academic departments are Business Administration, Information Management, Industrial Management, Marketing and Distribution Management, and Finance.

The College of Business and Management encourages students to forge intellectual and social ties with fellow students, faculty, and alumni. Our well-known faculty share their professional expertise as consultants to businesses and government agencies. Our state-of-the-art facilities, featuring the latest managerial technology of global operations, reflect our forward looking vision.



Contact Information

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www.ma.uch.edu.tw



Department of Industrial Management

find out more at www.ie.uch.edu.tw



Educational Goals

1. To provide a comprehensive education in both professional knowledge and technology capabilities of Industrial Management.
2. To train students to effectively use appropriate tools in business according to the development of information technology, so that their training can keep pace with social development.
3. To have students integrate theory and practice in business to become managerial personnel at entry and medium levels of industry.

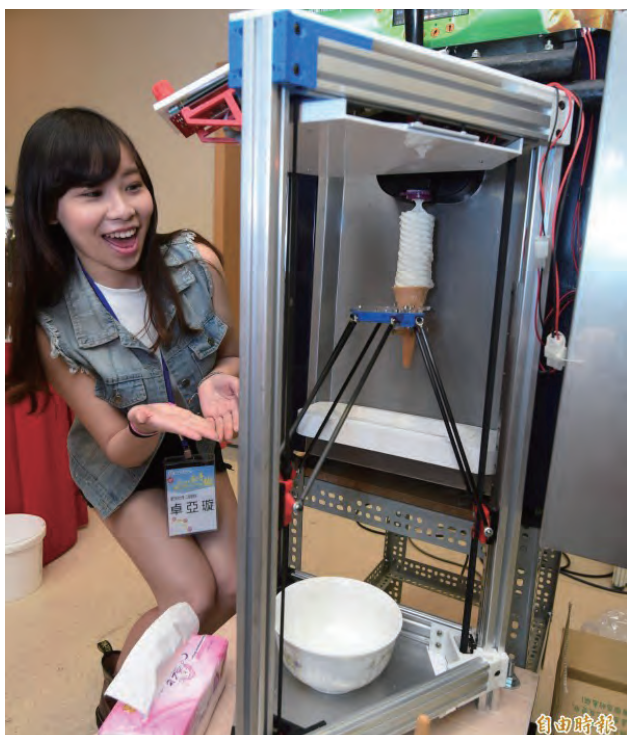
Faculty

The Department has been aggressively recruiting faculty with doctoral degrees from distinguished universities in both Taiwan and from overseas to enhance teaching quality. At present, the Department

has a total of 11 faculty members, including 5 associate professors, 3 assistant professors, and 3 lecturers. All assistant professors (and higher) hold doctoral degrees, and all of the lecturers are enrolled in Ph.D. programs. At present, 84% of the faculty members are of assistant professors or higher standing.

Facilities

In order to research and develop the technologies of Industry 4.0 and IoT, a new intelligent management laboratory and related equipment have been newly established to provide students with a sound practical learning site. We also have other laboratories in different fields were established, such as Production Scheduling Lab, Motion and Time Study Lab, Quality Management Lab, Retail Service Lab, Enterprise Resource Planning Lab, Enterprise Application Integration (EAI) Lab, Human Factors



and Ergonomics Lab, and Data Pattern Recognition and Analysis Lab. The laboratories are also used for communication with industry. Students are offered opportunities of practical internships and training through a partnership between industry and schools so that the goal of “applying what have learned” could be achieved.

Curriculum

Department has categorized its research and curriculum into 6 major fields based on the local industry characteristics, business development needs, and the specialty of instructors. Each academic field is accompanied with a course program. The course programs are set up in order to help students create specialty knowledge in the associated academic fields.

Professional Academic Fields	Courses
Industry 4.0	Automation practice, IoT practice
Operations Management	Operations management, Lean Production, Scheduling
Quality Management	Statistics, Quality management, Six Sigma management, International Standard Accreditation.
E-business	E-commerce, Enterprise Resource Planning.
Occupational Safety & Human Factors	Ergonomics, Human Factor Design
Service Management	Retail Management, Logistics Management, Customer Relationship Management, Service Quality Management.



Department of Business Administration

find out more at www.ba.uch.edu.tw



The Department of Business Administration was established in 2000. Its teaching goals are to fulfill the need of the business development of the society, of the medium and long-term development of the University, and of cultivating different levels of professional talents in business management.

Based upon the Department, the Graduate Institute of Business and Management was founded in 2004 and the Program of Executives Master of Business Administration in 2008. Additionally, a Fashion Management Program was created in 2016, providing professional knowledge in cross domain innovative design, multimedia marketing, fashion event planning, and micro-firm venture management.

Our Core Values

Build the right attitudes towards life in learning professional knowledge.

Visions

Cultivate a solid foundation of general management and fashion management talents.

Faculty

This Department has 20 full time professional teachers, consisting of 2 professors, 6 associate professors, 11 assistant professors, and 1 lecturer. All

the teachers, excepting the 1 lecture, earned Ph.D. degrees either from home or abroad; many of them have strong business careers or hold professional certificates.

