2022
College Bulletin

Mission

To develop highly qualified engineers that have a rich sense of humanity and creativity.
To contribute to the wealth and advancement of our local community
as a driving force of intellectual and technological progress.

National Institute of Technology,
Kagawa College
[Kagawa KOSEN]

Message from the President

National Institute of Technology, Kagawa College was established by the incorporation and reorganization of Takamatsu National College of Technology and Takuma National College of Technology both having the long history, on October 1st, 2009. We have seven departments at the General Education Courses and two majors at the Advanced Course. We have improved and advanced the facilities and the equipment for both education and research. We are enhancing the cooperative relationship between Takamatsu Campus and Takuma Campus, and are providing favorable environments for the education. At the General Education Course, we arrange a curriculum composed of liberal education, professional education, and practical technology education for 5 years, to develop highly qualified engineers that have a rich sense of humanity and creativity, with a competency to deal with rapid progress of science and technology and with harmony among intelligence, technology and spirit. Students can attain as high competency as those at a university by the study for 5 years. Moreover, students can obtain the same degree of bachelor as those who graduate a university by the study for 2 years at the Advanced Course after graduation of the General Education Course.

At Takamatsu Campus, We have Industrial and Systems Engineering Division composed of Department of Mechanical Engineering, Department of Electrical and Computer Engineering, Department of Electro-Mechanical Systems Engineering and Department of Civil Engineering for the General Education Courses. We are cultivating engineers active in the region of creative manufacturing. At Takuma Campus, We have Electronics, Information and Communication Engineering Division composed of Department of Communication Network Engineering, Department of Electronic Systems Engineering, and Department of Information Engineering for the General Education Courses. We are cultivating engineers active in the region of advanced electronics, information and communication. We have Advance Course in Industrial and Systems Engineering at Takamatsu Campus and Advanced Course in Electronics, Information and Communication Engineering at Takuma Campus. At both Advanced Course, We are supplying educations full of intellectual stimulation and international sense, and are enhancing the Science Seminar.

We have Dormitories, Counseling Room and Career Support Center to support students' welfare, study, employment and career shaping through such as internship. We have International Exchange Promotion office to develop international exchange and collaboration in education and research, and Human Resource Development Office to develop local industries and enhance the partnership with them. We are making Academic Exchange Agreements with Overseas Universities, sending students abroad for international internship or student exchange, and promoting Cooperative Research with the Private Sector eagerly. We contribute to the wealth and advancement of our local community as a driving force of intellectual and technological progress.

Both of our campuses' long histories have seen over 20,800 students graduate and secure meaningful employment in the private sector, municipal and prefectural governmental offices, universities, and research institutes. These graduates of the colleges have displayed and exemplified an impressive work ethic and job performance, leading to high praise and evaluations given by employers. We constantly embark on new challenges and develop ourselves, inheriting the excellent traditions.

Masao Tanaka
President

Mission and Educational Goals

■Mission of National Institute of Technology, Kagawa College : NITKC (Kagawa KOSEN)

○ To develop highly qualified engineers that have a rich sense of humanity and creativity.

○ To contribute to the wealth and advancement of our local community as a driving force of intellectual and technological progress.

■Educational Goals

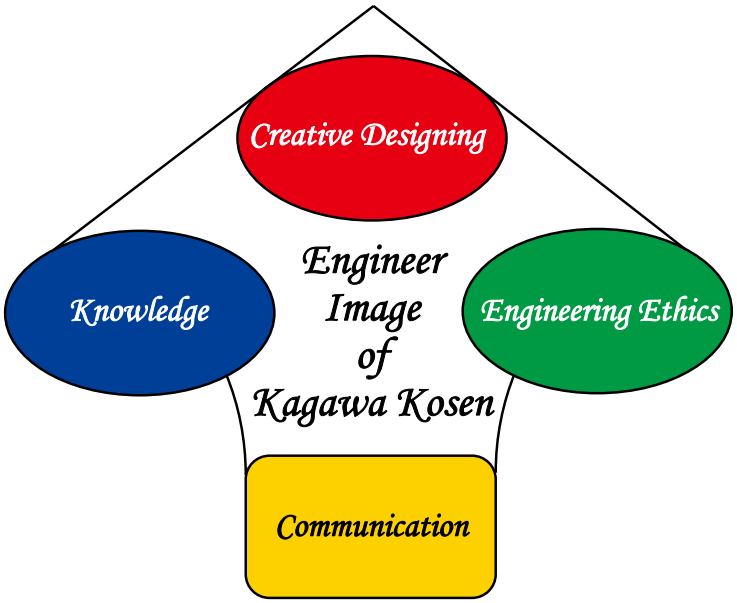
Kagawa KOSEN's educational objectives, based upon a detailed and comprehensive curriculum, are as follows:

◇ To broaden students' minds, with the aim that they will become engineers of the future that will play an instrumental role in a sustainable society.

◇ To train students to have the technological Knowledge and applicable skills for coping with these fast changing times.

◇ To train students to be engineers of the future, who can apply their imagination to tackle the complex problems of society.

◇ To develop the students' intellect, as well as communication skills, in order to prepare them for international career paths.



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History

◇History

Takamatsu National College of Technology (Takamatsu KOSEN)※Takamatsu Campus of Kagawa KOSEN

April, 1962 Takamatsu National College of Technology(Takamatsu KOSEN) was established. It consisted of two departments: the Department of Mechanical Engineering and the Department of Electrical Engineering.

April, 1966 Takamatsu KOSEN was restructured into three departments: the Department of Mechanical Engineering, the Department of Electrical Engineering and the Department of Civil Engineering.

April, 1990 Takamatsu KOSEN was restructured into four departments: the Department of Mechanical Engineering, the Department of Electrical Engineering, the Department of Electro-Mechanical Systems Engineering and the Department of Civil Engineering.

April, 1999 Advanced Engineering Course was established.

April, 2001 Takamatsu KOSEN consisted of four departments: the Department of Mechanical Engineering, the Department of Electrical and Computer Engineering, the Department of Electro-Mechanical Systems Engineering and the Department of Civil Engineering.

April, 2004 Takamatsu KOSEN was reorganized and was affiliated with the Institute of National Colleges of Technology.

Takuma National College of Technology (Takuma Denpa KOSEN)※Takuma Campus of Kagawa KOSEN

October, 1943 Kanritsu Musen Densin Koshujo Osaka Branch (National School of Radio Telecommunications, Osaka Branch) was established at Yata-mura, Naka-Kawachi-gun, Osaka

April, 1945 Kanritsu Musen Densin Koshujo Osaka Branch was renamed Kanritsu Osaka Musen Densin Koshujo (Osaka National School of Radio Telecommunications).

April, 1949 Kanritsu Osaka Musen Densin Koshujo was relocated in Takuma-cho, Mitoyo-gun, Kagawa, and was renamed Takuma Denpa High School (Takuma Radio Technical High School).

April, 1971 Takuma Denpa High School became Takuma National College of Technology (Takuma Denpa KOSEN). It consisted of one department of Radio Engineering.

April, 1976 Takuma Denpa KOSEN was restructured into two departments: the Department of Radio Engineering and the Department of Electronics.

April, 1980 Takuma Denpa KOSEN was restructured into three departments: the Department of Engineering, the Department of Electronics and the Department of Information Engineering.

April, 1985 Takuma Denpa KOSEN was restructured into four departments: the Department of Radio Engineering, the Department of Electronics, the Department of Information Engineering and the Department of Control Engineering.

April, 1989 The Department of Radio Engineering was renamed the Department of Telecommunication Technology.

April, 2004 Takuma Denpa KOSEN was reorganized and was affiliated with the Institute of National Colleges of Technology.
Advanced Engineering Course was established.

In October, 2009, Takamatsu KOSEN and Takuma KOSEN were incorporated and reorganized as National Institute of Technology, Kagawa College (Kagawa KOSEN). Two divisions including seven departments were set up: Industrial and Systems Division (Takamatsu Campus) and Electronics, Information and Communications Division (Takuma Campus).
The departments are as follows: Dpt of Mechanical Engineering, Dpt of Electrical and Computer Engineering, Dpt of Electro-Mechanical Systems Engineering and Dpt of Civil Engineering (Takamatsu Campus); Dpt of Communication Network Engineering, Dpt of Electronic Systems Engineering and Dpt of Information Engineering (Takuma Campus).
The Faculty of Advanced Engineering was also set up: Advanced Course in Industrial and Systems Engineering; Advanced Course in Electronics, Information and Communication Engineering.
Dr. Masashi Kamon was appointed as the first president of Kagawa KOSEN.

In January, 2013, a commemoration ceremony was held to celebrate the 50th anniversary of the Takamatsu Campus and the 70th anniversary of the Takuma Campus.

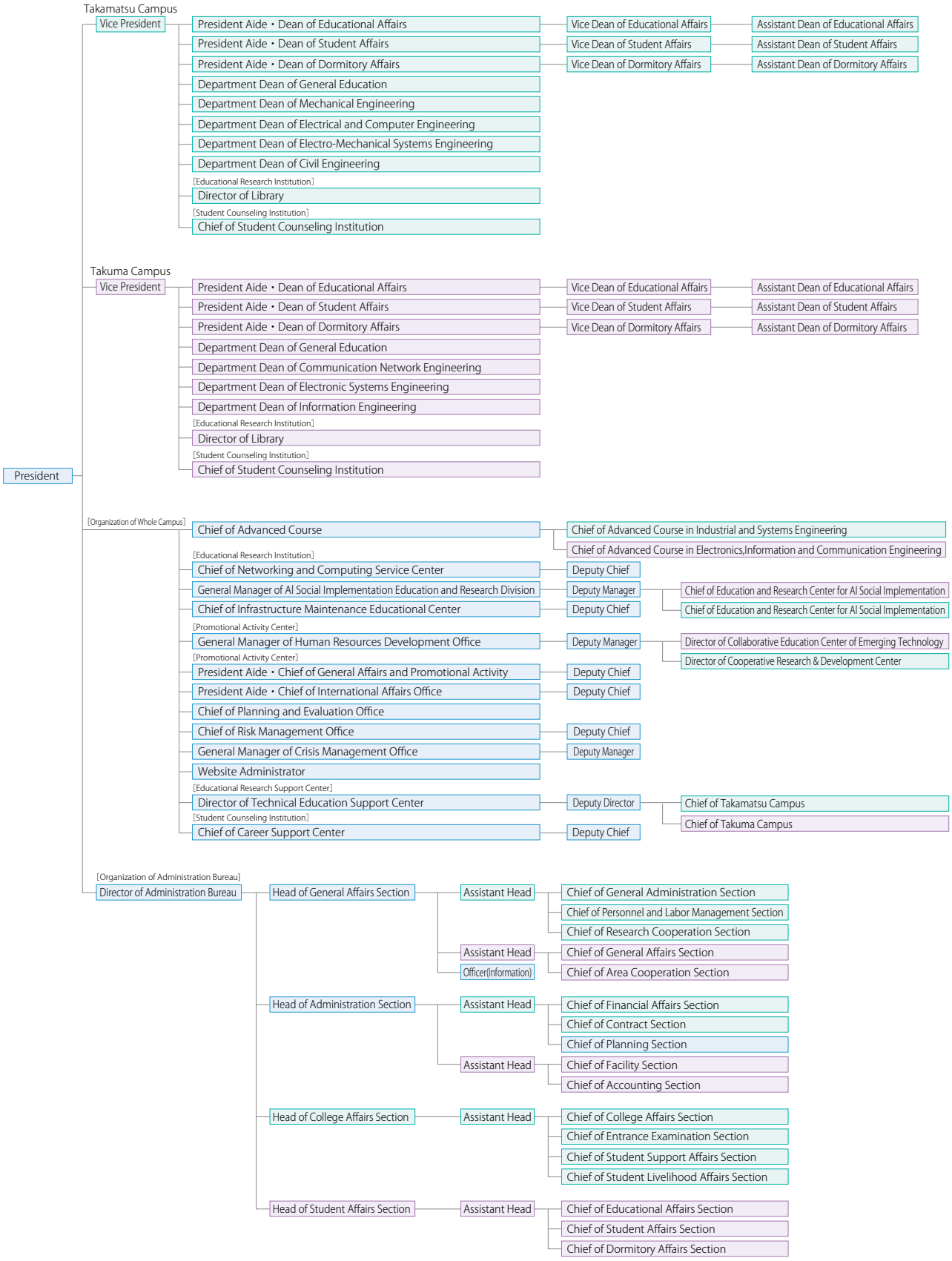
In April, 2014, Dr. Takeshi Yao was appointed as the second president of Kagawa KOSEN.

