



Nourishing capable individuals with the spirit of science and engineering
combined with talent for liberal arts in an open-minded environment

Department of Industrial Engineering and Management
Graduate School of Decision Science and Technology
Tokyo Institute of Technology

2013

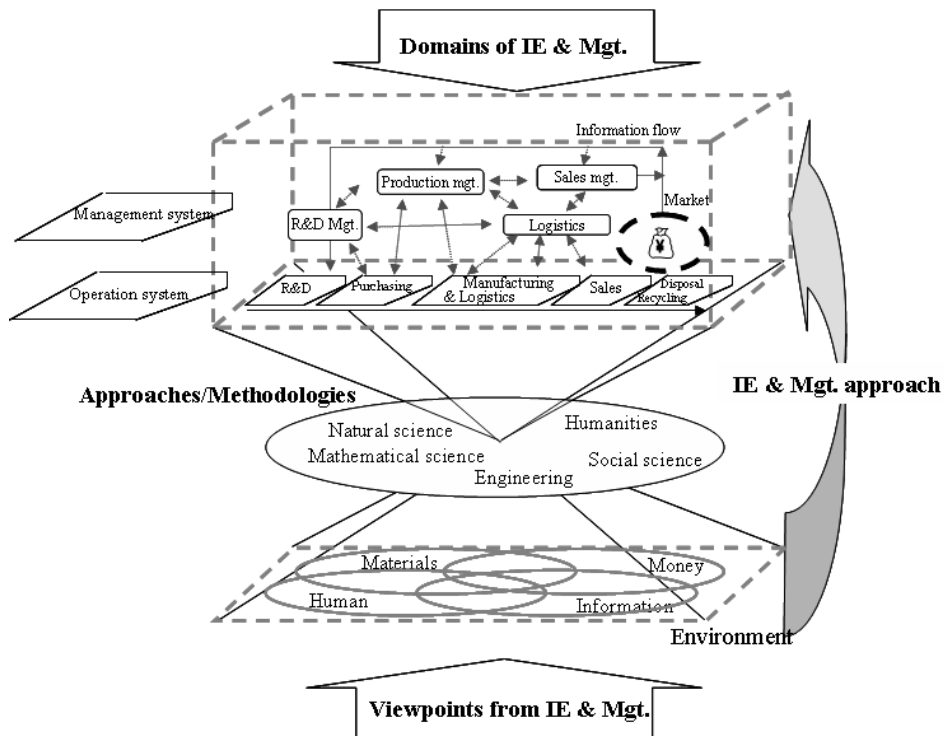


At Tokyo Institute of Technology, we provide
you with highly-qualified research staff and
abundant resources, bringing you freedom
with generosity to encourage the spirit of
science combined with talent for liberal arts.





As the global base for Industrial Engineering and Management, we strive to foster the spirit of science and engineering combined with talent for liberal arts



What is Industrial Engineering and Management?

Industrial Engineering and Management aims to uncover and solve organizational issues by attempting to establish a desirable allocation of management resources through the use of technologies. In an area where reactions to continuous changes are needed, the field of Industrial Engineering and Management utilizes “technology on technology”, including a variety of management technologies and history and philosophy of science and technology.

What are the missions and objectives of the Department of Industrial Engineering and Management?

The missions of the Department of Industrial Engineering and Management is to cultivate talented individuals who can uncover and solve issues, conduct research and contribute to society.

For this reason, we foster capable individuals who display the spirit of science combined with talent for liberal arts and a professional approach to discovering and solving issues supported by an army of the best researchers, a wealth of campus resources and an open-minded environment.

What is the curriculum at the Department of Industrial Engineering and Management?

In addition to the three central pillars (core classes in Basics in Engineering, Department of Industrial Engineering and Management, and Business) that form the course subjects, as well as history and philosophy of science and technology, there are various instructions given at the individual research lab.

Also, students can take course subjects in other graduate schools or departments within the university or even at Hitotsubashi University, Keio University and the University of Tokyo.



Industrial Engineering and Management Presentation Seminar (Rinko) is a required course for 1st year-master students

A free discussion atmosphere attended by faculty members, undergraduate and graduate students, and OB·OG.



What are characteristics of the Department of Industrial Engineering and Management?

★ Overview

The Department of Industrial Engineering and Management was established in 1963 as one of the departments of the Graduate School of Science and Technology. With an emphasis on graduate education, the department was moved to the Graduate School of Decision Science and Technology in 1996.

Since its establishment, approximately 1,000 researchers and practitioners with the master and/or doctor degree have graduated from the graduate school to date. Also, the graduate school has been highly recognized internationally and has numerous foreign students from all over the world.

★ Curriculum of Global Standards

Concerning both Industrial Management and Engineering and Business core classes, the same course subjects are offered at our university as those offered at leading international institutions such as MIT, Stanford University, University of Arizona and University of Texas.

