

APPLICATION GUIDELINES
Master's Program, Department of Engineering
Graduate School of Sustainability Science, Tottori University
Special Green Sustainable Chemistry Program in Collaboration
with Southwest Asia for 2026 Special Entrance Examination
- April Admission -

The Department of Engineering of the Graduate School of Sustainability Science, Tottori University (Special Green Sustainable Chemistry Program in Collaboration with Southwest Asia) recruit students who wish to study Engineering according to the following guidelines.

1. Courses and Number of Enrollments

Courses	Number of Enrollments
Mechanical and Aerospace Engineering	a few
Information and Electronics	a few
Chemistry and Biotechnology	a few
Social Systems and Civil Engineering	a few

2. Qualifications for Application

Applicants must fulfill one of the criteria given from 1 to 8 below.

1. Graduated or expected to graduate from a four-year university program on or before the end of March 31, 2026.
2. Awarded or expected to be awarded a bachelor's degree by the National Institution for Academic Degrees and Quality Enhancement of Higher Education following the School Education Law Article 104 Clause 7 on or before the end of March 31, 2026.
3. Have completed or expected to complete 16 years of formal education in a foreign country on or before the end of March 31, 2026.
4. Have completed or expected to complete 16 years of formal education in a foreign country on or before the end of March 31, 2026 by completing Correspondence Education courses provided by the country in question while residing in Japan.
5. Have completed or expected to complete a program provided by an educational institution that owns degree programs offered in foreign countries (only the program that grants the diploma for 16 years of formal education in the said foreign country), which is also recognized as a formal educational institution in the said county while authorized by the Ministry of Education, Culture, Sports, Science and Technology (hereafter called MEXT) on or before the end of March 31, 2026.
6. Have been awarded or expected to be awarded a degree equivalent to a bachelor's by completing a program duration of which is more than three years (includes the case of finishing 16 years of formal education in a foreign country by completing Correspondence Education courses provided by the country in question while residing in Japan, and the case of obtaining degree specified by (5) when graduating from an educational institution recognized by the foreign country in question) at a university or other form of school in a foreign country (limited to the institutions with their educational quality such as education and research activities recognized by the evaluators approved by the government of the foreign country in question or other relevant authorities, or institutions recognized as its equivalent by MEXT) on or before the end of March 31, 2026.

7. Have completed an upper-level course of a specialized training college (limited to the course duration of which is more than four years and meets other requirements provided by MEXT), which is specially approved by MEXT, after the date provided by MEXT or be expected to complete the course mentioned above before the end of March 31, 2026.
8. Specially recommended by MEXT (Public notice Item 5 by Ministry of Education in 1953)

Note.

1. The Department of Engineering, Graduate School of Sustainability Science, Tottori University (Special Green Sustainable Chemistry Program in Collaboration with Southwest Asia), offers all lectures in English.
2. Since this program, including lectures and research guidance, is conducted in English, applicants must have English ability.
 - 1) Applicants must pass or achieve scores on English language proficiency tests that correspond to B1 or higher level in the Common European Framework of Reference for Languages (CEFR) at the time of application.
 - 2) Applicants must have completed school curricula that meet the conditions for admission to a Japanese university with English as the main language.
 - 3) Applicants are (separately) evaluated by Tottori University as having English language ability equivalent to or better than the ability requirement 1.

3. Application Procedure

3.1 Choice of Course and Desired Academic Supervisor

1. The applicant must choose a course of study and a desired supervisor. Please contact the desired supervisor in advance before applying. Applications are accepted only with the permission of the desired supervisor.
2. In addition, applicants must contact the Academic Affairs Division, Faculty of Engineering (email address: en-kyoumu@ml.adm.tottori-u.ac.jp) by July 7, 2025, to know how to transfer the Examination Fee.

3.2 Application Period

Applications must be submitted from July 22 to July 25, 2025. Any applications received after this date will not be accepted.

3.3 Application Documents

Applicants should send the following documents the Academic Affairs Division, Faculty of Engineering, by EMS (Express Mail Service) or international courier service.