In April, 2018, Dr. Yoshio Aso was appointed as the third president of Kagawa KOSEN.

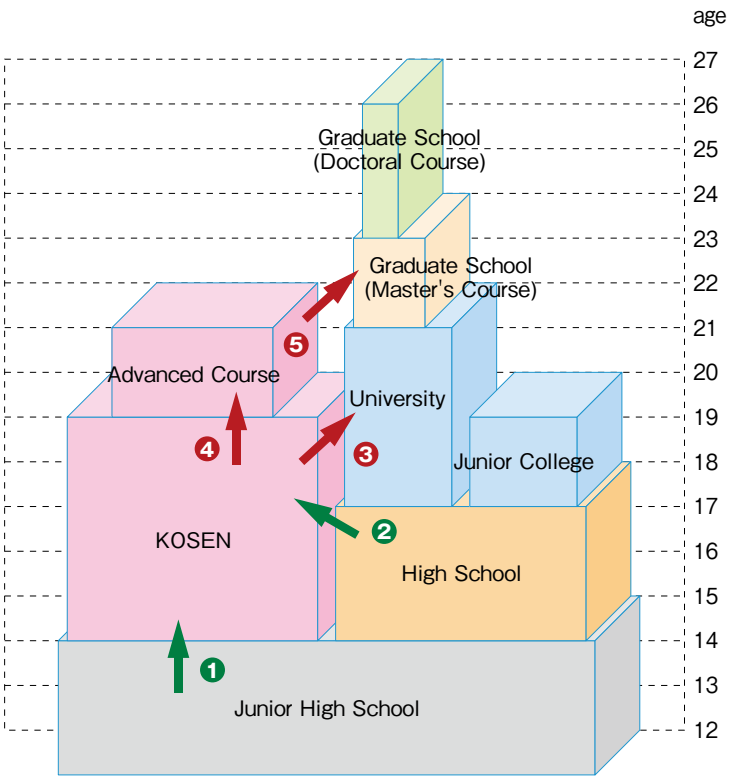
In April, 2021, Dr. Masao Tanaka was appointed as the fourth president of Kagawa KOSEN.

Organization

◇Chart of Organization



School System of Japan



1. Junior high school graduates are eligible to enroll at a KOSEN.
2. High school graduates are eligible to enroll at a KOSEN as transfer students.
3. KOSEN graduates are eligible to enroll in a university as transfer students.
4. KOSEN graduates are eligible to enroll in an advanced course.
5. KOSEN Advanced Course graduates are eligible to enroll in a university graduate program.

KOSEN System

KOSEN system — five-year engineering education from 15-year old — was established in 1961, in response to a strong demand from industrial sector to foster engineers who sustain Japanese high economic growth at that time.

Characteristics of KOSEN Education

Upon Admission

- We admit junior high school graduates
- We enable students to engage in career and life planning at a young age

In School

Practical and Innovative Education

- We develop an curriculum in the liberal arts and professional studies
- We have highly qualified teaching staff (more than 80% of specialized subject teachers have doctoral degree)
- We provide experimental and practical training, internship and coop education
- We provide programs accredited by JABEE
- We offer international exchange opportunities

Personality Development

- We offer student dormitories and extracurricular activities
- We hold Robot, Programming, Design and Speech contests
- We organize annual all KOSEN Athletics Competition

Upon Graduation

- We help students to find various career paths
- We produce engineers with extensive practical creativity

Departments

General Education

This division offers various arts and science subjects including physical education aimed at cultivating students with wide-ranging knowledge and basic understanding required for the study of engineering. Our curriculum covers that of senior high schools putting stress on mathematics and science, and also offers some courses at the college level to the senior students.

◇Fulltime Academic Staff in Department of General Education

[Takamatsu Campus]

Title	Name	Research Field
Prof.	TAKAHASHI, Hiroaki	Topology Mathematical Physics
	OKANO, Hiroshi	Inorganic Materials Chemistry Thin Film Engineering
	TAGUCHI, Jun	History of Educational Thought
	NAKASE, Mikio	Sports Methodology Coach Methodology
	SAWADA, Isao	Statistical Mechanics Condensed Matter Theory
	HASHIMOTO, Norifumi	Synthetic Organic Chemistry Catalytic Chemistry
	YOSHIZAWA, Kosei	Theory of Sports Training
Associate Prof.	KOSHOU, Kiyohiro	Pedagogy English Educarion
	YODA, Jun	European History
	TOBA, Motoko	English Education Applied Linguistics
	SATO, Fumitoshi	Algebraic Geometry
Senior Lecturer	TOKUNAGA, Shintaro	TESOL, East Asian History
	NOGUCHI, Naoshi	Japanese Literature
	TACHIKAWA, Naoki	Electrochemistry Lithium Battery
	KADOWAKI, Dai	Japanese Literature
	KAWAMURA, Masaya	Differential Geometry
	NODA, Kazuto	Condensed Matter Theory
Assistant Prof.	MORISHITA, Jiro	American Studies
	KUWATA, Ken	Mathematical Physics

[Takuma Campus]

Title	Name	Research Field
Prof.	MINAMI, Takayuki	Differential Equation Hamiltonian System
	ARIMA, Hirotoshi	Methodology of Coaching
	FUJIHARA, Nobuhiro	Japanese Literature
	HASHIMOTO, Ryuta	Number Theory Continued Fraction
Associate Prof.	UEHARA, Shigenori	Geometric Topology General Topology
	YOKOYAMA, Manabu	Methodology of Sports Training Health Education
	MORI, Kazunori	English Teaching, CALL
	TAKENAKA, Kazuhiro	Synthetic Organic Chenistry, Organometallic Chemistry
Senior Lecturer	MORIOKA, Takaaki	Teaching English to Speakers of Other Languages
	MORI, Akane	Clasial Japanese Literature
	TAMURA, Masaki	Indian Philosophy Buddhist Studies
Assistant Prof.	SHIRAHATA, Yasuhiro	Solar Cells, Electrical and Electronic Materials
	OHASHI, Asuka	Numerical Linear Algebre Numerical Multi-Linear Algebre
	NAKAZAWA, Takuya	Contemporary history of Yugosiavia Montenegrin Studies


Learning English by a Native Speaker


Department of General Education


A Lesson in the Multimedia Room


Physics laboratory

◇Curriculum

Compulsory Subject	Credits
Japanese Ⅰ-Ⅲ	6
Japanese	2
Society Ⅰ-Ⅱ	4
Mathematics ⅠA	2
Mathematics ⅠB	2
Mathematics ⅠC	2
Mathematics ⅠD	2
Mathematics ⅡA	2
Mathematics ⅡB	2
Mathematics ⅡC	2
Mathematics ⅡD	2
Mathematics ⅢA	2
Mathematics ⅢB	2
Physics Ⅰ-Ⅱ	4
Chemistry Ⅰ-Ⅱ	4
Health and Physical Education Ⅰ-Ⅲ	6
English ⅠA	2
English ⅠB	2
English ⅡA	2
English ⅡB	2
English ⅢA	2
English ⅢB	2
Communication & Expression Ⅰ-Ⅱ	4
Art	2

Department of General Education in Spring

Collaborative Learning

[Takamatsu Campus]

Elective Subject	Credits
Literature Ⅰ	2
Human Science Ⅰ-Ⅲ	6
Social Science Ⅰ-Ⅲ	6
General Chemistry Ⅰ-Ⅱ	4
Phyisical Education Ⅰ-Ⅱ	2
English ⅣA	2
English ⅣB	2
English ⅤA	2
English ⅤB	2
Language Seminar Ⅰ-Ⅳ	8
Overseas English Program	1

[Takuma Campus]

Elective Subject	Credits
Human Science Ⅰ-Ⅳ	8
Social Science Ⅰ-Ⅳ	8
Topics in Natural Science	2
Physical Education Ⅰ, Ⅱ	4
English for Specific Purposes Ⅰ, Ⅱ	4
Chinese Ⅰ, Ⅱ	4
Overseas English Program	1
Teaching Support Activity	1

◇Main Experiment Facilities

	Room	Main Equipment
Takamatsu Campus	Physics Laboratory	High Vacuum Pump, Spectroscope, Induction Coil
	Chemical Laboratory	Sputtering System, PH Meter, Draft Chamber with Scrubber
	Language Laboratory	46 booths, 46 Computers, e-learning

	Room	Main Equipment
Takuma Campus	Physics Laboratory	Audio-visual Equipment, Measurement Device of Specific Charge
	Chemistry Laboratory	Ultra Pure Water Production System, Draft Chamber with Scrubber, Drying Oven
	Multimedia Learning Laboratory	48 booths, 48 computers, e-learning

Industrial and Systems Engineering Division
(Takamatsu Campus)

Department of Mechanical Engineering

Mechanical engineers play a vital role in product design, development and manufacturing of industrial products in the modern industrial world as well as new challenges in developing countries.
Our educational program is designed to develop creative mechanical engineers who will excel in the industrial world and fulfill their personal desire to leave a legacy of successful accomplishments.

◇Fulltime Academic Staff

Title	Name	Research Field
Prof.	KIHARA, Shigefumi	Applied Mechanics
	YAMASAKI, Yojiro	Robotics Motion Control
	KOJIMA,Takafumi	Thermodynamics Heat Transfer Engineering
	YOSHINAGA, Shinichi	Control Engineering
	JODAI, Yoshifumi	Fluids Engineering
Associate Prof.	TOKUDA, Taro	Strength of Matcrials Fracture Mechanics
	TAKAHASHI, Yoichi	Precision Machining Forming Processes
Senior Lecturer	KIMURA, Yuto	Moleculae Dynamics
	MAEDA, Yusaku	Sensor Engineering
Assistant Prof.	TAKATANI, Hideaki	Robotics


Bending Test of Metallic Materals


Graduation Research

◇Curriculum

Classification	Subject	Credits
Compulsory	Engineering Literacy	2
	Applied Mathematics Ⅰ	2
	Applied Mathematics Ⅱ	2
	History of Science and Technology	1
	Intellectual Property	1
	Exercise of Mechanical Engineering Ⅰ	1
	Exercise of Mechanical Engineering Ⅱ	1
	Engineering Mechanics Ⅰ	2
	Strength of Materials Ⅰ	2
	Strength of Materials Ⅱ	2
	Thermodynamics	2
	Hydraulics	2
	Mechanical Vibrations	2
	Working Technology	2
	Machine Element Design Ⅰ	1
	Machine Element Design Ⅱ	2
	Material Science and Engineering	2
	Electrical Engineering	1
	Control Engineering Ⅰ	1
	Fundamental Programming	2
	Numerical Methods	2
	Mechanical Design and Drafting Ⅰ	2
	Mechanical Design and Drafting Ⅱ	2
	Computer Aided Design and Drafting Ⅰ	3
	Fundamental of Working Exercise Ⅰ	3
	Fundamental of Working Exercise Ⅱ	3
	Fundamental of Working Exercise Ⅲ	2
	Mechanical Experiment Ⅰ	3
	Mechanical Experiment Ⅱ	3
	Graduation Research	8

Classification	Subject	Credits
Elective	Applied Mathematics Ⅲ	2
	Engineering Mechanics Ⅱ	2
	Strength of Materials Ⅲ	2
	Theory of Elasticity	2
	Heat Transfer Engineering	2
	Fluids Dynamics Ⅰ	2
	Electronics	2
	Computer Engineering	2
	Mechanism	2
	Computational Mechanics	2
	Computer Aided Design and Drafting Ⅱ	4
	Technical English	2
	Heat Engines	2
	Control Engineering Ⅱ	2
	Fluids Dynamics Ⅱ	2
	Job Training	1
	Special Lecture Ⅰ	1
	Special Lecture Ⅱ	1
	Special Lecture Ⅲ	1
	Special Lecture Ⅳ	1
	Pre-research Activity Ⅰ	1
	Pre-research Activity Ⅱ	1
	Pre-research Activity Ⅲ	1
	Advanced Programming Training Ⅰ	4
	Advanced Programming Training Ⅱ	4
	Advanced Programming Training Ⅲ	4


Computer Aidded Design & Drafting


Solar Car and Eco Car

◇Main Experiment Facilities

Room	Main Equipment
Workshop Lab.	Ultra-Precision Machine, Wire-Cut EDM Systems, Hobbing Machine, Precision Lathe
Mechanical Measurment Lab.	Non-Contact 3D Measuring Machine, Surface Finishing Indicator, Micro Hardness Tester
Material Testing Lab.	Universal Materials Testing Machine, Fatigue Testing Machine, Torsion Tester, Charpy Impact Tester
Materrial Lab.	Optical Microscope, Electric Furnace, Hardness Tester, SPD Equipment
Research Space Lab.	Hydraulic Servo-Mechanical Fatigue Testing Machine
Vibration Engineering Lab.	Vibration System, Vibration Meter, FFT Analyzer, Signal Analyzer
Wind Tunnel Lab.	Low Turbulent Wind Tunnel (40 m/s), Hot Wire Anemometer
Thermal Engineering Lab.	Heat Exchanger Testing Equipment
Internal Combustion Engine Lab.	Internal Combustion Engine Performance Testing Equipment, Engine Combustion Analysis System, Exhaust Gas Analyzer
Control Lab.	DC Servo Motor Testing System, BASIC FA Study Kits, Pocketcomputer Controlled AGV Testing System
Electronics Lab.	Oscilloscope, Digital Multi-Meter, Function Generator, DC Power-Supply Unit
Machine Shop	Lathe, Machining Center, CNC Lathe, Milling Machine, Grinding Machine, Crucible Furnace, Welding Equipment, Hydraulic Press
Drafting Room, CAD Room	Drafting Desks and Machines, Sketching Goods and Models, CAD System

Department of Electrical and Computer Engineering

The department of electrical and computer engineering intends to educate the engineers who can contribute to the high technological society. For this purpose, the educational curriculum is designed to include the fundamental of mathematics and physics in the first stage, and applied technologies are programmed in the next stage. Furthermore, teamwork and cooperativeness, which are necessary in the social works, will be introduced in the various experiments and circuit design. Major parts of these subjects consist of the technologies of the embedded system.