Curricula Planning

Using the consistent curriculum planning, the Department aims to fulfill the purpose of cultivating business and management leaders who possess innovative strategic thinking, with equal emphasis on theory and practice. The Department has designed six professional modules: Information Technology and Operation Management Module; Marketing Management Module; Organizational Human Resource Management Module; Innovation, Research, and Development Module; Financial Management Module, and Fashion Management. Moreover, The Department also has created three credit programs: Customer Relationship Management, Fashion Management, and New Venture Management of Micro-firms.

The Characteristics of Teaching

1. International views: Planning international language and management practice professional programs.
2. Combining case studies with practice: fully utilizing case study models, simulating operating systems of a company, and operating decision integration platform and other resources, to develop the characteristics of industries in Jung Li and its surrounding area.
3. Cultivating professional skills to elevate student's ability in integration management.
4. Emphasizing education in nurturing positive personalities: implementing business ethics,

planning professional service curriculums, and general service learning activities; cultivating positive and correct attitudes in students.

5. Providing professional facilities (teaching resources and research laboratories)

To co-ordinate the development of curriculum and reinforce the learning effect, the Department currently has exclusive use of six professional classrooms, while it shares more than ten professional classrooms with other departments. There is more than enough room for the students in this Department to use mechanical tools and facilities.



Department of Marketing and Distribution Management

find out more at www.mdm.uch.edu.tw



Introduction

The Department, established in 2001, offers two undergraduate programs: a 4-year regular program and a 4-year evening program. Our educational goal is to provide students with theory learning and practical skills training in four areas: Marketing Planning, Retailing, Logistics, and Sports Marketing. Students are trained to respect their work, be innovative, and apply their knowledge and skills in the relevant industry.

Faculty

There are 18 full-time faculty members in the Department, including 2 professors, 3 associate professors, 12 assistant professors, and 1 lecturers.

Above 94% of the Department faculty possesses Ph.D. degrees.

Facilities

1. Marketing Management Lab

The laboratory is designed as a professional studio, where students can develop their product ideas, make photos and advertising videos, and produce a practical marketing proposal. The lab is equipped with the most advanced video cameras, digital SLR cameras, flexible lighting systems, audio recording equipment, live streaming equipment, and multimedia software, providing students with resources for multimedia creation and production.

2. Intelligent Logistics Lab

This laboratory is equipped with 67 personal computers, along with various marketing and

distribution software, providing students with the tools to enhance their information ability and investigate applications in smart warehousing, intelligent transportation, and smart stores.

3.Creativity & Innovation Lab

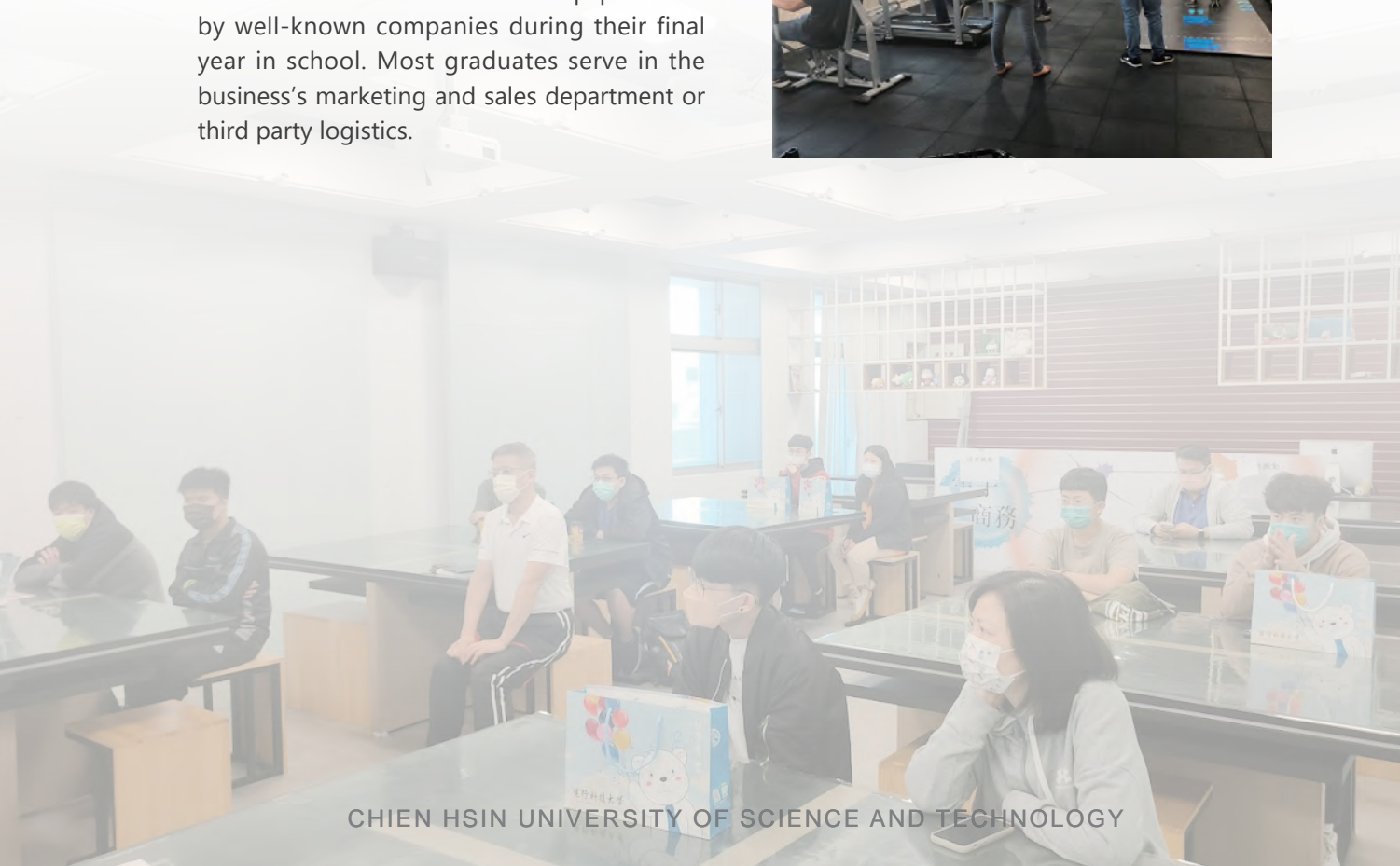
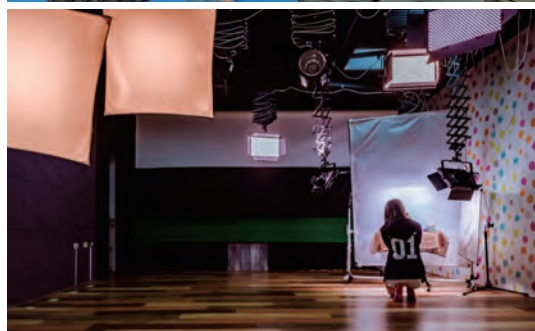
The Creativity & Innovation Lab is designed to stimulate students' innovative and creative ideas and provide multi-functional usages such as interactive learning, group learning, demonstrations, and seminars.

