

## Waseda University

# **Graduate School of Information, Production and Systems**

# Graduate School code: 60

Web site: http://www.waseda.jp/fsci/gips/en/

1. Graduate School code	60	
2. Maximum number of participants	3 Participants per yea	ır
3. Fields of Study		saster Prevention Science □Tourism □Politics Sociology □Education ☑Engineering
Sub Fields	Computational intermanagement inform [Production System materials and Ap system, Process m and Production infor [Integrated System communication, Am	chitecture ] Information and communication model, elligence, Language and media information, Social and natics, Robotics & mechatronics, Fiber-optic systems ms] Machine design and Robotics, Sensor and advanced plied measurement, Intelligent and process control onitoring and Equipment management, Management ormation system terms] Multimedia and image information, Mobile talog and high-frequency circuits, Ultra large-scale IC, w-power LSI, LSI design automation, LSI verification
4. Program and Degree	Program	Information, Production and Systems Engineering Master's program
5. Standard time table (Years needed for graduation)	months, then 2 ye	Master of Engineering r's Student OR Starting as a Research Student up to 6 ars as a Master's Student after passing the entrance pends on the capacity of the applicants)
6. Language of Program	<ul> <li>who do not under</li> <li>(2) Textbook: Generic textbooks may orally.</li> <li>(3) Laboratory work Conducting of the English.</li> <li>(4) Seminar: Seminar: Seminar</li> </ul>	the lectures are in English. It is advisable that students erstand Japanese should take lectures in English. For an and the state of th

7. Desirable English level and Necessary Academic background	Linguistic Ability EJU, IELTS, GRE of else	There is no specific English ability requirement. However, students must be able to understand lectures, instructions, etc. in English.
8. Prior Inquiry From Applicants (Before Submission of Application Documents)	It is not compulsory to contact professors before submission of application documents although you can do so if you wish.	
9. Website	http://www.waseda.jp/fsci/gips/en/about/faculty/	
	Name	Research Subject , Contact (e-mail) , Special message for the Future students
	Prof. FUJIMURA, Shigeru (Mr.)	Production planning and scheduling, Production management, Supply chain management, Project management, Business process modeling
<pre>10. Professors and Associated Professors *If you wish to contact our professors, please send a message to the following e-mail address. <gsips@list.waseda.jp></gsips@list.waseda.jp></pre>	Prof. FURUZUKI, Takayuki (Mr.)	Neural networks, Genetic algorithms, Bioinformatics, System identification and control, Optimization systems
	Prof. IWAIHARA, Mizuho (Mr.)	Database query processing, Web information systems, Web mining, Security and Privacy, Social media
	Prof. KAMATA, Sei-ichiro (Mr.)	Image processing, Pattern recognition, Biometrics, Image database, Space filling curves and fractals
	Prof. KOYANAGI, Keiichi (Mr.)	Self-organizing network, Peer-to-Peer network, Grid computing, Distributed systems, Collaboration, Cloud computing
	Prof. LEPAGE, Yves (Mr.)	Natural language processing, Machine translation, Paraphrasing, Example-based methods learning by example, Differences and similarity, Analogy
	Prof. MATSUMARU, Takafumi (Mr.)	Remote operation systems of mobile robot, Preliminary announcement of mobile robot's intention, Form and movement of human synergetic robot, Interaction with human symbiotic robot, Measurement and analysis of mechatronics
	Prof. TSUBOKAWA, Makoto (Mr.)	Fiber-optic sensing technology, Optical functional device technology, Reliable network architecture, Optical transmission system technology
	Prof. YOSHIE, Osamu (Mr.)	Virtual community, Agent, Multi-player interaction, eMaintenance, Consensus building process, Knowledge logistics
	Prof. TANAKA, Jiro (Mr.)	Human interface, Interactive systems, Ubiquitous computing, Software engineering, Programming languages
	Prof. INUJIMA, Hiroshi (Mr.)	Equipment condition diagnosis techniques, Data science, Signal processing techniques, Analogue electric circuits, Sensing system, Acoustic
	Prof. LEE, Hee-Hyol (Mr.)	Intelligent control, Cooperative action, Learning control of robot group, Decoupling control of large-scale system, Sliding mode control, Bayesian network and production & inventory control, Traffic