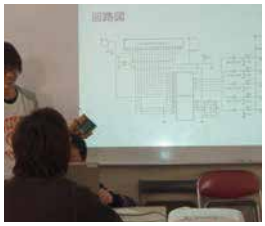
◇Fulltime Academic Staff

Title	Name	Research Field
Prof.	SHIKAMA, Tomokazu	Semiconductor Physics Thin Films Engineering
	SHIGETA, Kazuhiro	Information and Communication Engineering Educational Technology
	TUJI, Masatoshi	Electronic Circuit Microwave Engineering
	URUSHIHARA, Shiro	Motion Control Control Engineering
Associate Prof.	MURAKAMI, Yukikazu	Educational Technology
	KAKIMOTO, Takeshi	Software Development Management
	YAMAMOTO, Masashi	Material Science
Senior Lecturer	YOSHIOKA, Takashi	Motion Control Motor Drive
	KITAMURA, Daichi	Statistical Signal Processing, Machine Learning
Assistant Prof.	HINAMOTO, Yoichi	Digital Signal Processing


Lecture


Experiment of Electronics


Plactice of Information Processing


Presentation of Circuit Design

◇Curriculum

Classification	Subject	Credits
Compulsory	Engineering Literacy	2
	Applied Mathematics Ⅰ	2
	Applied Mathematics Ⅱ	2
	History of Science and Technology	1
	Intellectual Property	1
	Fundamentals of Electrical and Computer Science Ⅰ	4
	Fundamentals of Electrical and Computer Science Ⅱ	4
	Fundamentals of Electricity	4
	Fundamentals of Electronics	4
	Electromagnetics Ⅰ	2
	Electrical Circuits Ⅰ	2
	Logic Circuits	2
	Fundamentals of Information Processing	4
	Electronic Circuits Ⅰ	1
	Information Mathematics	1
	Creative Engineering Experiment Training Ⅰ	2
	Creative Engineering Experiment Training Ⅱ	4
	Experiments on Electrical and Computer Science Ⅰ	4
	Experiments on Electrical and Computer Science Ⅱ	4
	Applied Experiments on Electrical and Computer Science	4
	Graduation Research	8
	Design of Circuits	2

Classification	Subject	Credits
Elective	Introduction of Semiconductor Physics	2
	Electromagnetics Ⅱ	2
	Electrical Circuits Ⅱ	2
	Instrumentation Engineer	2
	Electrical and Electronic Materials	2
	Electronic Circuits Ⅱ	2
	Electronic Circuits Ⅲ	2
	Energy Conversion Engineering	2
	Control Engineering	2
	Electronic Devices	2
	Communication Engineering	2
	Information and Communication Network	2
	Algorithms	2
	Computer Architecture	2
	Operating System	2
	Signal Processing	2
	Information and coding theory	2
	Intelligence Information Processing	2
	Numerical Simulation	2
	Statistical Data Processing	2
	Technical English	2
	Job Training	1
	Special Lecture Ⅰ	1
	Special Lecture Ⅱ	1
	Special Lecture Ⅲ	1
	Special Lecture Ⅳ	1
	Pre-research Activity Ⅰ	1
	Pre-research Activity Ⅱ	1
	Pre-research Activity Ⅲ	1
	Advanced Programming Training Ⅰ	4
	Advanced Programming Training Ⅱ	4
	Advanced Programming Training Ⅲ	4

◇Main Experiment Facilities

Room	Main Equipment
Measurement Control Lab.	SCR Inverter, Electric Machine Training System, He-Ne Laser, Optical Power
Electronics and Information Lab.	Curvetracer, Oscilloscope, Logic Analyzer, Microwave Measuring System, Print Board Fabrication System, Optical Communication/Optical Fiber Communication System
Materials Lab.	Lock-in Amplifier, Ultra High Resistance Meter, Liquid Nitrogen Cryostat, Thickness Meter, Green Laser
Power Electronics Lab.	Ball screw mechanical system with AC servo motor, Induction motor control system
Electromagnetic Compatibility Lab.	Uniform Magnetic Field Exposure System, Magnetic Field Measurement Device, Work Station
Electronics Lab.	Oscilloscope, Function Generator, DC Power supply, Q Meter, Digital Frequency Counter, Pulse Circuit Trainer
Acoustical Information Lab.	Anechoic Chamber, Acoustic Measuring System, Ultrasound Detector
Computer and Communication Engineering Lab.	Logical Circuit Experiment Apparatus, Semiconductor Element Experiment Apparatus, Arithmetic Circuit Trainer, AD/DA Converter Trainer, Logic Analyzer

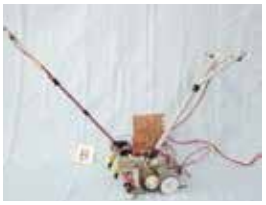
Department of Electro-Mechanical Systems Engineering

The department has a curriculum to educate students standing on mechatronics which is a combined engineering field that consists of mechanics, electronics, control engineering and computer science. The students are expected to have the role of not only simple manufacturing but also design & development, quality management, maintenance & inspection and so on in the production process.

◇Fulltime Academic Staff

Title	Name	Research Field
Prof.	SOGO, Hiroyuki	Kinematics Robotics
	TOKUNAGA, Hidekazu	Conputational Learning Theory Web Mining
	SOUMA, Takeshi	Energy Engineering Energy Materials
Associate Prof.	YURA, Satoshi	Control Engineering Motion Control
	SHIMASAKI, Shin-ichi	Electromagnetic Processing of Materials
	SHOBAKO, Shinichiro	Welding & Joining Arc Plasma
	ISHII, Kohei	Biomedical Engineering
Senior Lecturer	TSUMORI, Nobuhiro	Nanophotonics Near-field Optics
Assistant Prof.	KAWAKAMI, Yusuke	Kansei Engineering, Signal Processing
	YAMASHITA, Tomohiko	High Voltage Engineering, Pulsed Power
	KADOWAKI, Jun	Soft robot, Pneumatic rubber muscle


Checking Robots


An Autonomous Robot


Working with Lathe Machine


Checking Electronic Components

◇Curriculum

Classification	Subject	Credits
Compulsory	Engineering Literacy	2
	Applied Mathematics Ⅰ	2
	Applied Mathematics Ⅱ	2
	History of Science and Technology	1
	Intellectual Property	1
	Electromagnetics Ⅰ	2
	Manufacturing Processes	2
	Fundamental Mechanics	2
	Engineering Materials Ⅰ	2
	Mechanical Engineering Design	2
	Mechanics of Materials Ⅰ	2
	Thermal Engineering Ⅰ	1
	Fluid Engineering Ⅰ	1
	Electric and Electronic Circuits Ⅰ	2
	Information Processing on Basis	2
	Mechatronics Ⅰ on Basis	3
	Mechatronics Ⅱ on Basis	3
	Mechatronics Ⅲ on Basis	3
	Mechatronics System Design	2
	System Control Engineering Ⅰ	2
	Technical Japanese Rhetoric	1
	Training and Exercise Ⅰ on MONOZUKURI Basis	3
	Training and Exercise Ⅱ on MONOZUKURI Basis	3
	Training and Exercise Ⅲ on MONOZUKURI Basis	2
	Experiment Ⅰ	4
	Experiment Ⅱ	4
	Graduation Research	8

Classification	Subject	Credits
Elective	Mechanics of Materials Ⅱ	2
	Engineering Materials Ⅱ	2
	Thermal Engineering Ⅱ	2
	Fluid Engineering Ⅱ	2
	Electric and Electronic Circuits Ⅱ	2
	Information Processing A	2
	Information Processing B	2
	System Control Engineering Ⅱ	2
	Mechanical Dynamics	2
	Robotics	2
	Mechanical Instrumentation	2
	Statistical Analysis	2
	Technical English	2
	Electromagnetics Ⅱ	2
	Semiconductor Engineering on Basis	2
	Electronic Instrumentation	2
	Sensor Devices	2
	Job Training	1
	Special Lecture Ⅰ	1
	Special Lecture Ⅱ	1
	Special Lecture Ⅲ	1
	Special Lecture Ⅳ	1
	Pre-research Activity Ⅰ	1
	Pre-research Activity Ⅱ	1
	Pre-research Activity Ⅲ	1
	Advanced Programming Training Ⅰ	4
	Advanced Programming Training Ⅱ	4
	Advanced Programming Training Ⅲ	4

◇Main Experiment Facilities

Room	Main Equipment
Engineer Material Lab.	Optical Microscope, Electric Furnace, Video Microscope, Vickers Brinell and Rockwell Hardness Tester, SPD Equipment
Mechanics of Material Lab.	300kN Universal Testing Machine, Torsion Tester Charpy Impact Testing Machine, Rotating Bending Fatigue Testing Machine
Thermal Engineering Lab.	High-frequency Induction Furnace, Electrometer, Laser Displacement Sensor, High-speed Camera, Heat Exchanger Testing Equipment
Electronics Lab./Electronic Control Lab.	Oscilloscope, Digital Multi-Meter, Function Generator, Electronic Voltmeter, Universal Counter, DC Power-Supply Unit, PCB-CAD/CAM
CAD Room	Video Projector, Personal Computer, 3D CAD
Exercise Room	Video Projector, Personal Computer, 3D CAD, 3D Printer
Control Lab.	Temperature Control Testing System, Water Level Control Testing System
FA Training Factory	3D Modeling Machine, Vertical Milling Machine, Drilling Machine, Band Sawing Machine
Measuring Lab.	Air Micrometer, Micro-Indicator, Tool Micrometer Microscope
Training Factory	Engine Lathe, Drilling Machine, Universal Milling Machine Universal Band Sawing Machine, Machining Center, Welders

Department of Civil Engineering

The department of civil engineering is working on fostering engineers who can contribute to the construction of infrastructure supporting safe and comfortable lives of citizens and the maintenance of the natural environment which is also deeply related to the construction of infrastructure.