4.i-health Sports Marketing Lab:

This laboratory is equipped with (1) digital fitness equipment, including a physiological information recording system, body composition analyzers, motion evaluation systems, treadmills, rowing machines, etc. (2) video production and live streaming equipment.

Internship and Future Career

Students can have an internship provided by well-known companies during their final year in school. Most graduates serve in the business's marketing and sales department or third party logistics.



Department of Information Management

find out more at www.im.uch.edu.tw



Core Value

Our department is dedicated to nurturing students with an international perspective, as well as fostering independent thinking, innovation, and communication skills. The core value is to establish students' professional competence in information management and multimedia applications. Establishing students' practical execution capabilities in information management and multimedia applications. Nurturing students' abilities in creative thinking and integrated application of information and multimedia. Enhancing students' abilities for continuous learning and self-planning.

Departmental Features

The development areas of our department include enterprise digitization, information application, and multimedia application. The curriculum planning of our department includes the following interdisciplinary credit programs:

1. Interdisciplinary Credit Program for Enterprise Digitization Personnel : Guiding students to understand the fundamental concepts of enterprise digitization and e-commerce-related knowledge and skills.



2. Interdisciplinary Credit Program for Information Application Personnel : It aims to nurture students with the ability to plan, design, and develop various information systems, as well as diverse information service skills.

The department established the Master's program in Information Management in 2008, with a focus on cultivating professionals in digital learning planning, information security management, and enterprise intelligence development as its teaching and research specialties.

Faculty

Currently, there are a total of 16 full-time faculty

members, including 14 with doctoral degrees (including associate professors and assistant professors) and 1 with a master's degree (lecturer). The proportion of faculty with a doctoral degree is approximately 90%.

Professional Labs

Our department currently has several specialized laboratories equipped to provide an environment for nurturing information management professionals.

1. Information Security Management Lab.
2. Enterprise Digitization Lab.
3. Information Technology Integration Lab.
4. Multimedia Application Lab.
5. Server Room

Future Career

Graduates from our department can take on roles as Information Security Engineers, MIS Engineer, Web Designer, System Maintenance Engineer, Database Administrator, ERP Project Manager, E-commerce Platform Project Manager, E-commerce Product Manager, E-commerce Operations Manager, E-commerce Marketing Planner, Information Management Consultant, Project Manager and System Analyst.



Department of Finance

find out more at www.fd.uch.edu.tw



The Department of Finance was established in 2001. It offers two undergraduate programs: a 4-year regular program and a 4-year evening program. Approximately 400 students take the regular program in the Department and 150 students study in the evening program. The graduate program was established in 2008.