	flow modeling by cellular automaton and traffic signal control, Power generation using low-temperature difference and its control
Prof. MURATA, Tomohiro (Mr.)	system simulation, Manufacturing planning & control, Service oriented system
Prof. OGAI, Harutoshi (Mr.)	Process control, Process modeling, Process analysis and simulation, Bridge diagnosis, Automotive control
Prof. TANAKA Eiichiro (Mr.)	Machine design, Mechanisms, Machine elements, Assistive engineering
Prof. TATSUMI, Kohei (Mr.)	Semiconductor packaging materials and technologies, Electronic materials, Microstructure in crystalline materials, Materials engineering for energy and environment field
Assoc. Prof. MIYAKE, Takeo (Mr.)	Bioelectronics, Biofuel cell system, Wearable device, Implantable device
Assoc. Prof. TATENO, Shigeyuki (Mr.)	Production process, Simulation techniques, Reliability engineering, Information and Production process
Prof. INUISHI, Masahide (Mr.)	Power semiconductor devices, Modeling of power devices for circuit simulation, Reliability of power devices
Prof. SHIMIZU, Koichi (Mr.)	Applied optics, Biomedical engineering, Biomedical measurement, Optical imaging, Biotelemetry
Prof. IKENAGA Takeshi (Mr.)	system, Video communication system, Digital signal processing LSI
Prof. KIMURA, Shinji (Mr.)	High-level design and verification, Application specific high-level synthesis, Hardware/software codesign, Dependable computing
Prof. WATANAE Takahiro (Mr.)	BE, ASIC design automation, Algorithms for physical design, Processor architecture, IP-Reused design methodology, Network-on-Chip (NoC) architecture
Prof. YOSHIMA Toshihiko (Mr.)	SU, High frequency IC (RFIC) design methodology, Analogue IC design methodology, High frequency device modeling and measurement technique
Assoc. Prof. TAKAHATA, Kiyoto (Mr.)	Opto-electronic integrated circuits, Optical semiconductor devices, Silicon photonics, Microwave photonics
Prof. SHINOHA Hirofumi (Mr.)	RA, Dependable LSI, Hardware security, Neuro information processing, Energy efficient circuits and systems
Prof. OHSAWA, Takashi (Mr.)	Nonvolatile working memories, Emerging memories, Distributed memory architecture, Cognitive computing system

11. Features of University	Waseda University was established by Shigenobu Okuma, a former Prime Minister of Japan, in 1882. Now the university has 9 campuses within or near Tokyo area and 1 campus in the City of Kitakyushu in Kyushu (southernmost of the four main islands of Japan). Currently there are 13
12. Features of Graduate School	undergraduate schools and 23 graduate schools at Waseda. Waseda University Graduate School of Information, Production and Systems (IPS) is a graduate school that has no corresponding undergraduate department established within the Kitakyushu Science and Research Park area in 2003 as the base for Waseda University to expand its presence in the world, especially in Asia. With three fields of study, including <b>Information Architecture</b> , <b>Production Systems</b> , and <b>Integrated Systems</b> , IPS undertakes academic research in the technological fields that society currently requires, and strives to attain a sustainable society through the use of technology.
	Having immediately implemented lectures both in Japanese and English for all courses at the time of its establishment, IPS has been creating an environment where international students par excellence can also study along with Japanese students. IPS actively conducts numerous joint research projects with various domestic and international organizations, such as corporations and universities, and participates in many public projects.
13. Features and Curriculum of Program	<ul> <li>IPS comprises three fields of study: Information Architecture, Production Systems, and Integrated Systems. The postgraduate work will give you an integral view of these three fields, enabling you to acquire the most advanced professional knowledge as a foundation for applying information and system LSI technologies to a broad range of production systems and their management.</li> <li>Information Architecture field covers the entire field of information and telecommunications, with special emphasis on educational research in its application.</li> <li>Production Systems field studies all technical domains of manufacturing business activities from development to production and logistics.</li> <li>Integrated Systems field provides a state-of-the-art LSI design development environment.</li> <li>Key words: multimedia and image information system, mobile communication system, analog and high frequency circuit design, Ultra Large-scale IC, High-speed and Low-power LSI, LSI design automation, LSI verification and test, etc.</li> <li>A research student (non-degree student) generally takes lectures only. However, he or she may be allowed to join in research activities of a faculty member's laboratory if the faculty member agrees to accept the student into his or her laboratory.</li> </ul>
14. Academic Schedule	[Early-April, 2018] Orientation for new students (April admission) Entrance ceremony (April admission) Course guidance for new students (April admission) Course registration begins Classes begin

[Mid-April, 2018]
Last day of course registration
Confirmation period of course registration begins
Last day of confirmation period of course registration
[Early-August, 2018]
Classes end
Summer holiday begins
[Late-September, 2018]
Commencement (September graduation)
Last day of summer holiday
Orientation for new students (September admission)
Entrance ceremony (September admission)
Course guidance for new students (September admission)
Course registration begins
Classes begin
[Early-October, 2018]
Last day of course registration
Confirmation period of course registration begins
Last day of confirmation period of course registration
[Late-October, 2018]
The anniversary of the Foundation of Waseda University (classes are
held)
[Late-December, 2018]
Winter holiday begins
[Early-January, 2019]
Last day of winter holiday
[Early-February, 2019]
Classes end
Spring holiday begins
[Late-February, 2019]
Announcement of term grades
[Late-March, 2019]
 Commencement (March graduation) *Date has not been confirmed yet.