◇Fulltime Academic Staff

Title	Name	Research Field
Prof.	MUKAITANI, Mitsuhiko	Geotechnical Engineering Geoenvironmental Engineering
	ARAMAKI, Noritaka	Geotechnical Engineering Resource Development Engineering
	MIYAZAKI, Kosuke	Infrastructure Planning Transportation Planning
	TAGAWA, Tadashi	Sanitary Engineering Environmental Engineering
Associate Prof.	YANAGAWA, Ryoichi	Coastal Disaster Management Engineering Coastal Ecosystem Engineering
	HAYASHI, Kazuhiko	Concrete Engineering Maintenance Engineering
	TAKAHASHI, Naoki	Hydraulic Engineering Ecological Engineering
Senior Lecturer	IMAOKA, Yoshiko	Urban Planning Welfare Engineering
	HASEGAWA, Yuki	Concrete Engineering Agricultural Engineering
Assistant Prof.	MATSUMOTO, Masayuki	Earthquake engineering Seismic engineering


Loading of steel structure


Surveying


Hydraulic Experiment


Numerical Model Analysis

◇Curriculum

Classification	Subject	Credits
Compulsory	Engineering Literacy	2
	Applied Mathematics Ⅰ	2
	Applied Mathematics Ⅱ	1
	History of Science and Technology	1
	Intellectual Property	1
	Structural Mechanics Ⅰ	2
	Structural Mechanics Ⅱ	2
	Structural Mechanics Ⅲ	1
	Structural Design Ⅰ	2
	Construction Materials	2
	Soil Mechanics Ⅰ	1
	Soil Mechanics Ⅱ	1
	Construction Management	1
	Hydraulics Ⅰ	1
	Hydraulics Ⅱ	1
	River and Coastal Engineering Ⅰ	1
	Environmental Engineering Ⅰ	2
	Environmental Engineering Ⅱ	1
	Information Processing Ⅰ	2
	Information Processing Ⅱ	2
	Surveying Ⅰ	2
	Planning Ⅰ	1
	Planning Ⅱ	1
	Design and Drawing Ⅰ	1
	Design and Drawing Ⅱ	1
	Civil Experiments and Exercises Ⅰ	4
	Civil Experiments and Exercises Ⅱ	2
	Civil Experiments and Exercises Ⅲ	4
	Civil Experiments and Exercises Ⅳ	4
	Civil Experiments and Exercises Ⅴ	3
	Introduction of Civil Engineering	2
	Current Topics on Civil Engineering	1
	Engineering Study with Creative Training	1
	Graduation Research	8

Classification	Subject	Credits
Elective	Structural Design Ⅱ	2
	Soil Mechanics Ⅲ	2
	River and Coastal Engineering Ⅱ	2
	Applied Mechanics	2
	Environmental Engineering Ⅲ	2
	Environmental Impact Assessment	2
	Information Processing Ⅲ	2
	Surveying Ⅱ	2
	Disaster Prevention Engineering	2
	Applied Mathematics Ⅲ	2
	Technical English	2
	Job Training	1
	Special Lecture Ⅰ	1
	Special Lecture Ⅱ	1
	Special Lecture Ⅲ	1
	Special Lecture Ⅳ	1
	Pre-research Activity Ⅰ	1
	Pre-research Activity Ⅱ	1
	Pre-research Activity Ⅲ	1
	Advanced Programming Training Ⅰ	4
	Advanced Programming Training Ⅱ	4
	Advanced Programming Training Ⅲ	4

◇Main Experiment Facilities

Room	Main Equipment
Structural Engineering Lab.	Static and dynamic loading machine, Beam testing machines, Servo-type 1D&2D shaking tables, 2D soil tanks
Materials Engineering Lab.	Automatic compression testing machine (Cap. of 3000kN), Universal testing machine (Cap. of 1000kN), Concrete mixer, Oil jacks and oil pumps, Concrete cylinder end grinder, Freezing and thawing machine, Testing apparatuses for various concrete, Concrete curing water bath
Hydraulic Engineering Lab.	Three dimensional channel, Movable channels, Wave making channels, Shape-created weir, Pipe line with a Venturi meter, Wave height indicators, Various recorders
Geotechnical Engineering Lab.	Automatic consolidation testing apparatus, Universal compression testing apparatus, Cyclic triaxial compression test apparatus, Large-scaled universal direct shear apparatus, Falling head permeability test apparatus, B-type viscometer, High speed camera, Various soil testing apparatus
Environmental Engineering Lab.	Total organic carbon analyzer, Ion chromatograph, Gas chromatograph, CHN analyzer, Autoclaves, Centrifuge, Ultra pure water system, Acid rain collect, Electronic scale, Constant temperature ovens
Equipment room	Global Navigation Satellite Systems, Geographic Information System, Remote Sensing, Total station, Digital type theodolites(4set), Automatic levels, Electro-optical distance meters(4set), Plane table, Pranimeters, Stereoscope

Department of Communication Network Engineering

Both modern industry and society rely heavily on telecommunication systems, which are also known as a "neural network" of society. The constituents of the systems are electric wires, optical fibers and electromagnetic waves, as well as a great deal of computers. The aim of the Department of Communication Network Engineering is to foster competent engineers in this promising field of telecommunications. The curriculum is organized so that students can qualify for various national licenses such as an On-the-Ground I-Category Special Radio Operator, or a First-Class Technical Radio Operator for On-the-Ground Services.

◇Fulltime Academic Staff

Title	Name	Research Field
Prof.	SAWADA, Shiro	Theoretical Physics
	INOUE, Tadaaki	Communications Measurement
	ISSHIKI, Hiromi	Biomedical Engineering
Associate Prof.	MANABE, Katsuya	Electromagnetic Theory Microwave Theory and Techniques
	TAKAJO, Hideyuki	Educational Technology Ubiquitous Computing
	SHOHON, Toshiyuki	Coding Theory Communication Engineering
	KUMEKAWA, Kazuya	Computer Networks
	ONO, Akira	Telecommunication Electronic Circuit
	SHIRAISHI, Keiichi	Computer Algebra e-Learning
	KAWAKUBO, Takashi	Field Emission Surface Physics


Wireless Communication Experiment


Optical Fiber Communication


Radar Detection


Computer Network Experiment

◇Curriculum

Classification	Subject	Credits
Compulsory	Applied Mathematics	2
	Probability and Statistics	2
	Applied Physics Ⅰ	2
	Electric Engineering	2
	Information Processing Ⅰ	2
	Information Processing Ⅱ	2
	Digital Circuits Ⅰ	2
	Electric Circuits Ⅰ	2
	Electric Circuits Ⅱ	2
	Electric CircuitsA	2
	Electromagnetics Ⅰ	2
	Electromagnetics Ⅱ	2
	Electronic Circuits Ⅰ	2
	Electronic Circuits Ⅱ	2
	Electric and Electronic Measurements Ⅰ	2
	Electronics	2
	Wireless Communication Engineering Ⅰ	2
	Seminar on Communication Engineering	4
	Fundamental Engineering Exercises	2
	Engineering Exercise	2
	Creative Experiments and Practices	4
	Experiments and Practices	2
	Experiments in Communication Network Engineering	2
	Experiments in Communication Engineering Ⅰ	4
	Experiments in Communication Engineering Ⅱ	4
	Graduation Research	8
Elective	Applied Physics Ⅱ	2
	Information Processing Ⅲ	2
	Electric and Electronic Measurements Ⅱ	2
	Wireless Communication Engineering Ⅱ	2
	Antennas and Propagation Ⅰ	2
	Antennas and Propagation Ⅱ	2
	Communication SystemA	2
	Communication SystemB	2
	Tlecommunications Law Ⅰ	2
	Tlecommunications Law Ⅱ	2
	Computer Networks Ⅰ	2
	Computer Networks Ⅱ	2
	Information Theory	2
	Seminar on Radio Engineering	2
	Data Communications	2
	Optoelectronics	2
	Mathematics for Information Science	2
	Information Security	2
	Network Programming	2
	Internship	1
	Special Lectures Ⅰ	1
	Special Lectures Ⅱ	1
	Pre-research Activity Ⅰ	1
	Pre-research Activity Ⅱ	1
	Pre-research Activity Ⅲ	1
	Research Fundamentals Ⅰ	1
	Research Fundamentals Ⅱ	1
	Research Fundamentals Ⅲ	1
	AI Ⅰ	1
	AI Ⅱ	1
	AI Ⅲ	1
	AI Ⅳ	1

◇Main Experiment Facilities

Room	Main Equipment
Electromagnetic Anechoic Chamber	EMI(Electromagnetic Interference)Receiver, CVCF(Constant-voltage Constant-Frequency)Power Supply, BiLog Antenna, Artificial Mains Network, Absorbing Clamp, Turn Table, Vector Network Analyzer
Applied Electromagnetic Wave Lab.	Radar, Satellite Compass, AIS(Automatic Identification System)Receiver, Radio Direction Measurement Equipment, Radio Transmitter, Radio Receiver
Photonics Lab.	Sampling Oscilloscope, Spectrum Analyzer, EO Converter, OE Converter, OTDR(Optical Time Domain Reflectometer)
3rd Fundamental Communication Eng. Lab.	Pulse Pattern Generator, Error Rate Detector, Optical Spectrum Analyzer
Information Network Exercise Room	Training Equipments for LAN(Local Area Network)Integration(Routers, Switching Hubs, Wireless LAN Access Points, Personal Computers), Microcomputer Development and Training System

Department of Electronic Systems Engineering

In light of the advancements of mechatronics and Information technologies, there is a large demand for engineers in the development and integration of computer science, robotic systems and telecommunications.
The program in our department is designed to offer students many options from various fields such as hardware, software, electronics and communication technologies. We combine theory and practical application in the same course which provides practical laboratory experience. Our goal is to cultivate ingenuity and innovation in our students and provide them with all skills necessary for a successful career in the electronics industry.

◇Fulltime Academic Staff

Title	Name	Research Field
Prof.	NAGAOKA, Shiro	Integrated Circuits
	MISAKI, Yukinori	Robot Engineering
	YAGI, Masakazu	Solid State Physics
Associate Prof.	TSUKIMOTO, Isao	Electronic Circuits
	MIKAWA, Michio	Solid State Physics
	JOHNSTON, Robert Weston	Computer Science
	MORIMUNE, Taichiro	Solid State Physics
Senior Lecturer	SHIMIZU, Tomo	Semiconductor Devices
	IWAMOTO, Naoya	Semiconductor Devices
	ONISHI, Akinari	Assistive Technology
Assistant Prof.	YOSHIOKA, Genta	Human Robot Interaction


Robot Manufacture Experiment using MINDSTORMS


Fundamental Electronic Circuit Experiments in English


Digital Circuit Manufacture Experiment using VHDL (in 5th Grade)


Graduation Work with Region Cooperation (in 5th Grade)

◇Curriculum

Classification	Subject	Credits
Compulsory	Applied Mathematics	2
	Probability and Statistics	2
	Applied Physics Ⅰ	2
	Electric Engineering	2
	Electric Circuits Ⅰ	2
	Electric Circuits Ⅱ	2
	Fundamental Electric Circuits	4
	Electromagnetics Ⅰ	2
	Electromagnetics Ⅱ	2
	Elecronics	2
	Electronic Circuits Ⅰ	2
	Electronic Circuits Ⅱ	2
	Semiconductor Electronics	2
	Semiconductor Device Engineering	2
	Digital Circuits Ⅰ	2
	Digital Circuits Ⅱ	2
	Elecronic Measurements	2
	Control Engineering Ⅰ	2
	Information Processing Ⅰ	2
	Information Processing Ⅱ	2
	Electronic Systems Engineering Seminar	4
	Fundamental Engineering Exercises	2
	Creative Experiments and Practices	4
	Experiments and Practices	2
	Experiments in Elecrtonic Engineering	4
	Experiments in Electronic Engineering Ⅰ	4
	Experiments in Electronic Engineering Ⅱ	4
	Graduation Research	8
Elective	Applied Physics Ⅱ	2
	Electric Circuits Ⅲ	2
	Solid State Physics	2
	Optoelectronics	2
	Electrical and Electronic Materials	2
	Control Engineering Ⅱ	2
	Robot Engineering	2
	Sensor Electronics	2
	Special Lecture in Electronic Systems Engineering	2
	Information System	2
	Communication SystemA	2
	Information Processing Ⅲ	2
	Data Communications	2
	Image Processing Technology	2
	System Engineering	2
	Internship	1
	Special Lectures Ⅰ	1
	Special Lectures Ⅱ	1
	Pre-research Activity Ⅰ	1
	Pre-research Activity Ⅱ	1
	Pre-research Activity Ⅲ	1
	Research Fundamentals Ⅰ	1
	Research Fundamentals Ⅱ	1
	Research Fundamentals Ⅲ	1
	AI Ⅰ	1
	AI Ⅱ	1
	AI Ⅲ	1
	AI Ⅳ	1

◇Main Experiment Facilities

Room	Main Equipment
Common Lab.	Liquid Crysta, Tunable Filters,Cooled CCD Camera,Multispectral Imaging System, Hyperspectral Camera
Measurement Engineering Lab.	Equipment of Supply Current Test to Detect Lead Opens of CMOS ICs, Oscilloscope, Current Probe
Computer Engineering Lab.	Oscilloscope, Radiation Detector, Analog Waveform Processing System
Circuit Design Lab.	Photoelectron Yieid Spectroscopy, UV-VIS NIR Spectrophotometer, Organic Thin Film Deposition Apparatus, Spectroscopic Reflectometer, Laser Micro-machining Apparatus, Atomic Force Microscope
Optoelectronics Lab.	Fluorometer, Quantum efficiency measurement system, Diffraction-grating monochromator, He-Cd laser, Ar ion laser, Cryogenic refrigerator
Electronics Lab.	Infrared Thermal Camera, 3D Printer, 3D Scanner, Tabletop Microscope, Non-Mydriatic Auto Fundus Camera, Pulse Oximeter
Materials Engineering Lab.	Pulsed Laser Depositon System, Sputtering Apparatus, Hall Effect Measurement System, X-ray Diffraction Equipment
Plasma Sinering Lab.	Spark Plasma Sinering System

Department of Information Engineering

The department offers students an opportunity to acquire the theoretical fundamentals of computer science, and learn how to apply this practical knowledge to everyday problems. The department aims to educate the students to be able to perform tasks such as the following:
-Information system development
-Application development and integration, such as sound and image processing, computer networking.