In addition to the core classes, we add a decisively more Japanese touch to our education method through “attention to detail” instruction in “presentation seminars” conducted by each research lab. Also, each teaching faculty has the responsibility of two or three advisees, regardless of class year.

☆ Academic Facilities

The department has a library, computer room, eight meeting rooms for seminars and other purposes as well as two copy machines and FAX machines. In the department library, a number of PCs, books, journals and magazines in the fields of industrial engineering and management and its related subjects are available for students. In each research lab. more than one PC, a desk and a chair as well as internet connection are provided each student. Wireless internet connection is available everywhere in the building.

Department library



Computer room



☆ Cooperation Programs

As Japan's leading university in Industrial Engineering and Management field, our department is supporting operation of the Industrial Engineering and Management Department, Egypt-Japan University of Science and Technology (E-JUST).



We have strong cooperation with departments related to Industrial Engineering and Management in Waseda University, Keio University, and Tokyo University of Science. Especially, we collaborate in the combined course called the "Technology and Management Course" with Hitotsubashi University's undergraduate students in the School of Commerce.

In addition, we have established a joint program named the "Decision Science and Technology Course" with China's Tsinghua University in Beijing, the premier university in East Asia.

Students also have opportunities to attend the summer session in University of Jyväskylä (Finland), and to participate in double-degree program with École des Ponts Paris Tech (France).

☆ Alumni Society "Keiyukai"

The alumni of the Department of Industrial Engineering and Management formed the "Keiyukai". Not only does it strengthen the horizontal ties with fellow classmates, but it also creates an opportunity to learn from the vertical ties that 60 years of history have built.

How can you join the Department of Industrial Engineering and Management?

☆ Master Program

There are two matriculation periods for the Master Program every year, April and October. The entrance examination takes place between July and August. For foreign students, we also have provisions for the international course.

Concerning the examination process, a candidate can choose to answer questions provided not only by the Department of Industrial Engineering and Management but also by other departments. The question provided by the Department of Industrial Engineering and Management is selected according to the faculty chosen by the candidate. All of those questions are written in Japanese. The alternatives are divided into Courses A and B.

Course A

Each candidate must answer the Questions on Fundamental Mathematics (Fundamental Analysis, Fundamental Linear Algebra, Mathematics for Industrial Engineering, Probability Theory and Statistics). In addition to this question he/she can choose four from the following eight subjects, and answer the questions of the selected subjects: (1) Quality Control; (2) Production Management; (3) Industrial Engineering and Ergonomics; (4) Management, Business Administration and Marketing; (5) Finance and Accounting; (6) Economics; (7) Operations Research; and (8) Systems and Information.

Course B

The candidate can choose between an essay and an examination in Basic Mathematics. In addition, he/she will select four from the following five subjects, and answer their questions: (1) History of Science; (2) Theories of Science; (3) History of Technology; (4) Theories of Technology; and (5) Methods in Science. For the international course (Master Program), all domestic applicants will be tested in English for the essay or basic mathematics examination.

The candidate is required to present a TOEFL score (paper, CBT or iBT) or TOEIC score to be used in place of an English examination.

In 2013, the department has established a new **international graduate program** which is an integrated Master and Doctor program provided in English for foreign students. For details, please refer to the application guidelines found in http://www.dst.titech.ac.jp/admission/admission_en.html.

☆ Doctor Program

The matriculation period for the Doctor (Ph.D.) Program is also twice a year in April and October. The entrance examinations are conducted in August and February. For the oral examination process, the candidates have a presentation followed by a Q&A session about their Master thesis and research plan.

Our international graduate program International Graduate Program for Global Leaders on Engineering Systems with Humanities, Social Sciences, and Cultural Studies (IGP-GLES)

(1) Purpose of the Program

The program aims to bring up future global leaders in such various fields as policy making, national administration, legal institutes, industry, education, and academic research. We accept excellent students from all over the world, and bring them up to be of capability and skills required to solve essential problems on engineering systems with harmonization among human, organizations, societies, cultures, and science and technology. In order to achieve our goals, we provide courses on knowledge of human, organizations, societies, cultures, science and technology, and Japanese style management technologies, which have obtained the world's respects and reputations.

(2) Characteristics of the Program

The program is characterized by:

- i) Numbers of courses on knowledge of human, organizations, societies, cultures, science and technology, and Japanese style management technologies, all of which are provided in English;
- ii) Interactive classes with discussion and presentation on engineering systems problems from global perspectives, in order for the students to obtain skills to utilize the knowledge and the technologies;
- iii) Transdisciplinary workshops which involve students, instructors, and experts to build up the visions of future global societies resolving engineering systems problems;
- iv) The growing human resource network of the students, the instructors, and the experts who will participate in our program and will be global leaders of the future world.