1. Application Form for Admission (Form 1)
2. Admission Cards with photos (in duplicate) *The photos can be submitted as data files as well
3. Transcript of degree or graduation certificate issued by the university or college you attended. *must be original
4. Transcript of scholastic record issued by the university or college you attended.
*must be original
5. Certificate of Residence, copy of Residence Card, or copy of Passport.
(Foreign nationals residing in Japan should submit a copy of their Residence Card (both sides) or a Certificate of Residence issued by the city or town office where they live. Foreign nationals residing abroad should submit a copy of their passport.)
6. Research Plan (Form 2)
7. Copy(ies) of a record of English proficiency tests such as TOEFL iBT, TOEIC L&R/TOEIC S&W, IELTS, GTEC, University of Cambridge ESOL, TEAP, TEAP CBT, The EIKEN Test in Practical English Proficiency.
The applicant planning to submit a score sheet proving their English ability other than the above documents must consult the Academic Affairs Section of the Faculty

of Engineering before application.

8. Examination fee of 30,000 yen.

Please transfer the Examination Fee between July 11 and July 25, 2025. Please note that we never refund the Examination Fee you paid under any circumstance except in the following cases.

- (1) In the case of paying the Examination Fee but not submitting documents for the application
 - (2) In the case of paying the Examination Fee but not accepting documents for the application
 - (3) In the case of paying the Examination Fee twice
- If applicable (1) ~ (3), please be sure to contact the Academic Affairs Division, Faculty of Engineering (email address: en-kyoumu@ml.adm.tottori-u.ac.jp).
Applicants are informed by email how to get a refund on the Examination Fee.

3.4 Note

1. Only complete and correct application forms and documents will be accepted.
2. The application documents are non-substitutable once received by the Academic Affairs Division, Faculty of Engineering. If original certificates are only issued once officially, duplicates (copies) that's attested to by your university (with official seal/stamp) can be accepted as original.
3. The application documents received will not be returned.

4. Screening

4.1 Screening Procedure

Applicants will be evaluated based on document screening and oral examination.

1. Document Screening

Based on the academic transcript, basic knowledge will be evaluated.

2. Oral examination

The interview will be on Wednesday, August 20, 2025. Applicants not based in Japan may be interviewed online but must consult in advance (i.e., before applying) with the professor who will become their adviser.

5. Applicants With Disabilities

The University provides consultation for applicants with disabilities who need special assistance during the entrance examination or enrollment after admission. Please submit a written statement with the following information and a medical certificate to the Student Section in the Faculty of Engineering by Friday, July 4, 2025.

If the University deems it necessary, it will interview the applicants or other related persons who can speak on their behalf. In addition, those who need assistance after the deadline due to an accident or other reason should contact the prospective supervisor immediately.

1. Name of applicant, address and telephone number
2. School from which you graduated
3. Course and Field of your choice
4. Type and degree of disability
5. Attention needed upon examination
6. Attention needed while attending graduate school
7. Measures and supports provided at previous schools
8. Conditions of daily life

6. Announcement of Screening Results

The screening results will be posted on the Tottori University website on Thursday, September 4, 2025, at approximately 11:00.

(<https://www.admissions.adm.tottori-u.ac.jp/>).

7. Admission Process

Instructions for admission process will be individually notified to accepted applicants.

1. Processing Documents etc.

Dossier, photograph mount for student ID etc.

2. Entrance Fee 282,000 Japanese Yen (Tentative)

3. Tuition Fees 535,800 Japanese Yen / year [First Semester: 267,900 Yen, Second Semester: 267,900 Yen] (Tentative)

- Tuition Fees must be paid in May (First Semester) and November (Second Semester)

- Payment instructions will be provided to accepted applicants

(NOTES) a. Once submitted, the entrance fee will not be refunded under any conditions.

b. Students who wish to get an entrance/tuition fees waiver (or collection postponement) should not submit the entrance/ tuition fees upon admission process.

c. Above stated entrance/tuition fees amounts are tentative and may change at any time. Students will be asked to pay the revised amount while taking courses at Tottori University.