◇Fulltime Academic Staff

Title	Name	Research Field
Prof.	MIYATAKE, Akiyoshi	Educational System Engineering
	TOKUNAGA, Shuichi	Image Processing
	KANAZAWA, Keizo	Image Processing
Associate Prof.	KAWATA, Jun	Plasma Surface Interaction
	KONDOH, Yuji	Computer Algebra
	OKUYAMA, Shingo	Algebraic Topology
	KAWAZOME, Hayato	Plasma Spectroscopy
	SASAYAMA, Manabu	Information Retrieval Machine Translation
	TANIGUCHI, Yasutaka	Theoretical Nuclear Physics
Assistant Prof.	MIYAZAKI, Takahiro	Remote Sensing

◇Curriculum

Classification	Subject	Credits
Compulsory	Applied Mathematics	2
	Probability and Statistics	2
	Applied Physics Ⅰ	2
	Electric Engineering	2
	Electric Circuits Ⅰ	2
	Electronic Circuits Ⅰ	2
	Digital Circuits Ⅰ	2
	Digital Circuits Ⅱ	2
	Information Engineering	2
	Computer Architecture	2
	Information Processing Ⅰ	2
	Information Processing Ⅱ	2
	Software Design and Development	4
	Communicaion Theory	2
	Data Structures and Algorithms	2
	Compiler	2
	Seminar on Information Engineering	6
	Fundamental Engineering Exercises	2
	Information Engineering Exercises	2
	Creative Experiments and Practices	4
	Experiments and Practices	2
	Experiments in Information Engineering	2
	Experiments in Information Engineering Ⅰ	4
	Experiments in Information Engineering Ⅱ	4
	Graduation Research	8
Elective	Applied Physics Ⅱ	2
	Mathematics for Information Science	2
	Numerical Analysis	2
	Electromagnetics	2
	Semiconductor Electronics	2
	System Engineering	2
	System Programming	2
	System Software	2
	Infromation System	2
	Artificial Intelligence Ⅰ	2
	Artificial Intelligence Ⅱ	2
	Digital Image Processing	2
	Database Management System	2
	Computer Networks Ⅰ	2
	Computer Networks Ⅱ	2
	Information Security	2
	Internship	1
	Special Lectures Ⅰ	1
	Special Lectures Ⅱ	1
	Pre-research Activity Ⅰ	1
	Pre-research Activity Ⅱ	1
	Pre-research Activity Ⅲ	1
	Research Fundamentals Ⅰ	1
	Research Fundamentals Ⅱ	1
	Research Fundamentals Ⅲ	1
	AI Ⅰ	1
	AI Ⅱ	1
	AI Ⅲ	1
	AI Ⅳ	1


Simulator of Microcomputer


Network System Integration


3D Content Creation for Virtual Reality


Demonstration in Programming Contest

◇Main Experiment Facilities

Room	Main Equipment
Control Circuit Lab.	3D Input/Output Device(3D Scanner, 3D Milling machine) 3D CAD/CAM software
Engineering Science Lab.	Educational design and prototyping platform, LabVIEW, Electronic Circuit Simulator
Network Lab.	Experiment equipments for network skill acquisition(Router,L2,L3 switch)
Knowledge Information Processing Lab.	The server for analyzing Big Data
ICT Lac.	203.2cm diagonal screen size Integrated Touch Display
Reference Room	AI learning server
Image information processing Lab.	Embedded technology training robot teaching materials
Joint Use Lab.	3D content creation system

Faculty of Advanced Engineering(Bachelor's Degree Program)

The Faculty of Advanced Engineering at Kagawa KOSEN aims to develop analytical, problem-solving skills as well as research ability of students so that they become practical and creative engineers who will play important roles in various industries, and contribute to the regional economy and society through collaborative projects.
To accomplish this goal, the Faculty of Advanced Engineering is comprised of the Courses in Industrial and Systems Engineering Program at the Takamatsu Campus, and the Course in Electronics, Information and Communication Engineering Program at the Takuma Campus.

■Educational Objectives

The educational objectives of the Faculty of Advanced Engineering at Kagawa KOSEN are:

◇ Students will acquire highly specialist knowledge in their engineering fields and develop analytical skills by attending advanced lectures and proceeding their thesis research.

◇ Students will acquire broad knowledge and problem-solving skills from practical experience in other related fields to play leading roles in interdisciplinary areas.

◇ Students will learn ethical issues and responsibilities as engineers through collaborative researches with local educational organizations and companies.

◇ Students will acquire global viewpoints and communication skills in Japanese and English, by participating in workshops and scientific conferences inside and outside of the college.


Advanced Course(Takamatsu Campus)


Advanced Course(Takuma Campus)

Advanced Course in Industrial and Systems Engineering (Takamatsu Campus)

This course has four sub-courses to educate students to be practical engineers with problem-solving skills and the creativity to develop technologies.

■Mechanical Engineering Course

This course is for future mechanical engineers with problem-solving skills and original creativity.

■Electrical and Computer Engineering Course

This course is for future electrical engineers, electronic engineers, computer engineers and researchers.

■Electro-Mechanical Systems Engineering Course

This course is for future mechatronics engineers with well-founded skills who contribute to the human happiness and welfare.

■Civil Engineering Course

This course is for future civil engineers with knowledge of design, planning, disaster prevention and environmental preservation techniques.

◇Curriculum

Classification		Subject	Credits
Liberal Arts	Compulsory	Management Theory	2
		TOEIC Preparation	2
	Elective	Jurisprudence	2
		Reading of Literary works	2
Engineering Basic	Compulsory	Engineer Ethics	2
		Topics in Mathematics Ⅰ	2
	Elective	Modern Physics	2
		Intellectual Property Rights	2
		English for Technical Purpose	2
		Topics in Mathematics Ⅱ	2
		Physical Chemistry	2
		Analytical Chemistry	2
		Applied Physics	2
		Overseas English Program	1
Core Eng. Subjects	Compulsory	Experiments and Practicals Ⅰ	2
		Experiments and Practicals Ⅱ	2
		Thesis Research Ⅰ	6
		Thesis Research Ⅱ	10
		Seminar Ⅰ	2
		Seminar Ⅱ	2
	Elective	Special Lectures	2
		Internship Ⅰ	1
		Internship Ⅱ	2
		Internship Ⅲ	4
		Internship Ⅳ	6

Classification		Subject	Credits
Eng. Subjects of ME Course.	Elective	Internal Combustion Engines	2
		Computational Mechanics	2
		Elasticity and Plasticity	2
		Advanced Strength and Fracture of Materials	2
		Matrix Vibration Analysis	2
		Reliability Engineering	2
Eng. Subjects of EC Course	Elective	Electromagnetic Compatibility	2
		Modern Control Theory	2
		Energy Conversion Engineering	2
		Project Management Theory	2
		Solid State Electronics	2
		Integrated Circuits	2
		Semiconductor Physics	2
		Power Electronics	2
		Information and Communication Engineering	2
		Microwave Engineering	2
		Digital Signal Processing	2
		Knowledge Computing	2
		Image Processing Engineering	2
Eng. Subjects of MS Course.	Elective	Advanced Heat Transfer	2
		Advanced Dynamics	2
		Optimization Theory	2
		Advanced Computer Processing	2
		Advanced Joining Technologies	2
		Advanced Energy Engineering	2
		Advanced Control Engineering Ⅰ	2
		Advanced Control Engineering Ⅱ	2
		Mechatronics	2
Eng. Subjects of CV Course	Elective	Seismic Design	2
		Maintenance Engineering	2
		Structural Analysis in Civil Engineering	2
		Transport Planning	2
		Urban Design	2
		Prevention of Natural Disasters Ⅰ	2
		Environmental Disaster Prevention Engineering Ⅱ	2
		Advanced Fluid Dynamics	2
		Civil Mathematical Planning	2
		Infrastructure Planning	2
		Information Technology and Systems	2
		Introduction to Civil Engineering	2
		Environmental Ethics and Management	2

ME Course…Mechanical Engineering Course
EC Course…Electrical and Computer Engineering Course
MS Course…Electro-Mechanical Systems Engineering Course
CV Course…Civil Engineering Course


Analysis using Motion Capture


Internal Combustion Engine


Water Quality Analysis

Advanced Course in Electronics, Information and Communication Engineering (Takuma Campus)

We provide a consistent curriculum from the associate degree course into the bachelor's degree course. The curriculum subjects consist of " liberal Arts ", " Engineering Basics " and " Field Specialized ".

Courses to enhance specialization in the fields of electronics, information, and communications are aligned to make it possible for studies to continue from the corresponding associate degree course. The course covers all fields of electrical and electronics engineering such as electrical and electronic information communication for the purpose of broadening students expertise.

Thesis research, special research, experiments and exercises are paramount for the program. In thesis research, the chance to research with supervisors collaborating with faculty at university is established. Joint research with local industry to contribute to regional industrial development are also prepared for students. In special research and experiments, students form groups to collaborate with students from the different fields and utilize the specialized knowledge and skills acquired by each individual to develop systems.

We cultivate practical and creative engineers who have a wide range of perspectives that can acquire complex knowledge and advanced skills in specialized fields with multidisciplinary capacity. Furthermore, our students also acquire advanced communication skills, self-sufficiency, high trouble shooting and problem solving capabilities throughout these studies.

◇Curriculum

Classification		Subject	Credits
Liberal Arts	Compulsory	Communicative English Ⅰ	2
		Communicative English Ⅱ	2
	Elective	Advanced Japanese Literature	2
Engineering Basic	Compulsory	Engineer Ethics	2
	Elective	Advanced Physical Science	2
		Topics Applied Mathematics	2
		Intellectual Property	2
		English for Engineers	2
		Engineering Mathematics	2

Classification		Subject	Credits
Common Special Subjects	Compulsory	Thesis Research Ⅰ	6
		Thesis Research Ⅱ	4
		Experiments and Exercise Ⅰ	4
		Experiments and Exercise Ⅱ	6
	Elective	Quantum Mechanics	2
		Introduction to Information Technology	2
		Digital Signal Processing	2
		Applied Electromagnetics	2
		Graph Theory	2
		Information Networks	2
		Specialized Electronic Circuits	2
		Industrial Instrument Engineering	2
		System Control Engineering	2
		Algorithms and Data Structures	2
		Multi-Media Engineering	2
		Image Processing	2
		Special Lectures	2
		Communication Engineering	2
		Radio and Light Wave Engineering	2
		Optical Communications	2
		Specialized Radio Engineering	2
		Applied Solid State Physics	2
		Integrated Electronics	2
		Digital Control Engineering	2
		Object Oriented Programming	2
		Applied Network Programming	2
		Database Design	2
		Internship Ⅰ	1
		Internship Ⅱ	2
		Internship Ⅲ	4
		Internship Ⅳ	6

Stockholm International Youth Science Seminar, SIYSS
(Image provided courtesy of the Japan Prize Foundation)

The world congress of Imagin Cup 2015 at Microsoft Corporate headquarters.
(Image provided courtesy of Microsoft Corp.)