What kinds of specialized courses does the Department of Industrial Engineering and Management offer ?

Course Category	Spring Semester	Fall Semester
Business	Pension Mathematics Distribution Channels Risk Management and Labour Welfare for Lifelong Design I	(EN) Managing Transformation by ICT Accounting Information and Capital Market EN Marketing Corporate Management and Financial Decision Advanced Course of Management Risk Management and Labour Welfare for Lifelong Design II
Industrial Engineering and Management Techniques	Operations Management EN Design Thinking	Process Management EN Ergonomics for Organization and Systems Design Project Management in Decision Science
Mathematics and Information	Applied Statistical Methods Numerical Optimization (EN) Business Information Systems Project	Advanced Mathematical Programming EN Information Technology and Management Topics of Mathematical Logic
Management of Technology	Practical Business Establishment	EN Transdisciplinary Collaboration Practice
Innovation Management (Offered by the Graduate School of Innovation Management)	Intellectual Property Management Intellectual Property Rights Law Infringement of Intellectual Property Right Practice for Intellectual Property Protection EN Strategic Management of Technology Financial Engineering	R&D and Intellectual Property Strategies (EN) Corporate Management and Intellectual Property Activities Corporate Finance EN Strategy and System of Innovation
Science, Technology and Society	EN History of Science and Technology and Environmental Problems Advanced Course for History and Methodology of Science and Technology I, III Advanced Course of Science, Technology and Modern Society Global COE Energy: Science and Technology in Society I	Logical Foundation of Methodology of Science Advanced Course for History and Methodology of Science and Technology II, IV Advanced Course for Science, Technology and Society I, II Global COE Energy: Science and Technology in Society II
Presentation Seminars, Research, Experiments	Presentation Seminars, Research, Experiments	
Master Thesis	Master Thesis	

EN: provided in English; (EN): provided in English every second year. Please check by the syllabus it is given in English or Japanese in a specific year.

How does a master student spend a typical day ? (One day in the spring semester)

- 8:00 At latest by this hour wake-up, eat breakfast and finish getting ready, when you don't have the first morning class.
You make your way to the University in a train after the rush-hour.
- 10:45 In 3rd and 4th periods (class) you have a lecture in "Technological Innovation Theory". You are learning about theories of and practices of technology innovation from the actual relationships with their economical progress.
- 12:30 You will take lunch with your friends.
The West 9 Building is a convenient location for going out for lunch. With some time to spare, you also create a schedule for an upcoming your lab's seminar camp for which you are the organizer.
- 13:20 In 5th and 6th periods you have a lecture on "Strategies in Production Technology and Development". The topic is about the Theory of Constraints (TOC). You recall some related topics from your undergraduate studies and start re-organizing your thoughts based on specific methods and recent trends.
- 15:05 In 7th and 8th periods you have a seminar for 1st year master students (M1).
For preparation of this session, you read some articles on Methodological Theory and finished creating a summary late last night. Based on this summary, your supervisor and two other M1 in your lab have a discussion. Next session, the subject matter will be on developing a theory based on information from the literature and actual cases.
- 17:00 Project meeting for your research lab. Your role is to analyze the ticket sales industry and teach the undergraduate seniors the theories of Strategic Management. You double-check whether you understand the content of the text and start preparing a plan for your final presentation at the seminar camp, which will be held in three weeks.
- 18:00 Prepare for Thursday's seminar. You read the case study, or you at least try since you are completely exhausted. You believe you may have a better chance reading standing up rather than sitting down so you decide to leave the campus and read on the train.
- 19:00 Leave campus.
- 20:30 Arrive home.



Where do alumni go after graduation?

Universities, Research Institutions, Government

Tokyo Institute of Technology; Univ. of Tokyo; Univ. of Osaka; Univ. of Tsukuba; Univ. of Electro-Communication, Waseda Univ.; Keio Univ.; Tokyo Univ. of Science; Chuo Univ.; Ministry of Finance, Ministry of Health, Labor and Welfare; Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Defense; Bank of Japan

Electronics, Telecommunications, IT Industries

NTT; NTT DoCoMo; Toshiba; Hitachi; Panasonic, Sony; Sharp; NEC; Fujitsu; IBM Japan; Fuji Xerox; Microsoft; NTT Data; SCSK; NS Solutions; Trend Micro; CyberAgent; Oracle; DeNA; GREE

Machinery and Automobile Industries

Toyota; Honda; Nissan; Mazda; Mitsubishi Heavy Industry; Canon; Ricoh; Murata Manufacturing

Iron and Non-Ferrous Metal Industries

Nippon Steel & Sumitomo Metal; Kobelco; Japan Mining Industry; Furukawa Denki; Asahi Glass

Chemical, Food Industries

Bridgestone; Ajinomoto; Takeda Pharmaceutical Company, Fujifilm; Asahi Breweries; Toray; Asahi Kasei; Daiichi-Sankyo; Kao; Shiseido; Suntory; DNP; 3M