4. Personal Accident Insurance for Students Pursuing Education and Research

1) Gakkensai: This is an accident insurance which covers injuries occurred as a result of a sudden accident while insured students are participating in regular or extracurricular activities, being on campus, or commuting to school. Insurance premiums (2 years): 1,750 yen

Department in charge: Health Science Center

(E-mail: hokekan-jimu@ml.adm.tottori-u.ac.jp)

2) Insurance for International Students: This insurance provides a wide range of support for student life, including personal liability, permanent disability, medical expenses for daily injuries, rescue expenses, and accidental damage to household goods in the residence.

Insurance amount (2 years): The amount varies depending on the type.

Department in charge: International Affairs Division

(Tel:+81-85731-5056, E-mail: kokuko-gaku@ml.adm.tottori-u.ac.jp)

Department in charge: International Affairs Division

(Tel:+81-857-31-5056, E-mail: kokuko-gaku@ml.adm.tottori-u.ac.jp)

5. Place of Admission Process 4-101 Koyama-cho Minami, Tottori

Academic Affairs Section of Faculty of Engineering, Tottori University

8. Inquiries

Please contact the prospective supervisor for application, examination, or admission inquiries.

Field of Education-Research, Supervisor and Research Theme*

※Subject to change due to personnel changes

① Course of Mechanical and Aerospace Engineering

Field of Education-Research		Supervisor Place to Contact	Research Theme
Materials and Mechanics	Solid Mechanics	MATSUNO, Takashi matsu■tottori-u.ac.jp SHIMIZU, Kazuyuki ksmz■tottori-u.ac.jp	<ul style="list-style-type: none"> Forming of high-strength metal material Identification of post-necking plastic deformation behavior of metal materials Multi-scale analysis of plastic deformation induced damage expansion Image-base inverse analysis for micro/nano damaging behavior Deformation and fracture analysis of materials by synchrotron X-ray imaging
	Materials Science and Engineering	CHEN, Zhongchun chen■tottori-u.ac.jp ONDA, Tetsuhiko onda■tottori-u.ac.jp	<ul style="list-style-type: none"> Fabrication and characterization of thermoelectric materials Development of novel high-strength and high-ductility titanium alloys using additive manufacturing Additive manufacturing of maraging steels and stainless steels In-situ synthesis and multiple toughening of ceramic-matrix composites In-situ synthesis of ceramic-reinforced aluminum-matrix composites Extrusion of aluminum-carbon composites with high thermal conductivity Development of novel antiviral materials and improvement of their durability
Design and Manufacturing	Reliability and Design Engineering	ONO, Yuichi ono■tottori-u.ac.jp NISHI, Ryosuke nishi■tottori-u.ac.jp	<ul style="list-style-type: none"> Study on fatigue damage evaluation of metals Study on experimental stress analysis Study on improving strength of gear Study on modeling traffic flows Study on the methodology of easing traffic jams
	Manufacturing Engineering	SATO, Masahiko sato■tottori-u.ac.jp	<ul style="list-style-type: none"> Metal cutting process Infrared temperature measurement in machining process Process modeling of turn-milling Modeling of chatter stability in milling operations
Robotics and Mechatronics	Mechanical Dynamics and Mechatronics	TAMURA, Atsutaka a-tamura■tottori-u.ac.jp	<ul style="list-style-type: none"> Study on injury biomechanics Human body modeling and mechanical characterization of biological materials Crash simulation
		HONGU, Junichi hongu■tottori-u.ac.jp	<ul style="list-style-type: none"> Study on vibration and noise reduction of machine Development of anomaly detection technique of machine
	Control and Robotics	TSUJITA, Katsuyoshi ktsujita■tottori-u.ac.jp NAKATANI, Shintaro snakatani■tottori-u.ac.jp	<ul style="list-style-type: none"> Research on the high functionality of legged mobile robots Functional design and motion control of spacecraft Research on the development of human motion assistive systems Robots for inspection, diagnostic and healthcare Biosignal measurements and processing Brain-machine interface for rehabilitation