An international conference MJIC2020

International Affairs

◇Academic Exchange Agreement with Overseas Institutions

University / Faculty	Country / Region	Since
Dongyang Mirae University (DMU)	South Korea	Aug. 2005
Danang University of Technology (DUT)	Vietnam	Jun. 2009
Cheng Shiu University (CSU)	Taiwan (R.O.C.)	Dec. 2009
College of Engineering, Seoul National University (SNU)	South Korea	Jun. 2010
Universiti Teknologi MARA (UiTM)	Malaysia	Aug. 2010
Christchurch Polytechnic Institute of Technology (CPIT)	New Zealand	Jun. 2012
University of Caen Basse-Normandie	France	Jul. 2013
Rajamangala University of Technology Thanyaburi (RMUTT)	Thailand	Aug. 2014
Thai-Nichi Institute of Technology (TNI)	Thailand	Mar. 2015
Universite Francois-Rabelais Tours (UFRT)	France	Dec. 2015
Universiti Sains Malaysia (USM)	Malaysia	Jul. 2018
Dalian Neusoft University of Information (DNUI)	China	Dec. 2018
National Cheng Kung University (NCKU)	Taiwan (R.O.C.)	Mar. 2021

◇Organization of International Symposiums/Seminar (2015-2021)

◇ "International Symposium on Geo-Environment Engineering (GEE) ," May 2015, May 2016 and May 2018
◇ "International Civil and Infrastructure Engineering Conference (InCIEC)," Shah Alam, Malaysia, Sep. 2015.
◇ "Eco-Energy and Materials Sciences and Engineering Symposium", Dec. 2016, and April 2018
◇ "International Conference on Nanoscience & Nanotechnology" Feb. 2014-2018, Mar. 2019 and April 2021
◇ "International Seminar on Electronics Engineering and NANO Technology", Mar.2017
◇ "International Conference on Creativity, Inovation, and Invention on Digital Technology(CIIDT)", Dec 2018
◇ "NIT-NUU Bilateral Academic Conference.", Sep. 2019, and Sep. 2021

◇International Exchange and Academic Activities by Faculties and Students(2015-2021)

◇ International internship at local offices of Japanese firms; in Thailand (2015), Hong Kong (2016), Vietnam(2015) Malaysia(2015, 2016 and 2017).
◇ "Engineering Class in English" by Visiting Professors from overseas; Takamatsu Campus (Dec. 2017) and Takuma Campus (Jan. 2018) .
◇ Global Engineer Training Program: to UiTM (Mar. 2015), to UiTM (Mar. 2016), to UFRT (Sep. to Dec. 2016), to UiTM (Mar. 2017), to RMUTT (Mar. 2017) ,to UiTM (Mar. 2018) ,to UFRT (Oct. to Dec. 2018), and to RMUTT (Sep. 2019), and to UiTM (Mar.2020), and to UFRT (Mar.2020)
◇ Global Engineer Training Program: from RMUTT (Apr. 2015), from UFRT (Apr. to Jun. 2016), from UiTM (Mar. 2017), from UFRT (Apr. to Jun 2018), from RMUTT (May. to Jun./Jul. 2018), and from UFRT (Apr. to Jun. 2019), from RMUTT (May. to Jul. / May. to Aug. / Jun. to Aug. 2019, Nov. 2019 to Jan. 2020)

◇International Students at NITKC

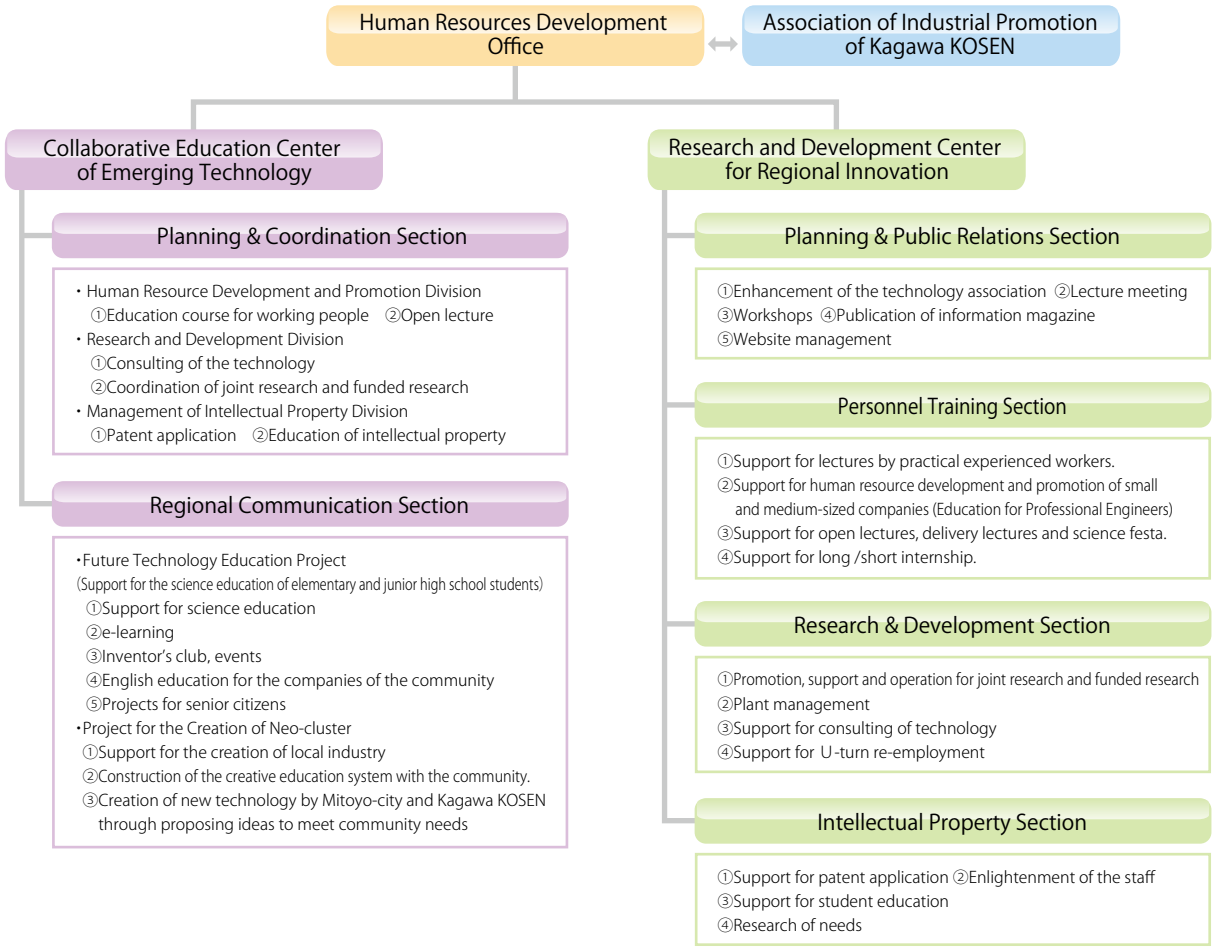
■Number of International Students Entering Mid-course/Advanced course of NITKC in Each School Year

Country / School Year	Bangladesh	Brazil	Cambodia	China	Colombia	India	Indonesia	Kenya	Korea	Lao PDR	Malaysia	Mongolia	Philippines	Sri Lanka	Thailand	Uganda	Viet Nam	Pakistan	Madagascar	Total
2022							1				1									2
2021									(1)	1	1									3
2020												1								1
2019											2	1			(1)				1	5
2018												3								3
2017											2	2			1					5
2016											4	1			1					6
2015									(2)	1		1						1		5
1985~2014	7	1	4	5	1	1	13	1	2	8	72	6	9	7	10	2	11			160
Total	7	1	4	5	1	1	14	1	5	10	82	15	9	7	13	2	11	1	1	190

( ):Advanced course

Human Resources Development Office

◇Organization Chart of Human Resources Development Office



◇Activities of Academic-industrial Alliance

■Association of Industrial Promotion of Kagawa KOSEN

Established on 28 August, 2009.
Purpose:

We utilize our knowledge, materials and human resources. We would like to develop the local industries and enhance the partnership with them, through the many operations such as exchanging technologies and information. We would like to contribute to the promotion of the education and research in Kagawa KOSEN

Description of business:

Promotion of technology development by the academic-industrial alliance. Development of local industries. Lecture meeting about technologies, lecture class, Workshop, Publish the information report, Consulting on technologies, Exchange information, Support for education of company workers, Promotion support projects of cooperative research, Internship, Recruiting fairs, Collaborative education, Promotion of education and research of Kagawa KOSEN etc.

■Shikoku KOSEN Center for Innovative Technologies

Purpose:

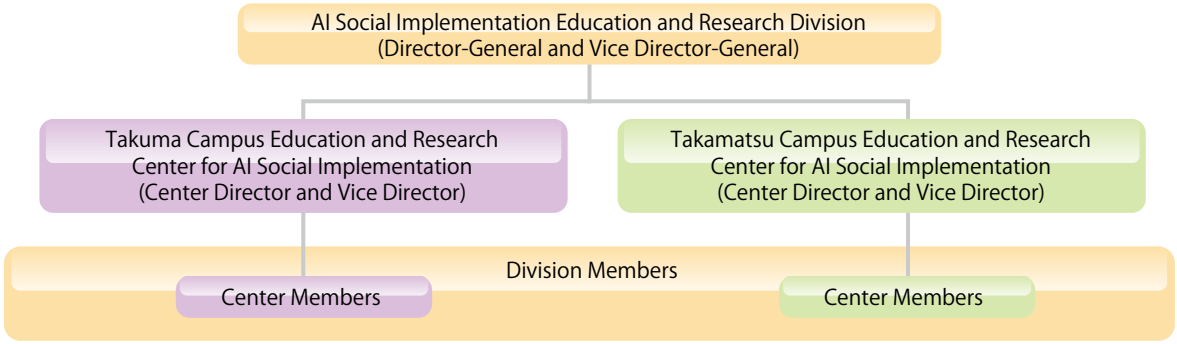
Anan, Kagawa, Niihama, Yuge and Kouchi KOSENs utilize the potentials of the colleges and aspects of the Shikoku-area, and spread out the activities of the academic-industrial alliance to contribute to the stimulation and promotion of the local area.

Business outline:

1. Department of the creation of innovation
   Matching between the needs and the technology seeds of KOSENs in Shikoku-area. Consulting the technologies. Activities of academic-industrial alliance such as joint research.
2. Department of the Intellectual Property
   Management and education of Intellectual Property in coalition for KOSENs in Shikoku-area.
3. Department of coalition for KOSENs in Shikoku-area.
   Other activities to achieve the purpose of the center.

AI Social Implementation Education and Research Division

◇AI Social Implementation Education and Research Division Organization Chart



Since the conclusion of an agreement of cooperation between the Matsuo Laboratory at the University of Tokyo (Mitoyo, Kagawa) and the National Institute of Technology Kagawa College (NITKC) on August 30, 2018, NITKC has been actively promoting development and social implementation of AI through Deep Learning Methods.
April 1, 2020, the NITKC AI Social Implementation Education Research Division was established to foster creative ideas amongst all the National Institute of Technology college students and researchers who conduct basic and applied research with AI; through the practice of social implementation, joint research with regional companies, and by human resource development, participants will have the power to implement their ideas in society.
The division will actively provide educational programs about AI and its underlying data science courses to all the students of the National Institute of Technology colleges by using the educational and research resources of the University of Tokyo' s Matsuo Laboratory and NITKC' s research achievements.

Conclusion of the Agreement of Cooperation between Mitoyo Matsuo Laboratory of the University of Tokyo and NITKC (August 2018, Mitoyo City Hall)

The NITKC AI Social Implementation Education and Research Division will promote education through the following activities:
(1) Research Development for AI student researchers.
(2) Community Education (social implementation) in cooperation with local areas.
(3) Accessible Lectures (visiting and remote) related to human resource development in AI technology
(4) Regional Cooperation with the Mitoyo AI Social Promotion Organization (MAiZM)*

The NITKC AI Social Implementation Education and Research Division will establish the "Takuma Campus Education and Research Center for AI Social Implementation" and the "Takamatsu Campus Education and Research Center for AI Social Implementation" to promote AI education and social implementation on each campus.

***The Mitoyo AI Social Promotion Organization (MAiZM) https://www.maizm.or.jp/**

On April 1, 2019, MAiZM was established in cooperation with Prof. Yutaka Matsuo from the University of Tokyo and with NITKC.
The organization will be actively promoting AI(DL) education for NIT students and AI(DL) applications.

◇Members

AI Social Implementation Education and Research Division	Director-General	MISAKI, Yukinori (Professor, Department of Electronic Systems Engineering)
	Vice Director-General	TOKUNAGA, Hidekazu (Professor, Department of Electro-Mechanical Systems Engineering)
Takuma Campus Education and Research Center for AI Social Implementation	Center Director	MISAKI, Yukinori (Professor, Department of Electronic Systems Engineering)
	Center Vice Director	KANAZAWA, Keizo (Professor, Department of Information Engineering)
Takamatsu Campus Education and Research Center for AI Social Implementation	Center Director	TOKUNAGA, Hidekazu (Professor, Department of Electro-Mechanical Systems Engineering)
	Center Vice Director	MURAKAMI, Yukikazu(Associate Professor, Department of Electrical and Computer Engineering)

Infrastructure Maintenance Educational Center

Infrastructure Maintenance Educational Center at Kagawa Kosen (iMec Kagawa) was established on April 1, 2020. It was aimed to carry out recurrent education and to develop human resources on maintenance and management of civil infrastructure using the education research resources at Kagawa Kosen.