Construction, Power, Transportation Industries

Kajima Corporation; JGC Corporation; Chiyoda Corporation; Toyo Engineering; CRIEPI, Tokyo Gas, JR Central; JR East

Finance, Trading Industries

Mizuho Financial Group; MUFG; Mitsui Sumitomo Bank; Development Bank of Japan; Japan Bank for International Cooperation; Japan Post Bank; Mitsubishi Trust; Goldman Saks; Merrill Lynch; Mizuho Corporate Bank; Nomura Securities; Matsui Securities; Mizuho Securities; Mizuho Asset Management; Daiwa SB Investment; Mitsubishi UFJ Asset Management; Sumitomo Mitsui Asset Management; Nomura Asset Management; Nippon Life Insurance; Dai-ichi Life Insurance; Mitsui-Sumitomo Insurance; Tokyo Marine & Nichido Fire Insurance; Mitsui & Co.; Itochu; Mitsubishi Corp.; Sumitomo Corp.

Consulting and Other Industries

Nikkei; Yomiuri Shimbun; Mainichi Shimbun; Mitsubishi Research Institute; Nomura Research Institute; Japan Research Institute; Daiwa Institute of Research; Hakuodo; Dentsu; Ernst & Young Japan; Accenture; McKinsey; IBM Business Consulting

Words from alumni who have acquired the spirit of science combined with talent for liberal arts



**NEC Personal Products, K.K.
Dr. Toshiyuki Adachi, Company
Executive**

(Undergraduate Degree, 1977; Master Degree, 1979; Doctorate dissertation, 1994)

The 3 years between my undergraduate senior year and the master program are full of memories about the fun I had in “research and factory internships” and “parties and baseball”. Even today, I am glad I majored in Industrial Management and Engineering. Corporate Japan of the post-bubble economy cannot survive without continuing to reform. At this time, what is needed is a person who has the ability to foresee the global sphere without being blinded by frontiers and who can proceed with big and innovative ideas.

This is a philosophy that is fostered in the crisscross thoughts of Industrial Management and Engineering and there is no time like the present when this field would thrive. Please aim to become the talented individual that will lead the reformation of society with confidence and strategic ideas.

Management Systems Engineering is a breed of its own even for Tokyo Tech standards. We didn't have overnight experiments. On the one hand, we had lectures that were heavy in the liberal arts but at the same time, we had 3 difficult mathematical seminars per week at night. On the other hand, the fact that I was “trained” in the thought of “grasping the bird's eye view” and the logic of social phenomena has been useful to my career. In this academia, “society” is the primary research subject. Please develop a balanced sensibility and pay attention to various social phenomena aside from your own research field to develop a deeper understanding.



**Kao, K.K.
Cosmetics Project Headquarters
Ms. Masako Kibara**

(Undergraduate Degree, 1992; Master Degree, 1994)



**Bank of Japan
Census Department, Economic Analysis
Division**

Dr. Takeshi Kimura, Project Representative
(Undergraduate Degree, 1987; Master Degree, 1989; Doctor Degree, 1997)

During my graduate school days, I was involved in fierce debates with faculty members and classmates during the weekly seminars. My research results were published in a journal as co-author. Through this process, I was able to build a foundation for my own personal research style. And for me, this is my most treasured asset.

After completing my master degree, I entered the Bank of Japan, finished a “tour of duty” at the Federal Reserve Bank (FRB) and am currently involved in the administration of financial policies and economic assessment. The statistics and probability as well as optimization methods that I learned in graduate school have remained useful to me, even in my work today. I am an economist by title but I still have a sense of pride of being a TITech-educated engineer.

Faculty Members

Our specialty is Corporate Finance and Corporate Governance. In particular, we are focusing on how corporate investment behaviors and financing decisions affect corporate value, and what kind of corporate governance lowers cost of capital and is effective for sustainable growth. We are currently interested in topics such as mergers and acquisitions, corporate restructurings, capital budgeting, and large capital investments for growth opportunities. We also focus on research perspectives of “cultural difference” and “law and finance” to deal with integration of global economy, and “behavioral finance” to test market efficiency and rationality of managers. Since research goal of our laboratory is to provide effective solutions for issues that corporate managers and policy makers face, we emphasize empirical approach to analyze the underlying issues. To achieve the goal, we welcome any students who have both analytical skills and strong commitments to the real world.



Development, Production and Distribution Engineering;
Corporate Finance;
Corporate Governance
Professor Inoue, Kotaro



Development, Production and Distribution Engineering;
Marketing; Distribution
**Associate Professor
Chung, Sulin**

Our specialty is marketing and distribution. My field of interest can be divided into three areas, the marketing strategies of Taiwanese manufacturers and retailers in Asia, the retail internationalization, and the modernization of distribution industry.