Educational Goals

The goal of the Department of Finance is to provide students with professional, and practical training in all aspects of the financial service industry. The Department pursues the following objectives:

1. Developing student skills in the fields of securities analysis, fund management, underwriting personnel, and derivatives analysis, thereby making them competent in all aspects of the financial service industry
2. Teaching students correct concepts and principles of investment and professional financial analysis software, thereby training them to properly manage portfolios
3. Helping students acquire the financial licenses offered by professional financial associations, thereby enhancing their job placements

Faculty

We are one of the largest departments within our discipline in the area of Taoyuan, Taiwan, comprising 13 full-time faculty members and one administrative staff. The Department is most distinctive in the quality and specialization of our academic faculty. All faculty members in our department hold

Ph.D. degrees, mostly in the fields of Finance, Management, and Economics. In recent years, we have built a strong reputation as one of the most vigorous and fastest-growing departments in UCH.

Facilities

In response to the fast-changing situation in the financial market, the Department has established a well-equipped financial laboratory in which students can acquire competence in decision-making. Our Digital Financial Center meets the need of financial markets in the cyber age. Based on the platform of e-learning, the lab encompasses 5 systems, including Virtual Exchange, Trader Quotation and Analysis System, Futures Hedging System, Fundamental Analysis System, and Stock Screening System. These systems are the foundations used in the following financial modules: Personal Investment Module, Corporate Investment Module, Derivatives Module, International Finance Module, and Derivatives Design Module. In addition, for the purpose of teaching and



research, the lab is equipped with various financial databases, national and international, which include CMoney, S&P's COMPUSTAT database and the financial database offered by Infotimes Inc. This computer lab is used not only for classes, but also to enable faculty and students to carry out their research projects and hold competitions in financial investment.



College of Human Ecology and Design

- Department of International Business
- Department of Interior Design and Management
- Department of Hospitality Management
- Department of Digital Multimedia Design
- Department of Applied Foreign Languages

The College of Human Ecology and Design at Chien Hsin University of Science and Technology was founded in 2016. This college consists of five departments and one graduate institute: Department and Institute of International Business, Department of Applied Foreign Languages, Department of Interior Design and Management, Department of Hospitality Management, and Department of Digital Multimedia Design. Each department offers four-year B.A. programs (regular and evening school), and a variety of professional extension education courses.

Through teaching resources integration among the departments of our college, we will provide students with the most practical and advantageous education. We aim to build a College of Human Ecology and Design that not only has character, excellent pedagogical quality, and abundant research potential, but can also consolidate resources in order to provide a variety of services for the social good.





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Department of International Business

find out more at www.ib.uch.edu.tw



The University continuously provides sufficient resources for the Department to expand specialized classrooms, computer hardware and software, and spacious research spaces. Till now, the Department has become the focus of the University. To meet the demands of globalized enterprises and the development of new specialization, the Department was separated into two specialized divisions since 2016, named the Division of Aviation and Marketing and the Division of Tourism and Leisure.

The goal of the Department is to cultivate students to be specialized in international business from both theoretical and pragmatic approaches. Therefore,

major developments of this Department focus on the following areas in our curriculum:

1.Division of Aviation and Marketing:

To educate and train human resources in airlines, international airport, catering service and airport services, among the professional of passengers, cargo, logistics and marketing planning.

2.Division of Tourism and Leisure:

Including three professional programs: Tourism Business Management Program, Travel Business Management Program, and Conference and Exhibition Management Program.

Hands-on Practices in Business Software

Different laboratory and centers are established to facilitate teaching and research: Tourism Leisure & Marketing Lab (C402); International Business Administration Classroom (C303); Aviation Service Lab (C404); Academic-industry Project Seminar Office (C405A); Multi-function Professional Classroom (C405B); Flight Service Simulation Lab (C403); Graduate Research Office (C601B).

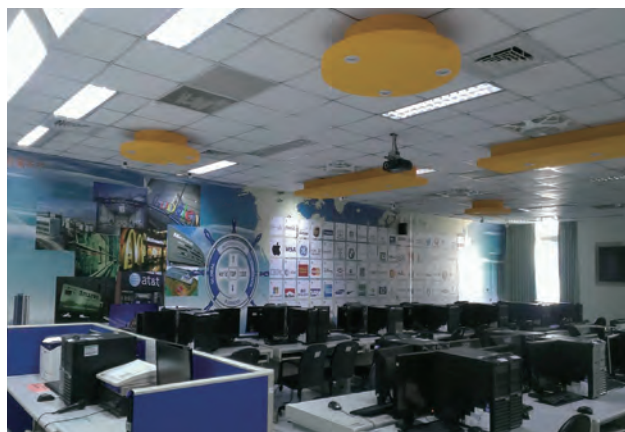
These labs are equipped with the latest facilities, as well as specialized business software (such as customs automation, trade information management and customer relationship management), books and databases.

Courses for Certificates/Licenses

To enhance students' capabilities when they enter the job market, this Department has designed diverse courses to assist students in obtaining business related certificates. The courses are related to foreign languages (TOEIC, Japanese, Korean, and etc.), international logistics, computer application, marketing, tour leader, tour guide, , Amadeus GDS Basic Reservation.

Practical Training

The purpose of practical training is to provide students with an opportunity to apply their knowledge to practical work experience. This department is cooperating with many local enterprises for senior-year students to acquire valuable experience. These enterprises are engaging in the following areas: airline, travel agents, retailing, logistics, restaurants, insurance, and food processing.