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Field of Education-Research		Supervisor Place to Contact	Research Theme
Thermo-Fluid Dynamics	Space Propulsion Engineering	KATSURAYAMA, Hiroshi katsurayama■tottori-u.ac.jp	<ul style="list-style-type: none"> • Research on energy conversion process of laser propelled rockets • Application of laser detonation waves to ultrafast wind tunnels • Development of atmospheric entry decelerator using magnetohydrodynamic force
	Fluid Engineering	SAKAI, Takeharu tsakai■tottori-u.ac.jp MATSUNO, Takashi matsuno■tottori-u.ac.jp ODA, Tetsuya odate■tottori-u.ac.jp	<ul style="list-style-type: none"> • Development of thermal protection system for space vehicles • Aerothermodynamics, Ablation, radiation, and surface thermochemistry • Simulation of High-Temperature Processes • Aerodynamic drag reduction of Aircraft and Ground Vehicles • Active flow control using plasma actuators • Research of flow field by numerical simulations • Research on liquid fuel atomization and spray combustion • Developments of spray measurement technique • Engine combustion analysis and emission reduction
Physical Mechanics	Mathematical Engineering of Complex Systems	FURUKAWA, Masaru furukawa■tottori-u.ac.jp OOSHIDA, Takeshi ooshida■tottori-u.ac.jp	<ul style="list-style-type: none"> • Theory and simulation of magnetohydrodynamics for magnetically confined fusion plasmas • Equilibrium and stability analysis of plasmas based on Hamiltonian dynamics theory • Structure-preserving numerical simulation algorithms • Statistical physics of colloidal liquids • Elastoplastic modeling of granular pastes • Flows in oscillated shallow water systems
	Mathematical Material Science	NADA, Hiroki hnada■tottori-u.ac.jp TAKAE, Kyohei takae■tottori-u.ac.jp	<ul style="list-style-type: none"> • Metadynamics study on crystallization mechanisms • Machine learning study on amorphous structures and material shapes • Mechanism of crystallization control by functional molecules • Nonequilibrium dynamics in soft matter and liquids • Phase transition in soft crystals
	Electronic structure calculation/ Computational Physics and Engineering	SAKAKIBARA, Hirofumi sakakibara■tottori-u.ac.jp	<ul style="list-style-type: none"> • Performance simulations on functional materials using first-principles calculations • First-principles derivation of many-body models used in performance simulations • Development of highly accurate and efficient solver for many-body problems • Prediction of correlated superconducting materials using first-principles calculations • Theoretical investigation on exotic transition such as excitonic transition • Design of artificial materials such as thin film and superlattice

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Field of Education-Research		Supervisor Place to Contact	Research Theme
Physical Engineering	Nano Dynamics and Tribology/ Molecular Fluid Dynamics	MATSUOKA, Hiroshige hiro■tottori-u.ac.jp DOI, Toshiyuki doi■tottori-u.ac.jp ISHIKAWA, Takumi tishikawa■tottori-u.ac.jp	<ul style="list-style-type: none"> • Research on molecular interactions and surface interactions • Research on ultra-thin liquid/solid films • Ultra-high accuracy measurements of tribological phenomena • Research on molecular gas/liquid-film lubrication • Research on computational tribology • Research on dynamics of information storage systems • Research on rarefied gas flows
	Bio and Fluid Mechanics	GOTO, Tomonobu goto■tottori-u.ac.jp NAKAI, Tonau nakai■tottori-u.ac.jp	<ul style="list-style-type: none"> • Micro-flow analysis, observation and numerical simulation • Collective and cellular level behavior of micro-organisms • Observation and numerical simulation of bacterial chemotaxis • Aeroacoustics, sound generation mechanism and noise reduction • Acoustic impedance measurement of an aperture in the presence of mean flow
	Renewable Energy Engineering	HARA, Yutaka hara■tottori-u.ac.jp	<ul style="list-style-type: none"> • Research and development of advanced technology of wind turbine • Computational fluid dynamics of wind turbines • Research on optimal layout of small wind turbines

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② Course of Information and Electronics