At the Chung lab, our research focuses on the theory behind and the application of marketing and distribution. For instance, students can choose to study the product, pricing, distribution channel, and promotion strategies of marketing in depth, or students can choose to study corporate marketing strategies in Japanese or overseas markets, as well as a comparative study of the two. Students interest in distribution, can study about the innovation and globalization of retailers. We encourage students to choose their research topics with awareness of current issues. Nurturing the youth who will play an active role in the international community is the goal of my lab.

Our field of specialization is Production Management and Quality Control. Especially in the field of Production Management, we focus on supply-chain management. For Quality Control, we focus on how performance affects and ties with corporate management results from the perspectives of customer satisfaction and new product development. This information is used to build our own database and applied to international markets for comparison.

The educational philosophy of our research lab is to be aware and observant, constantly be on the lookout, recognize problems and discover and approach issues from the strengths of Industrial Management and Engineering, IT and statistics.



Development, Production and Distribution Engineering;
Production Management;
Quality Control; Logistics
Professor Enkawa, Takao



Development, Production and Distribution Engineering; Production Management; Quality Control; Logistics
Associate Professor Suzuki, Sadami

Our specialty is production management and logistics, which include various fields. In our laboratory, we mainly focus on a series of operations related to supply chain such as development, production, logistics, sales and disposal/recycle as the activities for creating valuable products and services for customers.

The theme of your research will be decided by respecting you own interests and enthusiasms. And we hope to bring your awareness of the problem into focus through the surveys of previous researches, and then carry on it by clearing up your research topic, gradually.

Through the days in laboratory, improve your capability of problem finding and its solving by studying the business process modeling or statistical approach and other Industrial Engineering and Management approach with us.

Let's lead a fruitful school days!

A goal of the Itoh research lab is to create problem-oriented methodologies and techniques useful to today's society and organizations.

The studies we are currently conducting are in the domains of healthcare and transportation, but we also welcome students who want to study in other fields. In this regard, much of our research deals with the issues of risk management such as the analysis of human error. There are also topics we are tackling, e.g., interface design and usability, on interface design development for the physically-challenged, and application of systems and product design led by recognition operations.

It is important that you become self-aware and confident that your field of research will contribute to society and that you persist in tackling a difficult and important issue brought about by reality while continuing to face new challenges.



Development, Production and Distribution Engineering; Ergonomics ; Safety Engineering; Cognitive Engineering;
Professor Itoh, Kenji



Development, Production and Distribution Engineering; Human Factors and Ergonomics, Industrial Engineering
Associate Professor Aoki, Hiroataka

We are conducting researches in human-related domains, placing much emphasis on IE approach in which the issues are investigated by a thorough observation.

As resources contributing to your research activities, we can provide measuring equipments like stopwatches, video cameras, eye trackers and so on. All of you, additionally, have already obtained knowledge in various problem solving approaches, which are expected to be other valuable resources. Let's enjoy research in our lab by making good use of such resources we can share! We also expect that you make the history of our lab with us, by sharing your daily life in our lab, inspiring new ideas, and making progress together.

At the Muraki lab, we conduct our research under the motto "how to create the best product and facility and utilize them to its maximum". We search for answers from the viewpoint of the plant lifecycle, which entails the production facility's design and architecture, as well as the operations and facility lifespan. We also look at the product lifecycle, which includes raw materials collection, scrapping, and recycling processes. From these perspectives, we address various issues of facility management, production management, safety control, and environmental control.

The educational system and philosophy of our lab is to cultivate individuals through the lab's seminars and other activities to think, identify problems to be solved, analyze and develop solutions and show abilities to validate their methods. We also want to educate them to become leaders who flourish and contribute to society.



Development, Production and Distribution Engineering; Process Management; Process Synthesis
Professor Muraki, Masaaki

People experience various affects (emotion, mood, feelings) in various experiences. These affective experiences are considered as essential values of our lives, services, and products. However, people's affective experiences are also difficult to design and evaluate. We call the potential of people and artifacts to evoke affects among people's mind as "affective." We are doing research on the question "How can we provide people with affective experiences?" in various ways: how to design, how to evaluate, and what management is necessary for companies to provide such affective experiences. Our laboratory welcomes people with broad backgrounds, with various ideas, senses, feelings, and dreams. We promote affective and creative atmosphere in our laboratory.



Development, Production and Distribution Engineering; Affective Technology and Management, Gerontechnology, Human Factors
Associate Professor Umemuro, Hiroyuki



Managerial and Financial Engineering; Applied Statistics; Quality Control; Reliability
Professor Miyakawa, Masami

Our specialty is applied statistics. We emphasize not only methods of experiment planning, but also survival time analysis, focusing on the theory and application. Statistics is a discipline with great history and was used substantially from the beginning of the 19th century. Since then, statistics has spread across widely, developing new models and techniques continuously. In today's sophisticated information society, this tendency is ever more apparent. In the research of statistics, basic mathematics, a specialized knowledge of probability and statistics are vital. We encourage graduate students to choose and establish their research theme through self-motivation. The goals of the master degree are to acquire the investigative methods for already-existing research, to focus on the selected research theme and to lead the research results.