Department of Interior Design and Management

find out more at www.pm.uch.edu.tw



Introduction

The Department of Interior Design and Management was formally established in 2020, the education purpose is positioned to "cultivating professionals in interior design and project management" and strengthen link with Taoyuan interior design related industries. Our department is in response to improve the quality of the living environment and the manpower needs.

Features

The school has invested tens of millions to create the learning environment that combines spatial design and woodwork courses. We emphasize on design and practical curriculum design, that integrates the project-oriented learning mode of local creation, counsel professional skills certification, and provides semester's design internship courses. The pragmatic and diverse courses and learning opportunities enable graduate students to have practical skills in the workplace.

Our students have 6 core abilities

- 1 Basic knowledge/ The basis for understanding, integrating and integrating interior design practices.
- 2 Professional knowledge/ Independent thinking, analysis and discussion of professional knowledge of specific cases of interior design.
- 3 Skills innovation/ Skills combined with computer technology to present design works of space creative style.
- 4 Practical ability/Cultivate the ability of practical operation of interior design through teamwork, communication and coordination in project-based learning.
- 5 Ethical attitude/ Humanistic literacy and sound character, and cultivate the social ethics of the interior design profession.
- 6 Forward-looking / Enhance the vision and trend of students' forward-looking development and exchanges with the industry.

Employment

Interior designers, exhibition planners, interior lighting designers, building drawing engineers, computer-aided drawing designers, spatial multimedia designers, online game scene designers, etc.

Advanced studies

Domestic space, landscape, interior, multimedia, art ...etc. research institutes, or foreign design professional research institutes.



▲ Fig. profession classroom



▲ Fig. graduation design practice



▲ Fig. the student exhibition practice

Department of Hospitality Management

find out more at www.hm.uch.edu.tw



Mission

The department's vision is the education and development of food, beverage, hotel management and tourism skills, with emphasis on graduating students with international level professionalism, skills and integrity.

The educational environment strives to teach a combination of theory and practice of hospitality management. In addition, we are in pursuit of strengthening our students' social and foreign language skills, as well as operational capability of information technology related to hospitality management.

The department works closely with government institutions at all levels in order to expand tourism and improve the quality of hospitality management, for both local and international tourists.



Program

The first two years of the program combine practical and theoretical courses on food and beverage skills, focusing on the enhancement of the students' skills in these areas.

In the third year, the program provides professional lectures on the theory and practice of hospitality management, as well as on current trends in the hospitality industry. Having experienced the real business world enables the students to understand both the workplace and future business developments. It also strengthens their sense of workplace ethics and ability to withstand pressure in their future careers.

From 2nd semester of the 3rd year to the 1st semester of the 4th year, students enter the hospitality industries to engage in internships. Having undergone twelve months of practical on-the-job training, this experience merges with their academic studies in order to strengthen the students' professional ability, thereby narrowing the distance between the educational environment and a real-world career.



The department curriculum is equally divided into these two fundamental areas.

Food and Beverage Management

This part of the curriculum includes courses on food and beverage safety, menu planning, procurement and preparation. The related classes improve the students' practical and theoretical skills in areas such as Asian and Western cuisine, as well as beverage service and bartending skills. The curriculum also encourages students to develop and use their own innovative skills in culinary arts by encouraging them to put their personal vision of food and beverage into practice.

Hotel Operations and Management

This section includes practical and theoretical courses on hotel operations and management. Classes ensure that students will have a basic understanding of front office, back office and room management skills, as well as knowledge of the theory of hotel operations. The relevant courses will provide students with the basic general skills required in hotel management.

Department of Digital Multimedia Design

find out more at www.dmd.uch.edu.tw



The Department of Digital Multimedia Design (DMD) is officially formed at Aug. 2015 to train talent for two professional areas – "digital music and sound effect creation" and "digital film creation". Programs designed to emphasize humanism quality, corporate culture, and industrial requirements, for combination of theories and practices is an educational goal at the DMD. The 12 full-time instructors include 4 Associate Professors, 6 Assistant Professors and 2 Lectures. Moreover, the DMD engages professional teachers from multimedia industries related areas cooperating with instructors to assist development of students.