Field of Education-Research	Supervisor Place to Contact	Research Theme
Intelligent Control	KUSHIDA, Daisuke kushida■tottori-u.ac.jp TAKEMORI, Fumiaki take■tottori-u.ac.jp	<ul style="list-style-type: none"> • Quantification of sensation based on biological signal • Motion evaluation system based on image processing • Decision-making modeling and extraction of empirical rules • Control design of human power assist system • Intelligent control for mobile robot
	YOSHIKAWA, Nobukazu nyoshi■tottori-u.ac.jp	<ul style="list-style-type: none"> • Optical sensing and measurement • Digital holography • 3D display • Imaging through scattering media
Computer Science and Technology	KAWAMURA, Takao kawamura■tottori-u.ac.jp TAKAHASHI, Kenichi takahashi■tottori-u.ac.jp HIGASHINO, Masayuki higashino■tottori-u.ac.jp	<ul style="list-style-type: none"> • Distributed systems • Social information systems • Agent system • Network and information security
	MURATA, Masaki murata■tottori-u.ac.jp	<ul style="list-style-type: none"> • Natural language processing • Information retrieval, information extraction • Machine learning
Knowledge Engineering	YOSHIMURA, Kazuyuki kazuyuki■tottori-u.ac.jp SHIMIZU, Tadaaki tadaaki■tottori-u.ac.jp	<ul style="list-style-type: none"> • Nonlinear science • Information processing using nonlinear dynamics • Digital speech signal processing • Signal processing using neural networks
	KIMURA, Shuhei kimura■tottori-u.ac.jp TOKUHISA, Masato tokuhisa■tottori-u.ac.jp	<ul style="list-style-type: none"> • Evolutionary computation • Bioinformatics • Semantic and emotion analysis in natural language processing • Information technology applications in tourism

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Field of Education-Research	Supervisor Place to Contact	Research Theme
Knowledge Engineering	IWAI, Yoshio iwai■tottori-u.ac.jp AOKI, Kota aoki.k■tottori-u.ac.jp	<ul style="list-style-type: none"> • Computational interaction • Pattern recognition • Human media processing • Augmented reality
	NISHIYAMA, Masashi nishiyama■tottori-u.ac.jp	<ul style="list-style-type: none"> • Image recognition • Video analysis • Human interface
Information and Control Engineering	NAKAGAWA, Tadao nakagawa■tottori-u.ac.jp	<ul style="list-style-type: none"> • Wireless communications and optical wireless communications for wearable devices • High-precision signal processing for biomedical sensors • Radio frequency circuit design
	SASAOKA, Naoto sasaoka■tottori-u.ac.jp	<ul style="list-style-type: none"> • Speech enhancement • Digital wireless communication system • Active noise control
	KONDO, Katsuya kondo■tottori-u.ac.jp	<ul style="list-style-type: none"> • Computer vision • Bioimage analysis and medical engineering • Development of smart measurement control system
Electrical and Electronic Systems Engineering	NAKANISHI, Isao nakanishi■tottori-u.ac.jp	<ul style="list-style-type: none"> • Application of digital signal processing • Biometrics person authentication • Speech signal processing
	OHKI, Makoto mohki■tottori-u.ac.jp	<ul style="list-style-type: none"> • Many-objective optimization algorithms • Constrained many-objective optimization algorithms • Multi-objective combinatorial optimization problems including symbols and numerics
	SAITO, Kentaro saitouken■tottori-u.ac.jp	<ul style="list-style-type: none"> • Wireless communication systems • IoT systems • Application of drones to wireless communication systems
	MISHIBA, Kazu mishiba■tottori-u.ac.jp	<ul style="list-style-type: none"> • Image processing • Computational photography

