Secondary Screening for October 2017 Intake International Undergraduate Programs in Engineering

The secondary screening for the International Undergraduate Programs in Engineering 2017 will be held as follows:

City	Date
New Delhi (India)	Tuesday, February 28, 2017
Hanoi (Vietnam)	Wednesday, March 1, 2017
Jakarta (Indonesia)	Thursday, March 2, 2017
Bangkok (Thailand)*	Friday, March 3, 2017
Beijing (China)	Saturday, March 4, 2017
Fukuoka (Japan)	Monday, March 6, 2017

^{*} Examinations for <u>Electrical Engineering and Computer Science</u> and <u>Mechanical and Aerospace Engineering ONLY.</u>

Please direct your inquiries to;

Administration Division, Student Affairs Department

Kyushu University

Email: nyu-inquiry@jimu.kyushu-u.ac.jp

Written Examinations for Engineering Programs

You will be given written examinations to test your basic knowledge in mathematics and science (physics or chemistry), which are essential for undertaking an education in engineering. The science test will be on a different subject depending on the program of your choice.

Program	Written Examination Subjects
Electrical Engineering and	(1) Mathematics (2) Physics
Computer Science	
Applied Chemistry	(1) Mathematics (2) Chemistry
Civil Engineering	(1) Mathematics (2) Physics or Chemistry* (* As selected in the online application registration.)
Mechanical and	(1) Mathematics (2) Physics
Aerospace Engineering	

1. Keywords

Here are some key words for helping you prepare for the written exams:

Subject	Key Words
Mathematics	Numbers and expressions, Quadratic functions, Figures and measurements, The number
	of possible outcomes and probability, Properties of integers, Properties of figures,
	Miscellaneous Expressions, Figures and equations, Exponential and logarithmic functions,
	Trigonometric functions, The concepts of differentiation and integration, Sequences of
	numbers, Vectors, Complex plane, Curves on a plane, Limits, Differential calculus,
	Integral calculus
Physics	Mechanics (Motion and force, Energy and momentum, Various forces and motion)
	Thermodynamics (Heat and temperature, Properties of gas)
	Waves (Waves, Sound, Light)
Filysics	Electricity and Magnetism (Electric field, Electric current, Current and magnetic field,
	Electromagnetic induction and electromagnetic wave)
	Atoms (Electrons and light, Atoms and nuclei)
	Chemical element, Molecule, and Chemical compound
	(Ionic bond, covalent bond, metallic bond, coordination bond, Crystal, closest packing)
	Atom and Electron configuration
Chemistry	(Electron shell, Periodic table, Atomic mass and Molecular weight)
	Chemical equation
	(Heat of reaction, Hess' law)
	Ideal and real gas
	(Combined gas law, Henry's law)
	Acid-base reaction
	(pH, Salt)
	Redox
	(Battery)

Inorganic chemistry
(Separation of metal ions, Properties of metals and ceramics)
Organic chemistry
(Aliphatic and aromatic compounds, Sugar, Amino acid and peptide, Synthetic polymers)
Chemical equilibrium
(Activation energy, Reaction rate, Catalysis, Solubility product)
State of matter
(Phase transition, Endothermic and exothermic transition, Colloid Solution)
Biochemistry
(DNA, RNA, ATP, ADP, Amino acid, Peptide, Enzyme, Pharmaceutical drug)

2. Sample Exams

We do not publish our past exams, but you should be able to have some idea of how our written exams would be like, by checking the past exams of Examination for Japanese University Admission for International Students (EJU).

They are available for download at the following URLs.

Subject	URL
Mathematics	http://www.jasso.go.jp/en/eju/examinee/icsFiles/afieldfile/201
	6/01/05/eju_2010_01question_math_en.pdf
Science (Chemistry and Physics)	http://www.jasso.go.jp/en/eju/examinee/icsFiles/afieldfile/201
	6/01/05/eju_2010_01question_science_en.pdf

You should also note that the levels of our written exams and EJU exams are about the same, but the formats in which they are offered are very different. While EJU exams typically consist of a series of multiple choice questions, our exams would require you to provide demonstrations and/or proofs.