Equipments

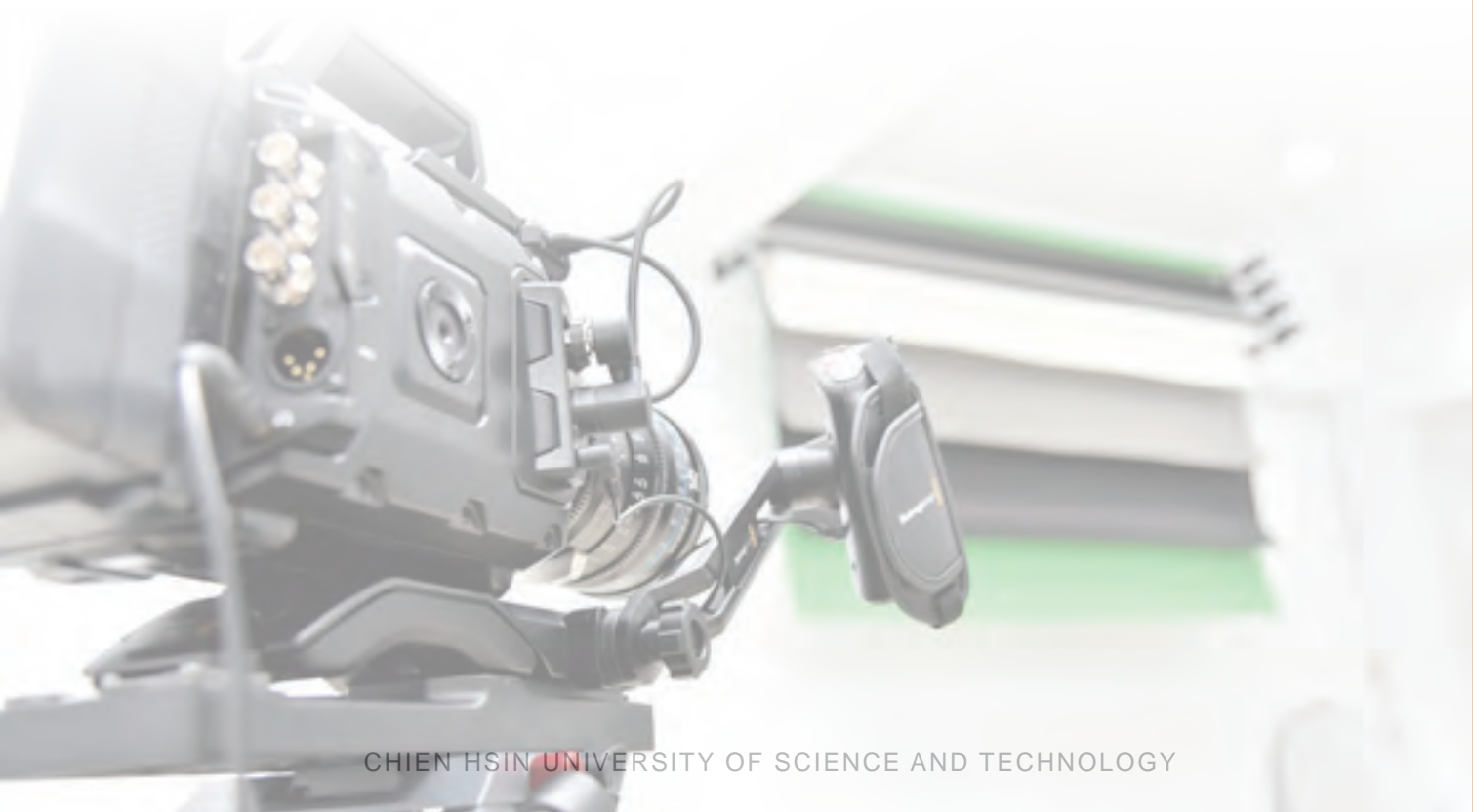
Digital video/audio and recording engineering lab with PC 50 units and Digital piano 4 units; Computer lab with high level image precessing PC 70 units; Digital Studio with EOS- 700D DLSR cameras, 4K video camera, 1500W/1000W/600W lighting set. Softwares include Adobe Creative Cloud (Premiere Pro, After Effects, Photoshop, Illustrator, Audition, Speed Grade, Prelude, Encore, Flash Professional, Media Encoder, Bridge), Music Maker, AMCA MixCraft, and 3ds Maya.

Features of the Program

The B.S. in digital multimedia design crosses between digital music creation, audio/video production, and interactive multimedia. You will become versed in contemporary issues in animation and interactive media, critical thinking and creative design solutions. The DMD graduate will obtain working experiences in collaborative teams on media projects, including serious and applied games, live digital performances, animation and virtual worlds. The DMD will allow a choice from two potential areas of concentration for students:

Digital film creation – Focused on technical art and digital films, including animation. Appropriate for those with strong interest in film making and special effect producing. Moreover, students will learn traditional 2D animation and digital animation skills, using digital media to effectively communicate and craft new forms of stories.

Digital music and sound effect creation – Focused on operate sound and mixing boards, computers and other equipment, record, mix and reproduce sound effects, music and voices, synchronize voices and sounds for movies or TV shows, edit live recordings on computers. Set up, operate, maintain and repair broadcast gear, monitor and adjust equipment to ensure visual quality, troubleshoot equipment, and edit video recordings on computers.



Department of Applied Foreign Languages

find out more at www.afl.uch.edu.tw



The Department of Applied Foreign Languages was established in 2002 in response to the globalizing international society's pressing need for foreign language specialists. The Department has recruited students interested in foreign languages, providing them with English, Japanese and Korean training grounded in Practical Application, Professionalism, and Humanism. Its curriculum cultivates well-rounded foreign language specialists with bi-lingual or tri-lingual proficiency.