The deterioration of civil infrastructure such as roads and bridges has become social issues, and it is necessary to develop engineers for maintenance. iMec Kagawa offers practical education which combines e-learning and lecture-style courses on maintenance, skill training courses on damage inspections and non-destructive tests and experience-based learning courses using educational materials from actual deteriorated bridges. These educations are offered to students, local government officials and private-sector engineers. Those who have completed the prescribed course will be given qualifications such as the bridge inspection engineer registered with the Ministry of Land, Infrastructure, Transport and Tourism. 'The development of KOSEN-type academic-industrial cooperation for infrastructure maintenance human resource development' has been adopted by 'Sustainable industry-academia joint human resource development system construction project' supported by the MEXT (Ministry of Education, Culture, Sports, Science and Technology) from FY 2019. Kagawa Kosen builds the basis for the recurrent education in community in collaboration with Maizuru Kosen, Fukushima Kosen, Nagaoka Kosen, and Fukui Konsen.

Organizational chart

(Central core for the recurrent education)
Maizuru Kosen

(Basis for the recurrent education)
Fukushima Kosen
Nagaoka Kosen
Fukui Kosen
Kagawa Kosen

iMec Kagawa
Director
Vice Director
Members

Facilities

Following structural members collected from actual deteriorated bridges were placed in practical training facility for infrastructures.


Overview of the space


Reinforced concrete slab


Reinforced concrete girder


Steel rivet girder


Steel truss bridge and supports


Non-destructive inspection by electromagnetic wave radar

◇Staffs

Director	HAYASHI, Kazuhiko (Associate Professor, Civil Engineering Department)
Vice director	IRIE, Masaki (Program-Specific Teacher)
Members	HASEGAWA, Yuki (Senior Lecturer, Civil Engineering Department)
	MATSUMOTO, Masayuki (Assistant Professor, Civil Engineering Department)

Research

◇Grants-in-Aid for Scientific Research

A feasibility study on introduction of stock-management system to irrigation facilities in Vietnam
Audio Augmented Reality and Extension of Audio Communication Ability Based on Small Data Machine Learning Theory
Utilize and Characterize human skill for Sports-coaching.
Mechanistic Study and Development of Catalytic Palladium Enolate Umpolung Reactions
Elucidation of the effect of adding trace amounts of oxygen in decomposition of polymers using hydrogen radicals
Study on a fishway design suitable for the upstream migration for reproduction of the endangered loach (Parabotia curtus) in paddy field areas
Identification of missing data mechanisms peculiar to software development data
Research on Interview Dialogue to obtain User's good points by Conversation Robot
Development of a Bunraku Robot which can be Operated by One Person
Development of Zero Liquid and Waste Discharge Treatment for Dye Factory Wastewater by Biological and Coagulation Process.
Piezo Resistance Effect of p-type Germanium
Development of an affective monitor system for evaluating Web class students
Heart rate monitoring system attaching to finger nail: experiments in daily life environment
Determining the inflationary particle content through the cosmological collider physics
A study of signal processing of hammering inspection test with deep learning
Unification of Deep Learning and Generalized Mathematical Model for Independence-Based Audio Source Separation
Study on Improving the Seismic Performance of Transmission Tower Based on Additional Damping by Using the Control Device for the Earthquake
Development of high durable reinforcing method of old embankment for heavy rainfall and earthquake
Estimation of the quantitative effect of sea cultivation aimed at dissapearnce of nutritional insuffiency at shallow water area
A Study of children mobility from the perspective of Children Independent Mobility (CIM) and traffic safety
Development of Co-operative Robot for Flexible Manufacturing System Satisfying both High-productivity and Safety
Experimental study for the general use of silicate-based surface penetrants
Comprehensive research on the application of microsatellite to bachelor's degree education and the development of its evaluation method
A Study on the Creation of Novel Expressions under Wartime Censorship : Focusing on Osamu Dazai
Moduli of representations and related topics (4)
Dark matter search using the cosmic microwave background
Research on High-reliable Cooperative Operation for Multiple-Mobile-Robot System using Blockchain and Distributed learning
Research on BMI operation screen that can control autonomous wheelchair more freely
A generalization of the Monge-Ampere equation to almost complex geometry and its new potential applications
Computing an arbitrary singular value of a large tensor sum
Improvement of STEAM teaching material production method that changes color depending on temperature for practical use in elementary schools
8 another research study, Number of Research Studies 39 , Total Funds 25,270,700Yen

◇Commissioned Research

Long-term pulsewave sensing based on micro-strain of fingernails
A Collaboration Project between Mitoyo City and The National Institute of Technology, Kagawa College
Installation test of a portable fishway for the upstream migration of Oncorhynchus keta and Oncorhynchus gorbuscha
Demonstration of technology for collecting mountain and offshore disaster prevention data using 2U CubeSat equipped with LPWA (LoRa) module
Development of Renewable Storage Energy System using New Lead-Acid Battery
Number of Research Studies 5, Total Funds 9,757,400Yen

◇Cooperative Research with Private Sector

Development of High-Performance Lead-Acid Batteries
Development of New Lead-Acid Batteries
Extraction Technology of Metal from Abandoned Coated Wires
Formation of fine structure by atmospheric pressure plasma and examination of oil and water repellency
Feasibility of industrial methane production in the subsurface environment via microbial activities
On Share Cyber Security Information
Bleeding sound reduction for music signals applicable in underdetermined situation
Study on development of wireless river monitoring system
Development of semi-solid slurry generator
Vital sensors attached to fingernail surface
Study on durability life prediction method of cable conductor/shield wire for moving parts.
A basic study of car stop bollard made by precast concrete based on analysis of experimental data of laboratory tests
Development of a monitoring system for seniors and infants using highly sensitive respiration sensors - For the purposes of overnight and home care monitoring for new coronavirus infection (COVID-19)
Development of an AI-powered fruit and vegetable sorting machine
The development of the convenient device system for water use and disaster mitigation including lowering the water level in the small and middle scale irrigation ponds
Research on image processing techniques using deep learning
Research on improving the accuracy of various sensors using AI
Study of Fluorine Treatment Technology
8 another research studies, Number of Research Studies 26, Total Funds 7,977,000Yen

◇Other Competitive Funds and Grants

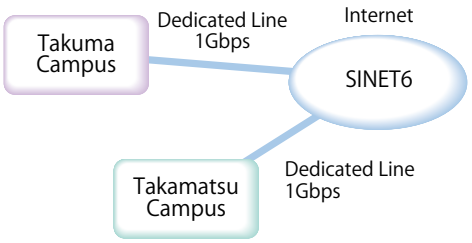
Wearable sensors without skin-contact: development of the sensor element to detect micro-strain of fingernails
Development of a portable fishway system applicable to weirs
The analysis of operational issue of stay-type evacuation shelter during COVID-19 spread
Analysis of Relative Characteristics for Multiple Musical Instruments Based on Matrix Decomposition Theory and Deep Learning
Experiment and Verification on Data Storage System using LSTM for Inheritance of Excellent Technician's Skills (Spinning Process)
Disaster prevention of houses near the pond's dike and visualization by AI technology
Position Sensor-less Control of IPMSM with High Load Torque Capacity Under Tuning-less Condition
4 another research studies, Number of Research Studies 11, Total Funds 19,981,200 Yen

Facilities

◇Networking and Computing Service Center

■Network Infrastructure

Each campus has a dedicated connection with 1Gbps to the Science Information NETwork (SINET).



Network Between Two Campuses and SINET6

■Computing Service

○Takamatsu Campus

Automatically-recoverable computers are installed in the facilities and are used for education on computer literacy and academic research. 47 client computers for the first training room; 50 client computers for the second training room; 18 client computers for the third training room; and 54 client computers for the multimedia room.

Takamatsu Campus Second Training Room

○Takuma Campus

Automatically-recoverable computers are installed in Second Seminar Room, Cyber Lab, Advanced Information Lab, and Multimedia Learning Lab, and are used for education on computer literacy and academic research. All of the students can take advantage of the Internet using e-mail and WWW.

Takuma Campus Second Seminar Room

◇Human Resources Development Office

This office consists of the Collaborative Education Center of Emerging Technology and the Cooperative Research & Development Center. Each center has many laboratories and a lot of equipment. These are used for students' experiment programs, the experiments for the graduation thesis of the associate degree, the cooperative research, and the commissioned research. The equipment is as follows: RF magnetron sputtering system; Plasma CVD; Vacuum evaporation system; Electron beam lithography system; X-ray diffraction system for thin-film crystalline analysis; Scanning electron microscope; Surface profiler; General-purpose FEM analyzer; X-ray fluorescence spectrometer; X-ray diffractometer; Scanning probe microscope; Ellipsometer; Absorption spectrophotometer; Scratching tester.

Scanning Electron Microscope

Digital_Microscope

Students

■Number of Students

◇Department

Classification		Admission Capacity	Enrollment 1st	2nd	3rd	4th	5th	Total
Departments	Department of Mechanical Engineering	40	42(1)	39(2)	39(4)	48(1)	42	210(8)
	Department of Electrical and Computer Engineering	40	42(3)	44(4)	47(6)	39(6)	37(4)	209(23)
	Department of Electro-Mechanical Systems Engineering	40	43(1)	44(2)	39(4)[1]	43(1)[1]	37(4)	206(12)[2]
	Department of Civil Engineering	40	42(10)	41(12)	40(1)[1]	43(9)	42(8)[1]	208(40)[2]
	Department of Communication Network Engineering	40	42(11)	36(8)	38(8)	43(11)[1]	34(6)	193(44)[1]
	Department of Electronic Systems Engineering	40	42(1)	43(4)	45(5)	38(6)	34(7)	202(23)
	Department of Information Engineering	40	42(5)	45(14)	42(8)	42(9)	40(4)	211(40)
	Total	280	295(32)	292(46)	290(36)[2]	296(43)[2]	266(33)[1]	1,439(190)[5]

◇Faculty of Advanced Engineering

Classification		Admission Capacity	Enrollment 1st	2nd	Total
Course	Advanced Course in Industrial and Systems Engineering	24	31(4)	30(2)	61(6)
	Advanced Course in Electronics,Information and Communication Engineering	18	19(1)	19(5)[1]	38(6)[1]
	Total	42	50(5)	49(7)[1]	99(12)[1]

( ) Female,
[ ] Overseas Students
As of May. 1, 2022

■Clubs and Associations of People Sharing Common Interests

◇Sports Clubs

Baseball Club
Track & Field Club
Table Tennis Club
Judo Club
Kendo Club
Yacht Club
Volleyball Club
Basketball Club
Swimming Club
Tennis Club
Soccer Club
Softball Tennis Club
Badminton Club
Handball Club
Shorinji-Kenpo Club

◇Societies

Calligraphy Society
Cheer Team
Literature Society
Painting Society
Photograph Society
SPOT Society

◇Cultural Clubs

Photography Club
Brass Band Club
English Club
Light Music Club
Computer Club
Painting Club
Mechanical System Club
Science Club
Future Car Club
Chorus Club
Sado & Kado Club
Radiotelegraphy Club
Shogi Club
Original Comics Club
Go & Shogi Club
Space Development Research Club

Dormitories

■Seiun-ryo（Takamatsu Campus）

Takamatsu Campus has accommodations for students called Seiun-ryo, which consists of three buildings: South Dormitory, North Dormitory and West Dormitory. Male boarders stay at North and South Dormitory and female boarders use West Dormitory

- South Dormitory 4-story building 57 private rooms(9㎡), 2 private rooms(13.5㎡), 1 shared room with 2 beds etc(24㎡), 1 shared room with 2 beds etc(13.5㎡)
- North Dormitory 3-story building 29 private rooms(11㎡), 1 private rooms(15㎡), 24 shared room with 2 beds etc(15㎡)
- West Dormitory 3-story building 23 private rooms(10㎡), 8 shared room with 2 beds etc(15㎡)
- Common rooms a-study room, a seminar room to study Japanese, lounges with a kitchenette, laundry room, bath room and a cafeteria

◇Number of Dormitory Students

School Year	1st	2nd	3rd	4th	5th	Faculty of Advanced Engineering	total
No. of Dorm studs	34(4)	30(6)	29(4)〈2〉	26(3)〈1〉	12(0)〈1〉	0(0)	131(17)〈4〉

( ) : Number of Female Students within Total, < > Number of Overseas Students within Total

As of May 1, 2022

West Dormitory & North Dormitory

South Dormitory

■Shippo-ryo・Shiun-ryo（Takuma Campus）

Takuma Campus has two block sets of dormitory buildings, one of which is "Shippo-ryo" and the other is "Shiun-ryo". The dormitory accommodations consist of three buildings, which are called Second, Third and Fourth Block. Presently, male students stay at Second and Third Block in Shippo-ryo, while female students use Fourth Block in Shiun-ryo.