Two themes are researched at the Nagata lab: (1) under which decisions and strategies do managers create accounting information? (2) And with this accounting information being released to the market, what influence does it have on the formation of the stock prices? In order to perform deep analysis from the viewpoints of management and investors, it is important to not only have knowledge of accounting and finance, but also have a "why" approach to daily realities that occur in the economic realm. The two years of your master degree should be filled with endless possibilities.



Managerial and Financial Engineering; Accounting Information; Business Analysis and Valuation
Associate Professor Nagata, Kyoko



Mathematics and Information Systems; Managerial Mathematics; Numerical Optimization; Operations Research; Financial Engineering
Professor Mizuno, Shinji

At the Mizuno research lab, our main research method centers on problem-discovery, modeling and analysis of models using a mathematical approach for solving problems in industrial engineering. We address issues such as scheduling problems, financials problems, decision making problems by using operations research, optimization, financial engineering and statistical mathematics. Our research lab is full of goal-oriented students with a high-level of self-motivation. I believe that it is important to enjoy your student life, accomplish your goals and take your responsibilities at the same time.

In my laboratory, we focus our research mainly on Operations Research and Data Mining. Due to the recent improvements on the computer hardware and the efficiency of optimization algorithms, it has been possible to analyse large-scale mathematical models nowadays. However, there is a continuous desire for obtaining more precise analysis of these models. To achieve this, our laboratory proposal is to develop innovative optimization algorithm and their implementations as a software.

I want that students of my laboratory could acquire potentials to create an abstract and a logical representations of problems through a mathematical training. I also want to prepare students who master computational mathematics by understanding fundamental principles of its functionality.



Mathematics and Information Systems;
Managerial Mathematics; Numerical
Optimization; Operations Research;
Financial Engineering
**Associate Professor
Nakata, Kazuhide**



Mathematics and Information
Systems; Systems Theory;
Business Process Modeling
Professor Iijima, Junichi

My area of specialty is the study of Information Systems and Systems Theory. I especially have a great interest in Information Systems Development Methodology aligned with Business Architecture, as well as Mobile Commerce and IT Investments.

My philosophy is “a rolling stone gathers no moss”. Furthermore, as an educational policy within my research lab, I want each student to be able to accomplish the expected with “no fuss or muss”. The students are supported in the acquisition of new skills and in their level of communication through debates. Also, regular seminars bring about proficiency in modern mathematics and programming.

Our lab’s research interests center on the Theory of Organization, the Theory of Strategy, Knowledge Management and Information Systems. In detail, we focus on the analysis of work style and work place, leadership, and business processes relating to Knowledge Management, of customer community strategies, and the potential evaluation methods for Knowledge Management tools.

Our research lab has 6 major goals: acquire knowledge on management basics, develop one’s ability to discover new topics, improve reading comprehension and self-expression, gain a multi-dimensional viewpoint, experience group work, and learn research methodologies. In addition, each lab member values 3 fundamental merits: do one’s best, challenge with courage, and respect each other.



Mathematics and Information
Systems; IT and organizations;
Knowledge Management
**Associate Professor
Senoo, Dai**



My personal research is focused on the study of Robert Hooke, a British scientist in the seventeenth century. However, the scope of my students is not confined to history of science. They are expected to have broader view to science and technology. Indeed, their research topics cover history of mechanics, current decision making of Japanese science and technology, medical ethics and so on. I promote my students to see science and technology from diverse angles, and I hope to do my best to set an environment for them to pursue their study from interdisciplinary point of view.

History, Philosophy and Social Studies of Science and Technology; Science and Technology Studies (STS); History of Science and Technology

Professor Nakajima, Hideto



My main research interest is logic, both mathematical and philosophical. When investigating the nature of logic, both mathematical aspect and philosophical aspect are crucial. If we want a logical system to be more than a mere calculating system, we soon realize that these two aspects are essentially related. Those students who wish to join us are required to have some training both in logic and philosophy.

History, Philosophy and Social Studies of Science and Technology; Logic Systems Theory; Methodology of Science and Technology

Professor Waragai, Toshiharu



My main research interest is the history of science in national and regional contexts, especially in Russia and Japan. I am also interested in science in society and scientific communities in various regions after 18th century. I study the science-related problems in society, especially environmental problems in 20th and 21st centuries. Those students with interest in the history of science as well as in contemporary problems of science and technology will be welcomed.

