

Agenda

(1) Background of "Professional University" demands Shortage of ICT resources Socioeconomic situation What type of University does industry expect ?

(2) What is a "Professional University"?

(3) What our "i University" is aiming?



Shortage of ICT resources, a major issue in Japan

Source: Ministry of Economy, Trade and Industry(June 2018)



The Shortage of IT human resources in 2030: approx. 600K

Socioeconomic situation

Rapid shift in industrial structures

Source: Nomura Research Institute, Ltd.

It will be technically possible that **<u>about 49%</u>** workers might be replaced with <u>**AI**</u>, <u>**robots**</u>, <u>**etc.**</u> by 2035.

Change in employment structures

Source: Ministry of Health, Labour and Welfare, "General Survey on Wages and Working Hour Systems, etc."

Ratio of education and training expenses in total labor costs:

2.4% (1988) \rightarrow **1.4%** (2011)

Decrease in working age population

Source: National Institute of Population and Social Security Research, "Population Projections for Japan"

<u>81.73 million (2010)</u> \rightarrow **44.18 million (2060)**

What type of University does industry expect ?



Source: Keidanren (Japan Business Federation), results of questionnaire on higher education

What is a "Professional University"?

- "Senmon-shoku daigaku" or "Professional University" belongs to the new category of schools that will be approved in Japan in April 2019.
- This new category in Japan will be approved after the last approval for "*Tanki-daigaku* or Junior College" 55 years ago.
- These schools will be for studying specialized subjects in an extensive and hands-on manner in collaboration with industry.



What is a "Professional University"?

University

Wide-ranging perspectives and concepts are studied.

An extensive education, and knowledge and theories based on research results are acquired.

Professional university

Human resources who will lead industry and can create new services, etc. are cultivated.

The skills needed for work are studied in a hands-on manner.

An extensive education is <u>acquired.</u>

Possibilities for finding employment are increased. Vocational school

The skills needed for a targeted profession are learned.

The knowledge directly needed for work is acquired.

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Differences compared to conventional higher education institutions

	[Vocational school]	[Conventional university]	[Professional university]
Curriculum	Practical education with a high level of specialization	Possible to graduate just by attending lectures at the school	<u>At least 600 hours of internship work</u> over four years
Teachers	Teachers who are highly knowledgeable about work in a particular field	Teachers who are well-versed in certain areas of study	Industry/worksite professionals , with practitioners accounting for at least 40% of teachers
Term of study	1 to 4 years	4 years	<u>4 years</u>
Number of people per class	About 40	From 2 in seminars to several hundred in large classes	40 or less
Degree	Granting of <i>senmon-shi</i> (Japanese post-secondary course diploma; in the case of graduating from a course of at least 2 years)	Granting of internationally- recognized degrees	Granting of internationally-recognized degrees (in the same manner as conventional universities)

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Parent school that will establish i University



- School name: Japan Electronics College (Shinjuku, Tokyo)
- Established: 1951
- Established fields: ICT, video games, CG, animation, design, security, electronics and electrical products, business
- Number of established academic subjects: 21 in daytime courses, 5 in night courses
- Number of current students: approx. 2,700
 - number of foreign students included in above: approx. 700, from 27 countries worldwide

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• Number of graduates: approx. 110,000

Overview of i University

Time of establishment: April 2020
University president: Ichiya Nakamura (scheduled for appointment), currently professor at Keio University graduate school



Faculties and departments	Faculty of ICT Innovation Department of ICT Innovation	
Admission quota	200 people (considering acceptance of high school graduates, foreign students, and working adults)	
Number of full-time teachers	26 (planning to have more than 20 teachers who are practitioners)	
Location	Sumida-ku, Tokyo (close to Tokyo Skytree)	

Educational philosophy

Finding enjoyment in change, learning independently, and creating innovations



Image of human resources to be cultivated



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Content of education



Special feature: having all students start businesses

- Having all students experience entrepreneurship while at the school
- Taking on challenges in an environment in which failures are acceptable
- Business "real" projects, in which entrepreneurship is studied in classes and preparations are carried out



Partner companies and organizations



Envisioning internships, teacher dispatches, class collaboration, support for entrepreneurship, etc.

Possible paths after graduation

- Continuation of businesses that have been started
- Employment at internship destinations and partner companies
- Envisioning active participation in a wide range of industries in addition to ICT, such as contents, media, finance, education, medical care, and logistics