### 15. Supporting service to International Students

International Students Support Center for Consulting or counseling about daily life, campus life, cross-cultural adjustment etc.	All the faculty members and almost all the office staff of IPS have good command of English. They are used to work with international students and give them necessary supports. On campus school counselors who speak Japanese, English and Chinese are also available. There are volunteer groups that help international students settle in the Japanese society as well.
Provision of Student Dormitory	Dormitories are available for international students (regular students only) of the master's program on or near campus. Rents need to be borne by the students. No dormitory is guaranteed for research students (non-degree students).
Japanese Language Education	Japanese language programs from beginner's level through to the advanced
Program for International	level are offered regularly on or near campus by the government of City of
Students	Kitakyushu. Fees need to be borne by the students.

Cultural ActivitiesInternational students are welcomed to enjoy the Japanese tea ceremony. There are volunteer groups that introduce Japanese cultures and custom to international students through various kinds of events and activities.Any special attention Religious PracticeIPS does not provide students with a prayer room; however, there is a small space in the school building where students with any religious background can use for praying.There are a library, a conference center, conference halls, a student		
Any special attention Religious Practiceto space in the school building where students with any religious background can use for praying.Facilities (Library etc.)There are a library, a conference center, conference halls, a studen restaurant, a gym, an exercise ground in the Kitakyushu Science and	Cultural Activities	There is a Japanese tea ceremony club organized by IPS students. International students are welcomed to enjoy the Japanese tea ceremony. There are volunteer groups that introduce Japanese cultures and custom to international students through various kinds of events and activities.
Facilities (Library etc.) restaurant, a gym, an exercise ground in the Kitakyushu Science and	• -	IPS does not provide students with a prayer room; however, there is a small space in the school building where students with any religious background can use for praying.
	Facilities (Library etc.)	There are a library, a conference center, conference halls, a student restaurant, a gym, an exercise ground in the Kitakyushu Science and Research Park and IPS students can use those facilities.
supporting service volu are	supporting service you are	IPS faculty members and staff give job-hunting guidance, seminars and recruitment talks for the international students who are keen to seek

### 16. Message to Prospective International Students

Message from University

#### Message from Dean of IPS

"A place where people who want to learn gather from all over the world and devote themselves to their respective studies." The Graduate School of Information, Production and Systems (IPS) was established on this concept in 2003 as one of Waseda University's graduate schools of science and technology. IPS has continued growing as an institution of education and research unlike any other for more than a decade since then. It is because of that concept that people of varied nationalities, backgrounds, and cultures come together at IPS, each bringing a personal goal.

The curriculum of IPS incorporates many features designed to welcome and nurture just such a community of diverse, ambitious people. For example, the student is not assigned to a laboratory for the first six months after entry into the master's program, but takes many classes in preparation for the full-scale research to come. This and the availability of both research-oriented and knowledge-oriented, lecture-intensive diploma programs are especially distinctive features. When you are ready to begin research in earnest, you'll choose your way forward from among the three broad fields of Information Architecture, Production Systems, and Integrated Systems, and proceed to acquire a wealth of learning through your research activities.

Information Architecture provides education and research based on a consideration of the current state of Information and Communication Technology, which deeply permeates the world around us today, and covering both hardware and software. Production Systems pursues the development of advanced, high-quality production methods through the introduction of production information systems utilizing Information and Communication Technology. Integrated Systems aims at the indispensable application of system LSI to the task of achieving compact, high-performance systems vital to such sectors as the smart home appliances of the future and the automotive industry. The three fields

	together mold global professionals possessing true collaborative ability
	through practical "collabo-learning" based on consigned research from
	corporations and joint research with overseas institutions.
	May your will to learn and your aspiration to succeed at the global level
	lead you to IPS, where a richly cosmopolitan, diverse environment for
	education and research awaits you!
	Message from an Indonesian graduate who is studying at IPS from April
	2015
	I maile an in the IDC It has a name made masses have income and
	I really enjoy studying in IPS. It has a very good research environment
	and all the learning resources which support the students to develop the
	skills that will be valuable for the future job. All the professors and the
	IPS staff members are very helpful. During my research work in the
	laboratory, the professor always encourages me to find the latest and
Voice of International Students	interesting research related topics. He dedicates a lot of his time to guide
	his students. Apart from offering a fantastic learning environment, IPS
	also has job training programs for the students. There would be high
	possibility to get a job offer from major enterprises which you are keen to
	at the most. Engaging in international environment helps me not only
	developing my English skills through daily discussion with a professor
	and laboratory members from many countries, but also overwhelming
	and rewarding experience.
	and rewarding experience.

Need to submit original application documents and entrance procedure documents.