- Shippo-ryo (Takuma Campus) Dormitory 2: 4-story building 26 private rooms(13.5㎡), 9 shared room with 2beds etc(27㎡)
  Dormitory 3: 5-story building 46 private rooms(9㎡), 69 shared room with 2 beds etc(18㎡)
- Shiun-ryo (Takuma Campus) Dormitory 4: 5-story building 12 private rooms(9㎡), 38 shared room with 2 beds etc(18㎡)
- Common rooms Study hall, a computer room, Lounge, lounges with a kitchenette, laundry room, bath room and a cafeteria

◇Number of Dormitory Students

School Year	1st	2nd	3rd	4th	5th	Faculty of Advanced Engineering	total
No. of Dorm studs	46(5)	54(9)	42(7)	35(7)〈1〉	22(3)	7(0)〈1〉	206(31)〈2〉

( ) : Number of Female Students within Total, < > Number of Overseas Students within Total

As of May 1, 2022

Shippo-ryo & Shiun-ryo

Cafeteria

After Graduation

■Employment or Academic Situation

As of Aplil. 1, 2022

◇Takamatsu Campus

	Classification	Number of Graduates	Number of the Students who Further their Education	Number of Employed	Number of the Other	Job Offered Companies
Departments	Department of Mechanical Engineering	36	8	27	1	830
	Department of Electrical and Computer Engineering	40	22	18	0	
	Department of Electro-Mechanical Systems Engineering	30	10	19	1	
	Department of Civil Engineering	37	17	18	2	
	Total	143	57	82	4	
Course	Advanced Course in Industrial and Systems Engineering	36	4	32	0	

◇Takuma Campus

	Classification	Number of Graduates	Number of the Students who Further their Education	Number of Employed	Number of the Other	Job Offered Companies
Departments	Department of Communication Network Engineering	34	7	27	0	549
	Department of Electronic Systems Engineering	40	14	25	1	
	Department of Information Engineering	38	24	10	4	
	Total	112	45	62	5	
Course	Advanced Course in Electronics, Information and Communication Engineering	20	4	15	1	

Campus Map

Takamatsu Campus

1 Administration and Department of General Education
2 Department of General Education
3 Department of Mechanical Engineering
4 Machine Shop
5 Department of Electrical and Computer Engineering
6 Department of Electro-Mechanical Systems Engineering
7 Department of Civil Engineering and Lecture Rooms
8 Advanced Course
9 Library
10 Networking and Computing Service Center
11 Research and Development Center for Regional Innovation
12 Gymnasium1
13 Gymnasium2
14 Budo-jyo(Gymnasium for Martial Arts)
15 Training Room for Sports
16 Multi-purpose Space
17 Meeting Place for the Staff
18 Clubrooms①
19 Clubrooms②
20 Wind Tunnel Laboratory
21 Jikyo-kaikan(Welfare Facilities)
22 Wakei-kan(Site of a Training Camp)
23 Seiun-ryo(North Dormitory)
24 Seiun-ryo(South Dormitory)
25 Seiun-ryo(West Dormitory)
26 Seiun-ryo(Dining Hall of Dormitory)
27 Swimming Pool
28 Athletic Field
29 Handball Court
30 Baseball Field
31 Tennis Courts
32 Tennis Court
33 Practical training facility for infrastructures

Takuma Campus

1 Administration Building
2 Faculty Building1
3 Faculty Building2
4 Faculty Building3
5 Multimedia Building
6 Advanced Course Building

7 Lecture Building1
8 Lecture Building2
9 Library·Student·Affairs·Career·Support·Nurse Station
10 Dormitory Administration
11 Shippo-ryo②(Dormitory)
12 Shippo-ryo③(Dormitory)
13 Shiun-ryo(Dormitory)
14 East Dormitory
15 West Dormitory
16 Boiler Room of Dormitory
17 Warehouse for Dormitory
18 Bathhouse for Dormitory
19 Gymnasium1
20 Gymnasium2
21 Martial Arts Gymnasium
22 Reserve Student Building
23 Warehouse for Physical Education
24 Building for the Swimming Pool
25 Student Commons Building
26 Reserve Faculty Building
27 Museum of Technology
28 Guard's Room
29 Garage
30 Housing for the Staff
31 Swimming Pool
32 Baseball·Soccer Field
33 Athletic Field
34 Tennis Courts

Accounting

◇Revenue and Expenditure（2021）

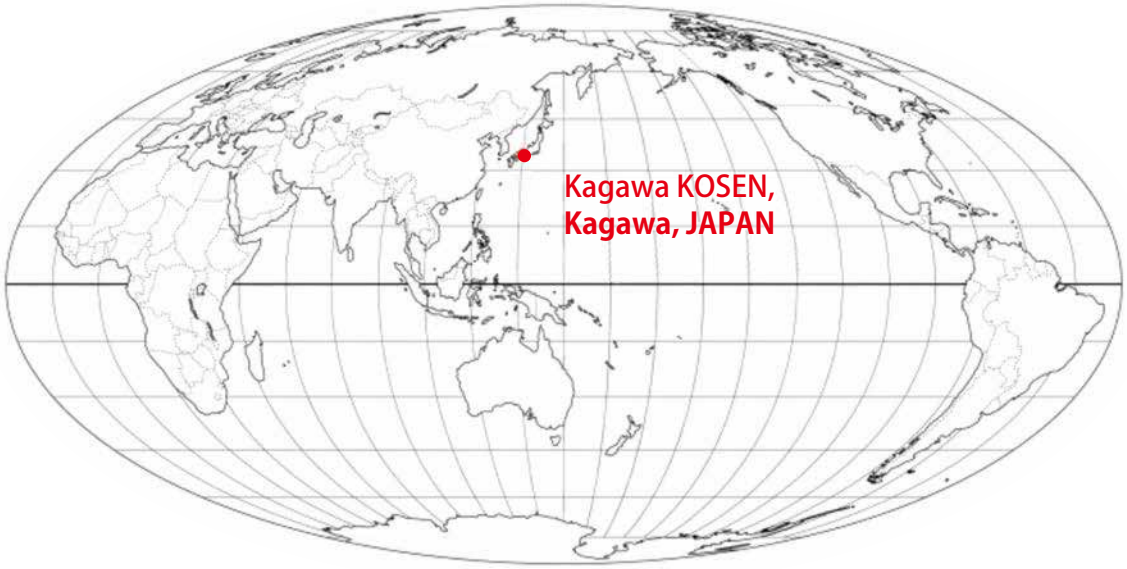
Revenue (a monetary unit：1,000yen)

Grant for working Expenditure	94,721
Facilities Improvement Expenses	318,458
Self-Revenue	
Tuition and Entrance Examination Fee	393,131
Miscellaneous Revenue	4,878
Industry-University Cooperation Research Revenue and Donation	41,989
Other Subsidy	14,283
Total	867,460

Expenditure (a monetary unit：1,000yen)

Educatioal Research Expenses	450,593
General Administrative Expenses	51,706
Facilities Improvement Expenses	318,458
Industry-University Cooperation Research and Donation Project Expenses	25,882
Other Subsidy	13,239
Total	859,878

Access from International Airports to Kagawa KOSEN



1 Narita International Airport(Tokyo) ⇒ (Narita Express) ⇒ JR Tokyo Station ⇒ (Tokaido Shinkansen) ⇒ JR Okayama Station ⇒ (Marine Liner) ⇒ JR Takamatsu Station

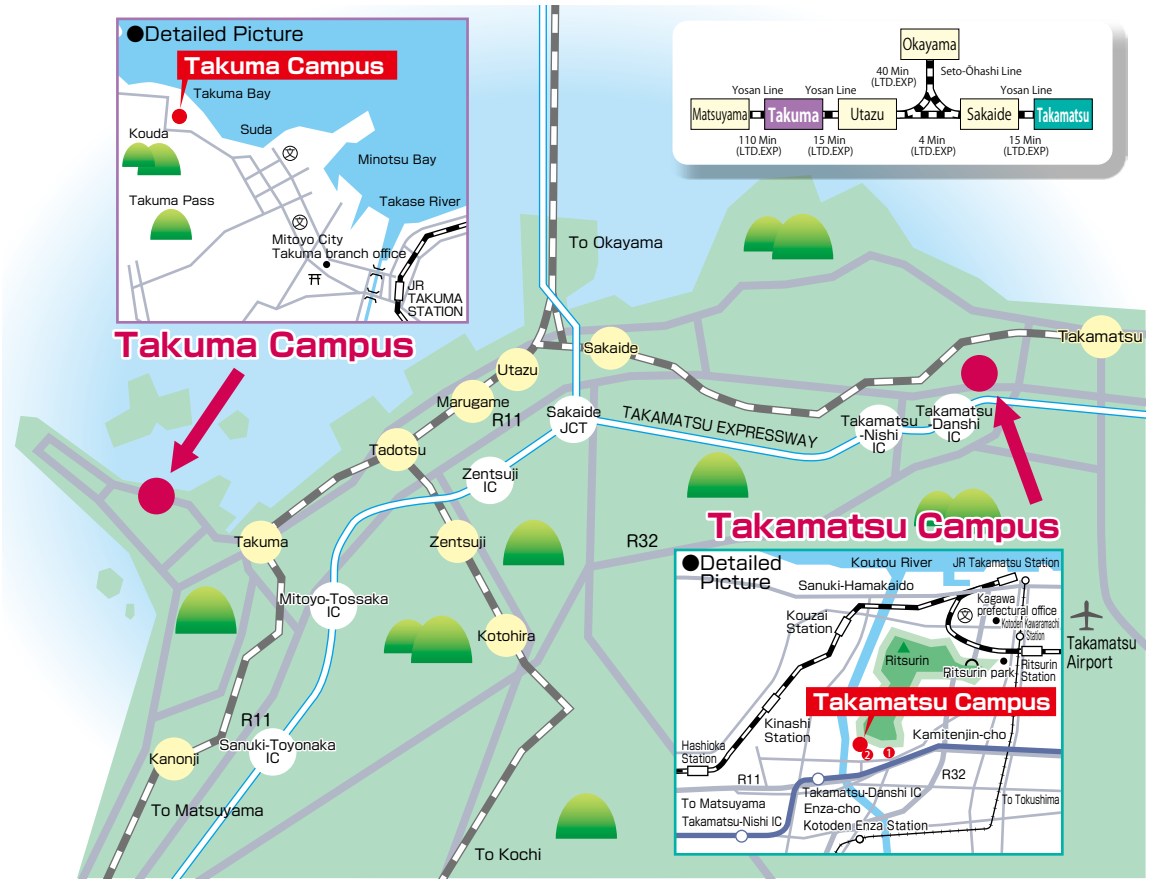
2 Tokyo International Airport(Tokyo) ⇒ (All Nippon Airways , Japan Airlines) ⇒ Takamatsu Airport ⇒ (Limousine Bus) ⇒ JR Takamatsu Station

3 Kansai International Airport(Osaka) ⇒ (Limousine Bus) ⇒ JR Takamatsu Station

4 Kansai International Airport(Osaka) ⇒ (Haruka Express) ⇒ JR Shin-Osaka Station ⇒ (Sanyo Shinkansen) ⇒ JR Okayama Station ⇒ (Marine Liner) ⇒ JR Takamatsu Station

Direct access from Takamatsu Airport or JR Takamatsu Station to NITKC is only 20 minutes by car.

Access Map



Takuma Campus

■From JR Takuma Station (Yosan Line)

20 minutes by car
Mitoyo City Community Bus for Nabuto on Takuma line /for Ohama on Takuma-Mino line
→ 1 minute walk from Kagawa KOSEN mae bus stop

■From Takamatsu Expressway IC

20 minutes by car from Mitoyo-Tossaka IC
30 minutes by car from Sanuki-Toyonaka IC

■From Takamatsu Airport

60 minutes by car

Address

551 Kohda, Takuma-cho, Mitoyo, Kagawa
769-1192 Japan
+81-875-83-8506

Takamatsu Campus

■From JR Takamatsu Station

30 minutes by car
Kotoden Bus(No.5 bus stop) for Ritsurin Garden, Mimaya-Prefecture Swimming Pool → 1 minutes walk from Kagawa Kosen mae bus stop❷
25 minutes by car
Kotoden Bus(No.5 bus stop) for Yusa-Iwasaki, Yusa-Ikenishi or Ikenishi-Konanrakuyu→ 10 minutes walk from Koyama bus stop❶

■From Takamatsu Expressway IC

7 minutes by car from Takamatsu-Nishi IC
5 minutes by car from Takamatsu-Danshi IC

■From Takamatsu Airport

20 minutes by car

Address

355 Chokushi-cho, Takamatsu, Kagawa
761-8058 Japan
+81-87-869-3811

National Institute of Technology, Kagawa College

［Kagawa KOSEN］

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