Pedagogical Development

The Department's planned pedagogical objectives are as follows:

1. Communicate cross-culturally in English, Japanese and Korean
2. Apply English, Japanese and Korean to a profession or career
3. Teamwork
4. Critical thinking
5. Have a globalized vision

Curriculum Characteristics

1. The Department curriculum is based on a multiple foreign language structure — English, Japanese and Korean. The first and second year courses aim to enhance students' basic communication skills in listening comprehension, reading comprehension, speaking and writing. The third- and fourth-year courses are designed to consolidate students' application of their language skills in different professions, for example, tourism, business, hospitality industry, and TESOL for Young Learners.

2. The Department offers courses in English, Japanese and Korean. The curriculum features 5 modules: English for Business and Tourism Industry, Teaching English to Young Children, English for Aviation and Hospitality, Workplace Japanese, Workplace Korean. These programs enhance students' professional skills in related fields.

Faculty and Research

Currently, the Department has 12 full-time faculty members majoring in English, Japanese, Korean or Russian language, all specializing in language, translating, or literature teaching and studies.

Research center

INTRODUCTION

- Digital Earth and Disaster Reduction Research Center
- Center for Spatial Modeling Application Research
- Green Energy Research Center



Digital Earth and Disaster Reduction Research Center

find out more at https://aps2.uch.edu.tw/acade_search/dedr/



Taiwan is located in the circum-Pacific seismic belt, and is located in subtropical regions, suffered the invasion of earthquakes, typhoons, heavy rains and landslides, and for land use, socio-economic and constitute a significant impact on life and property safety. Although the technology is still unable to prevent similar acts of God, but from the viewpoint of disaster prevention and relief, as long beforehand to establish adequate and detailed spatial and geographic information, usually can develop practical disaster prevention technology, ready to grasp accurate and immediate changes sign, and to establish a sound and rapid notification system, you can achieve the purpose of disaster prevention, disaster relief and mitigation. The 1999 Chi-Chi earthquake that completely exposed space information is missing and inadequate disaster prevention system. In view of this, the school was established in August 2002 with the Disaster Prevention Spatial Information Research Center, a research center for the standing to integrate various expertise personnel engaged in anti-space environment information, application and research

on mitigation practices, and support for teaching and research and services to build the space environment information repository, community service, in order to enhance the university's reputation.

The center was founded ninety authorized to spend a school year, a permanent center for the study of. Center is located one director, served by the school, General Education Center Assistant Professor Cheng Shih-Nan, responsible for planning blueprint for the development and comprehensive business center of the management center, set up by the Executive Secretary and one assist in academic research assistant manager and executive director of business-related matters. Since all members are full-time teachers study the relevant departments of the composition, in accordance with the relevant regulations preliminary draw for the following four areas of research group:

1. Spatial Information Group: The main content of spatial measurement, geographic information system application software development, space



and other environmental information repositories established.

2. Disaster Prevention Research Group: The main content of the earthquake disaster, geological hazards, groundwater studies, pollution prevention projects
3. Education Promotion Group: The main tasks include the establishment of a basic library of disaster prevention, maintenance and updating, anti-disaster public promotion of compiling teaching materials as well as anti-disaster education.
4. Engineering and Environmental Geophysics Laboratory: The main task committed to the application of geophysical exploration methods in a variety of disaster prevention technology, environmental pollution survey, civil non-destructive testing, reservoir silt, fault geology, groundwater and reservoir water leakage survey, archaeological and spa potential research surveys.

Due to the early days of limited manpower, the Centre to implement the research team to implement the principle of division of labor, but to make all work smoothly promote and strengthen the integration of efficiency, the study groups are located above the head of a man, part-time teachers by the school, responsible for coordinating the work of the group promoting the study of each, and may, depending on the actual work needs to hire professionals any researchers, technicians and assistants.

For the development of the center of the stage can achieve a good interaction between academic and research institutions at home and abroad, and the direction of the center for research and development that it can have a more forward-looking recommendations to be considered by the school to hire domestic eminent experts in related fields five to seven -member advisory group of the center, the center will be held regularly or irregularly Advisory Committee meeting.

The primary task of the next three to five years, according to a study in the different disaster prevention needs, planning and there is an urgent need to build a number of geographic information systems and related spatial information database environment, collect and integrate data relevant domestic academic research institutions and research and development close and easy to use interface and the results show the use of information systems. Enhanced research team is also important tasks such as recruiting scholars in groundwater or air pollution and other areas, and actively join the current NSC disaster prevention information center of the informal painting, through the Internet architecture, shared with the existing regional research teams information exchange and integration to achieve the effect.

The center will continue to fight for Science and Technology and the Ministry of Transportation Research Project, Ministry of Economic Affairs and other relevant ministries, and continued cooperation with relevant public and private institutions, for the project plan, the two go hand in hand by the academic and practical aspects, in order to build a complete space and Disaster information Center database and the primary objective, and the selected earthquake disaster prevention topics such as science and technology focused on the development and characteristics of the project, so that the school can become an important base for future space information and disaster prevention research.