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Field of Education-Research	Supervisor Place to Contact	Research Theme
Electronic Materials and Device Engineering	ICHINO, Kunio ichino■tottori-u.ac.jp	<ul style="list-style-type: none"> • Study on wide bandgap semiconductors for optical/power devices • Study on high-efficiency solar cells • Study on high-efficiency ultraviolet/visible light-emitting devices
	ABE, Tomoki abe■tottori-u.ac.jp	<ul style="list-style-type: none"> • Study on crystal growth of wide bandgap semiconductors • Development of blue-ultraviolet optical detectors (avalanche photodiodes) • Development of blue-ultraviolet optical modulators • Development of high efficient ultraviolet light emitting devices
	OHMI, Koutoku ohmi■tottori-u.ac.jp	<ul style="list-style-type: none"> • Research on electroluminescent displays • Development of wavelength conversion phosphor film for plant growth • Development of wavelength conversion phosphor film for solar panel • Research on phosphors for white LED applications
	NISHIMURA, Ryo ryo■tottori-u.ac.jp	<ul style="list-style-type: none"> • Application of renewable energy technology, such as desalination of brackish water, for arid-land development • Application of electrostatics and high voltage technology • Photovoltaic power generation
	LEE, Sang-Seok sslee■tottori-u.ac.jp	<ul style="list-style-type: none"> • MEMS devices for bio/chemical/medical applications • Sensors for IoT and IoT systems • Design and application of metamaterials • RFMEMS and RF devices
	MATSUNAGA, Tadao matsunaga■tottori-u.ac.jp	<ul style="list-style-type: none"> • Development of minimally invasive medical devices utilizing microfabrication techniques (MEMS) • Development of ultra-thin fiber-optic MEMS sensor • Development of micro sensors for robotic surgery • Development of tactile display using micro actuators • Study on non-planar photofabrication techniques

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③ Course of Chemistry and Biotechnology

Field of Education-Research	Supervisor Place to Contact	Research Theme
Green Catalysis Chemistry	KATADA, Naonobu katada■tottori-u.ac.jp TSUJI, Etsushi e-tsuji■tottori-u.ac.jp TSUNOJI, Nao tsunoji■tottori-u.ac.jp	<ul style="list-style-type: none"> • Principles and application of zeolites and solid acid catalysis • Conversion of heavy oil components, methane, biomass and plastic waste into useful materials • Synthesis of functional nanostructured materials • Development of electrocatalysts and co-catalysts for water splitting and CO₂ reduction • On-demand zeolite synthesis for property design • Carbon capture and utilization, and environmental purification
Main Group Element Chemistry	NANJO, Masato nanjo■tottori-u.ac.jp	<ul style="list-style-type: none"> • Synthesis of ionic liquids consisting of heavy group 14-elements and application to electrochemical devices • Design and synthesis of functional organosilicon and organogermanium compounds, and development of electronic materials
Applied Electrochemistry	USUI, Hiroyuki usui■tottori-u.ac.jp DOMI, Yasuhiro domi■tottori-u.ac.jp	<ul style="list-style-type: none"> • Synthesis of lithium, sodium, or potassium storage intermetallic compounds and their properties as anode materials in rechargeable batteries • Development of all solid-state secondary batteries • Development of energy storage materials based on photovoltaics • Reaction behavior analysis of electrode in rechargeable batteries
Molecular Self-assembly	MATSUURA, Kazunori ma2ra-k■tottori-u.ac.jp INABA, Hiroshi hinaba■tottori-u.ac.jp	<ul style="list-style-type: none"> • Creation and application of artificial virus structures • Construction of nanostructures by self-organization of biomolecules • Creation of light-responsive biomolecular systems • Creation of functional materials applying inner space of microtubules
Organic and Polymer Materials Chemistry	AGO, Mariko mariko.ago■tottori-u.ac.jp	<ul style="list-style-type: none"> • High-throughput synthesis for functional nanoparticles • Photo-thermal conversion with porous carbon particles • Sustainable development of functional materials from under-utilized biomass resources • UV-blocking properties of nano-, micro-particles derived from natural polymers • Mechanisms of stabilisation of Pickering emulsions and development of their applications. • Development of a rapid analysis method for microplastics released into the environment.
Synthetic Organic Chemistry	NOKAMI, Toshiaki tnokami■tottori-u.ac.jp	<ul style="list-style-type: none"> • Molecular Glycoscience • Organic Electrochemistry • Functional Ionic Liquids