History, Philosophy and Sociology of Science; History and Philosophy of Chemistry; Science and Technology Studies

Associate Professor Kaji, Masanori

Research Fields of Professors

Teaching Faculty		Lecture/Course	Main Research Fields
Professor	Inoue, Kotaro	Development, Production and Distribution Engineering	Corporate Finance, Corporate Governance
Associate Professor	Chung, Sulin		Marketing, Distribution Strategies, Retail Internationalization
Professor	Enkawa, Takao		Production Management, Quality Control, Logistics
Associate Professor	Suzuki, Sadami		Production Management, Logistics
Professor	Itoh, Kenji		Ergonomics, Safety Engineering, Cognitive Engineering
Associate Professor	Aoki, Hirotaka		Human Factors and Ergonomics, Industrial Engineering
Professor	Muraki, Masaaki		Process Management, Process Synthesis
Associate Professor	Umemuro, Hiroyuki		Affective Technology and Management, Gerontechnology, Human Factors
Professor	Miyakawa, Masami	Managerial and Financial Engineering	Applied Statistics, Quality Control, Reliability
Associate professor	Nagata, Kyoko		Accounting Information, Business Analysis and Valuation
Professor	Mizuno, Shinji	Mathematics and Information Systems	Numerical Optimization, OR, Financial Engineering
Associate professor	Nakata, Kazuhide		OR, Mathematical Programming, Data mining
Professor	Iijima, Junichi		Systems Theory, Information Systems
Associate Professor	Senoo, Dai		Organization Theory, Organization Behavior, Strategic Theory, Knowledge Management
Professor	Nakajima, Hideto	History, Philosophy and Social Studies of Science and Technology	Science and Technology Studies, History of Science and Technology
Associate Professor	Kaji, Masanori		History of Science, Philosophy of Science, Science and Technology Studies
Professor	Waragai, Toshiharu		Logic System Theory, Methodology of Science and Technology
☆ Professor	Tanaka, Yoshitoshi	Intellectual Property Management/Graduate School of Innovation Management	Corporate Management and Intellectual Property, International Intellectual Property
* ☆ Professor	Higa, Kunihiko	Graduate School of Innovation Management	Management of Information Systems, Database, Telework
* ☆ Professor	Ninomiya, Shohichi		Mathematical Finance, Analysis of Numerical Probability
* ☆ Professor	Miyazaki, Kumiko		Technology Management and Policy, Diffusion of Innovation

* These faculty members cannot be appointed as supervisors.

☆ These Faculty members are affiliated with the Graduate School of Innovation Management.

What are some of the themes presented for master and doctorate theses?

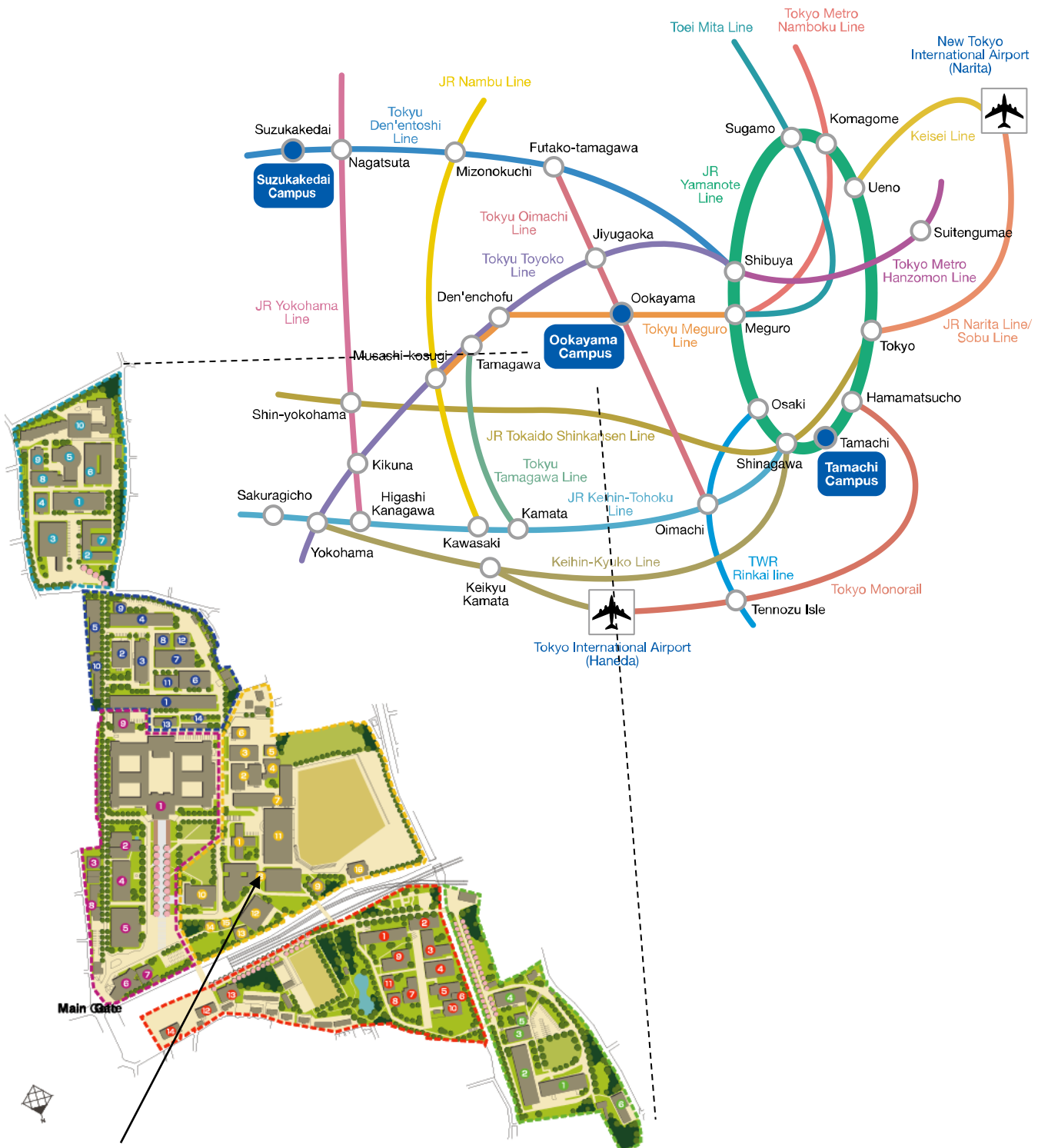
Resent research topics of doctoral dissertations