Center for Spatial Modeling Application Research

find out more at <https://sites.google.com/gapps.uch.edu.tw/agiuv>



About CSMAR

The center was established in 2019 and is dedicated to the research and teaching of spatial modeling applications. XR technology combined with VR/AR/MR is currently a new and popular interactive visual technology, and the 3D spatial modeling results built with stereo mapping technology have also been widely used in construction, surveying and mapping, disaster prevention and other engineering applications. XR equipment combines Building Information Model (BIM), Unmanned Aerial Vehicle (UAV) three-dimensional modeling and advanced spatial information technology, can add value to the spatial model composed of buildings, terrain and landscape, and can be used through resource

integration and multiple applications. This center can promote cross-domain learning for students, enables them to have professional technical capabilities in spatial modeling and visual applications, and forms the school's professional characteristics in this field.



Goals and Development

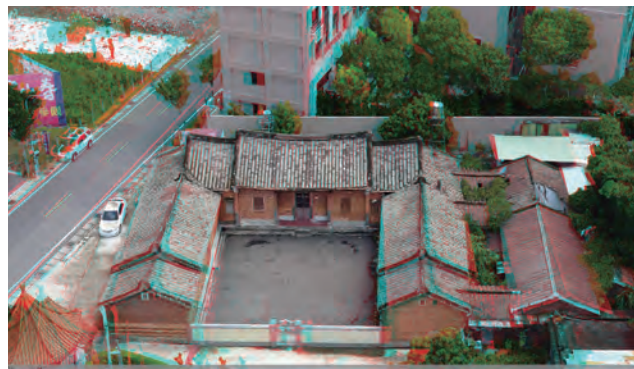
The features of this center include: satellite positioning technology, laser scanning (LiDAR) technology, unmanned aerial vehicle (UAV) applications, three-dimensional modeling applications, and geographic information applications. This center can integrate the latest technology from a more macro and effective perspective, and actively cooperate with government agencies and private enterprises to train cross-field scientific and technical talents to increase the ability of flexible use and innovate research and development. From the beginning of the establishment of the center, it was awarded the grant from the Ministry of Education to promote the technical university's practice environment plan (including the expansion plan), and to implement the industry training program. Moreover, it was also supported by the construction industry, the information industry and the spatial surveying and mapping industry to effectively carry on a number of industry-academic cooperation projects related to national construction and development, with outstanding performance.

Important equipments

- VX2300 Hybrid UAV
- E-Bee fixed-wing drone
- P4 fleet (Pro 5 aircraft, RTK 2 aircraft, Multispectral 1 aircraft)
- Matrix fleet (type 200 2 aircraft, type 300 1 aircraft)
- Mavic Enterprise (thermal) drone
- Parrot Anafi TIR (thermal) drone
- Mavic Air training fleet (10 aircraft)
- 3D laser scanner (BLK 360, Faro S70, GeoSLAM)
- UAV data solving software (Metashape, Pix4D Mapper, Context capture)
- 3D graphics and virtual reality software (SketchUp, Artlantis, Twinmotion)
- eGNSS RTK Receiver 6 sets
- High precision GNSS Receiver 8 sets
- High-end 3D graphics computers 40 sets
- Teaching equipment for drone professional certification examination room 1 set

Prospects

Satellite positioning applications, 3D modeling and vision applications, and UAV applications play important and critical roles in engineering construction, product manufacturing, structural safety monitoring, and even car dispatch and personnel monitoring. Among county and city government agencies, there are many related work in charge of cadastral bureau, public works bureau, construction bureau, fire bureau, police bureau, urban and rural development bureau, metropolis development bureau, environmental protection bureau, etc., or in the industry, such as construction companies, construction plants, consulting companies, and passenger (freight) transportation companies. The research and development of related technologies such as satellite positioning applications, three-dimensional modeling and vision applications, and UAV applications are all closely related to the center.



Green Energy Research Center

find out more at <https://solar.ee.uch.edu.tw>



The Green Energy Research Center of Chien Hsin University was established in 2002 with the objective of applying the teaching resources of the Institute to the development of related technologies of green energy. The aims of the Center are to enhance research skills, provide coalition courses, promote industrial-academic cooperation, and offer extension education. Research of the Center is conducted in the fields of photovoltaic systems, wind-power systems, fuel cells systems and energy saving technology.

Research

The Center has organized several teams of professional teachers in the fields of electrical, electronic, mechanical, civil, and industrial engineering to advance research. In addition to the facilities of the Green Energy Laboratory, the Center is also equipped with a complete set of green energy demo systems. The Center has sufficient potential to undertake research projects sponsored by the National Science Council, Bureau of Energy, and Ministry of Education.

Coalition Courses

The Center unites teachers and facilities to offer

green energy-related coalition courses. Students who gain 18 credits from these courses will earn a certificate awarded by the Center, which will be valuable for their future employment.

Industrial-Academic Cooperation

The Center is devoted to cooperating with green energy related companies in Taiwan. This is done in order to investigate superior technologies for photovoltaic system design, solar-module manufacturing engineering, battery charging controller design, inverter design, monitoring system design, solar cell applications, photovoltaic system testing, wind power system design, fuel cell system design, energy storage system design and smart grid application.

Extension Education

The Center is linked with the Green Energy & Environment Research Laboratories of the Industrial Technology Research Institute to offer extension courses on photovoltaic system design and construction. These courses help to spread green energy knowledge and promote manufacturers' design ability and construction quality.

Our Location

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