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Field of Education-Research	Supervisor Place to Contact	Research Theme
Inorganic Materials Chemistry	MASUI, Toshiyuki masui■tottori-u.ac.jp	<ul style="list-style-type: none"> • Synthesis and application of environment-friendly color materials • Design of new phosphors based on rare earth compounds • Development of inorganic sunscreens • Preparation of heterogeneous catalysts containing rare earth elements
Biofunction Development Engineering	SUZUKI, Hirokazu hirokazusuzuki■tottori-u.ac.jp YAGI Hisashi yagi■tottori-u.ac.jp	<ul style="list-style-type: none"> • Discovery and application of novel functions of microorganisms and marine algae • Application and development of the functions of microorganisms and marine algae to the practical production of useful substances and the solutions of environmental problems • Fundamental studies: enzymology, molecular genetics, and protein engineering of enzymes involved in the metabolisms of physiologically active substances and new generation carbon sources in microorganisms and marine algae • Directed evolution approaches to enhance enzyme stability using error-prone thermophiles • Development of new medical materials using unutilized marine resources
Biocatalyst Engineering	OKAMOTO, Kenji okamoto■tottori-u.ac.jp HARADA, Hisashi harada■tottori-u.ac.jp	<ul style="list-style-type: none"> • Isolation and production of bioactive compounds from basidiomycetes • Determining the mechanism of action of bioactive compounds from basidiomycetes • Production of lignocellulose-degrading enzymes, ethanol and xylitol by basidiomycetes • Pathway engineering for the production of functional isoprenoids • Functional characterization of isoprenoid biosynthesis genes in higher plants and microalgae • Production of useful materials by microalgae
Protein Engineering	MIZOBATA, Tomohiro mizobata■tottori-u.ac.jp AOKI, Eriko eaoki■tottori-u.ac.jp	<ul style="list-style-type: none"> • Structure and function of enzyme and protein • Protein folding • Protein stability and conformational change • Molecular chaperone and protein fibrillogenesis (aggregation) • Membrane insertion of bacterial membrane proteins • Study of antibiotics targeting bacterial proteins
Bioorganic Chemistry	HANASHIMA, Shinya hanashima■tottori-u.ac.jp	<ul style="list-style-type: none"> • Flexible bioorganic molecules: Interactions and biological functions • Organic molecules targeting lipid bilayers: Mechanistic insights and development • Organic synthesis of biomolecules
Structural Biology	NAGANO, Shingo snagano■tottori-u.ac.jp HINO, Tomoya t_hino■tottori-u.ac.jp SATO, Yusuke yusato■tottori-u.ac.jp	<ul style="list-style-type: none"> • Structural biology of natural products biosynthesis • Molecular basis of nitrogen metabolism by anammox bacteria • Structural biology of thermal sensation • Structural biology of membrane proteins • Structural biology of ubiquitin signaling

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④ Course of Management of Social Systems and Civil Engineering