- Study of the market-related, cultural, and causes of customer satisfaction
- A study on a human factors approach to safety management in the trucking Industry
- Affective well-being in the workplace: Perspectives of top management and employee
- Providing customers with affective experiences: Perspectives for design factors and management
- The separation and breaks in 2-period double round robin tournaments
- Consolidation and expansion of KM research: Toward a grand theory of knowledge management

Recent research topics of master theses

- An empirical analysis of patient satisfaction and willingness to participate in the medical process
- Effects of helping zone in Japanese cell manufacturing
- The strategy of quality design method using customer satisfaction model considering activity and emotion
- A B2B perspective on the role of customer value creation and strategic orientation in new product development
- A study on new product diffusion model considering word of mouth and consumer network
- The impact of regret and its coping strategy on customer loyalty mode
- Virtual data-transfer with ubiquitous memory
- A method for measuring individual's emotion by use of pupil metrics
- Exploratory learning method by archiving subjects in real-time and animation aided teaching materials: Implementation in Google SketchUp and evaluation
- Evaluation of searching behavior based on semantic structure of information in website and eye-tracking data
- The effect of regional brand components on consumer's behavioral intention
- A new and effective model for nonparametric item response theory
- Proposing a framework to design/evaluate user experience
- Effects of emotional intelligence on group work satisfaction
- Post-listing and performance of stock: An effect of deregulation of listing requirements
- Earnings management targeting at "ordinary income": An examination of classification shifting under Japanese GAAP
- Whether change in the number of employees in Japanese firms have the ability to predict future performance
- The market reaction to initial earnings forecasts-Earnings management and beating or meeting earnings forecasts-
- Earnings quality and valuation in IPOs
- Ownership structure and firm cash holdings -The impact of foreign investors on Japanese firms-
- Audit quality, corporate governance and earnings management: Evidence from Japan
- Solving vehicle routing problem appearing in a real-world cars transportation by tabu search algorithm
- Multi-stage portfolio problem under uncertain exit period
- Portfolio optimization by the Black-Litterman model
- Algorithm for upper bounded linear programming problem using zonotope property
- On the number of iterations in the simplex method for solving network programming problems
- An efficient method for solving portfolio selection problems with non-convex transaction cost
- Efficient pre-marshalling in a container terminal
- Calculation of a life insurance premium by a model reflecting a change of the number of policyholders
- Summarizing reviews on a news site via budgeted median problem
- Approximation algorithm for staff scheduling problem that considers various constraints
- Using Pareto efficiency emerging patterns for analyzing access log
- A multi-period portfolio optimization approach for asset management of pension funds

- Proposing patterns of work process improvements in administrative services: From users perspective
- Examination of the relationship between IT maturity and productivity of agricultural corporation
- Toward the fundamental theory of gamification
- Framework for effective mobile application in flood disaster
- Simulating DEMO Model with colored petri net
- An examination of influence of the way of acquisition on the later process of assimilation in the organization
- A study on the effective goal setting method for increasing goal commitment
- The development of railways in Hokkaido in the Meiji period: Nationalizing Japan's frontier
- Scientists and engineers in the Meiji period : The life and achievements of a physicist and engineer, Shunkichi KIMURA



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