Field of Education-Research	Supervisor Place to Contact	Research Theme
Structural and Concrete Engineering	TANIGUCHI, Tomoyo t_tomoyo■tottori-u.ac.jp NOGUCHI, Tatsuya noguchit■tottori-u.ac.jp	<ul style="list-style-type: none"> • Structural design of infra-, mechanical and offshore structures • Earthquake-resistant performance of infra-, mechanical and building structures • Maintenance of infra-, mechanical and offshore structures • Earthquake response evaluation of subsurface and building structures • Hazard assessment of natural disasters by GIS and satellite technology
	KURODA, Tamotsu tkuroda■tottori-u.ac.jp	<ul style="list-style-type: none"> • Application of industrial waste products to concrete • Durability assessment of concrete and concrete structures • Repair and strengthening for concrete and concrete structures • Prediction of deterioration and maintenance for concrete structures
Geotechnical and Rock Engineering	NAKAMURA, Koichi nak_x■tottori-u.ac.jp	<ul style="list-style-type: none"> • Constitutive properties of saturated and unsaturated soils • Slope disaster mitigation and monitoring
	ONO, Yusuke ysk■tottori-u.ac.jp KOHNO, Masanori kohnom■tottori-u.ac.jp	<ul style="list-style-type: none"> • Earthquake response analysis of earth structures • Numerical simulation of geohazards • Hazard risk assessment for slope disaster • Evaluation of properties of clay mineral-bearing geomaterials • Properties of rock mass including macro-fracture filled with clay minerals
Hydraulic and Coastal Engineering	WADA, Takashi wada-t■tottori-u.ac.jp	<ul style="list-style-type: none"> • Sediment transport and bed deformation in non-uniform sediment beds • Bed deformation and channel evolution due to sediment supply to riverbed • Effects of river structure on sediment dynamics • Debris flow mechanics • Sediment-transport process in a river system from mountainous area to estuary
	KUROIWA, Masamitsu kuroiwa■tottori-u.ac.jp KAJIKAWA, Yuki kajikawa■tottori-u.ac.jp	<ul style="list-style-type: none"> • Numerical model of waves and nearshore currents • Coastal sediments and Prediction of coastal geomorphological change • Maintenance of river-mouth, port and harbor • Coastal disaster and monitoring • Numerical analysis of topography change due to river flow or tsunami
Geo-spherical Environmental and Architectural Engineering	KAGAWA, Takao kagawa■tottori-u.ac.jp	<ul style="list-style-type: none"> • Research for sophisticating strong ground motion estimation • Effects of fault rupture process and surface geology on earthquake ground motion • Exploration and modeling of underground structures based on geophysical methods
	TSUJII, Maiko K. m.tsujii■tottori-u.ac.jp	<ul style="list-style-type: none"> • Architectural planning • Citizen co-creation of public architecture. • Preservation and utilization of historical buildings. • Cultivation process of architectural engineering education. • Basic education of fine arts in engineering education.

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Field of Education-Research	Supervisor Place to Contact	Research Theme
Urban Planning	FUKUYAMA, Kei fukuyama■tottori-u.ac.jp	<ul style="list-style-type: none"> • Institutional design and analyses of regional socio-economic systems • Public policy evaluation • Infrastructure planning and management, and urban planning
Management Systems	NAGAE, Takeshi nagae■tottori-u.ac.jp	<ul style="list-style-type: none"> • Multi-regional computable general equilibrium model and its application • Design of residential and road space in a society with decreasing population • Management and pricing of infrastructure projects under dynamic uncertainty • Infrastructure planning and management, transportation engineering, regional science and urban economics
Information Systems	KUWANO, Masashi kuwano■tottori-u.ac.jp MINAMINO, Yuka minamino■tottori-u.ac.jp	<ul style="list-style-type: none"> • Activity – travel behavior analysis • Big data based planning theory • Infrastructure planning and management, transportation engineering, and urban planning • Service quality control and evaluation • Decision making models
Public Systems	TANIMOTO, Keishi tanimoto■tottori-u.ac.jp CHOSOKABE, Madoka mchoso■tottori-u.ac.jp	<ul style="list-style-type: none"> • Methodologies for sustainable society planning • Planning theory of local transport system • Design and analysis of daily support services • Design of participatory planning process • Analysis and evaluation of regional management organization
Disaster Prevention Planning and Infrastructure Maintenance Engineering	OTA, Takao ohta■tottori-u.ac.jp EMOTO, Hisao emoto■tottori-u.ac.jp	<ul style="list-style-type: none"> • Soft measures for disaster prevention based on evacuation simulation • Performance evaluation of coastal disaster prevention facilities • Maintenance management model for infrastructure • Bridge management support system by XR and AI • Road pavement management system by AI and motion sensor
Environmental Planning	MIYAMOTO, Yoshikazu miyamoto■tottori-u.ac.jp TAKABE, Yugo takabe.yugo■tottori-u.ac.jp	<ul style="list-style-type: none"> • Social design on watershed or rural environmental management • Design for the preservation of environments • Disaster risk management for adaptation to climate change • Application of microorganisms for establishing recycling-based society- • Water quality control and management • Current issues in global environmental protection

The symbol of ■ should be replaced by @.