

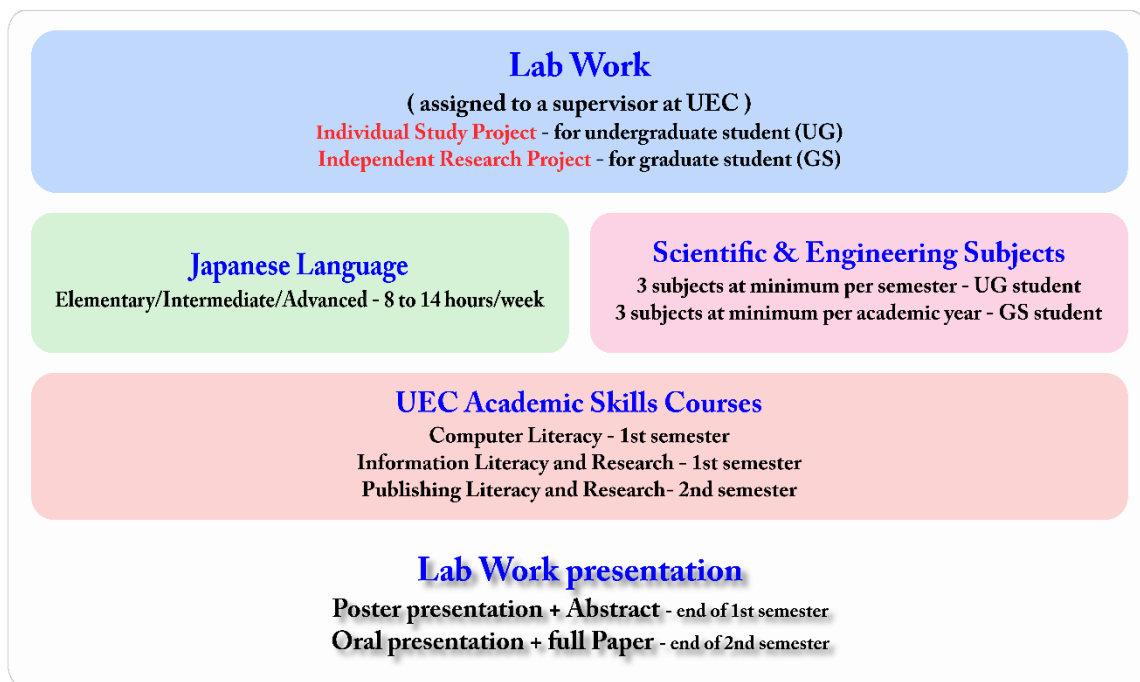
# UEC Short-term Exchange Program

(Japanese University Studies in Science and Technology, JUSST)

## Program Outline

This program is designed to cultivate researchers and professionals to possess the research ability in the fields of science and engineering and to develop strong technical skills of science communication.

All participants will be assigned to a research lab/faculty member, in the field related to your research or the field you are interested in, to undertake an original individual research study under the supervision of the faculty member at UEC. This means that, while earning your academic credits, you will have the chance to experience the Japan university research lab's life and work with the local students in addition to gain essential research skills and knowledge.



**JUSST program outline (core subjects and semester end assignment)**

†Please use the search-engine below to find out which faculty members specialize in areas relevant to your proposed research project.

**Webpage:** [http://kjk.office.uec.ac.jp/scripts/websearch/kaken\\_bunya.htm?DISP\\_KIND=1&lang=en](http://kjk.office.uec.ac.jp/scripts/websearch/kaken_bunya.htm?DISP_KIND=1&lang=en)

*\*Please note that some courses may be subject to change, based on staffing.*

## Course offerings

### a) Japanese language and Academic Skills courses (offered in every semester)

1. Japanese Language
2. UEC Academic Skills I (Computer Literacy)
3. UEC Academic Skills II (Information literacy and Research)
4. UEC Academic Skills III (Publishing Literacy and Research)

### b) Science and Engineering courses

Spring Semester	Fall Semester
1. Advanced Communication Engineering and Informatics I (Information and Communication Networks) *	1. Experimental Electronics Laboratory
2. Advanced Communication Engineering and Informatics II (Optical Communication Engineering)	2. Advanced Communication Engineering and Informatics III (Computational Complexity)
3. Media Design	3. Advanced Communication Engineering and Informatics IV (Computer Algorithms)
4. VLSI Low Power Circuit Design	4. Quality and Reliability Engineering
5. Introduction to Computational Methods in Science and Engineering	5. Semiconductor Materials and Devices
6. Advanced Quantum Mechanics *	6. Topics in Mechanical and Intelligent Systems Engineering I (Advanced Robotics and Mechatronics Engineering)"
7. Modern Optics and Photonics	7. Topics in Mechanical and Intelligent Systems Engineering II (Visual Communications)
8. Advanced Theory of Systems Reliability *	
9. Photonics and Opto-Electronics	

\* Joint classes with regular graduate students

### c) Scientific Research Communication Courses

Spring Semester	Fall Semester
1. Preparation for Overseas Study	1. Advanced Reading in Academic English
2. English for Intercultural Communication	2. Research Writing

### d) Optional course: Life Long Learning Sports (practical, for 2nd semester student only)

<sup>†</sup> The student might take the regular courses (conducted in Japanese), if their Japanese language proficiency is sufficient to be able to follow the classes/lectures

#### Course description

[http://www.fedu.uec.ac.jp/en/future\\_students/jusst/course-description/](http://www.fedu.uec.ac.jp/en/future_students/jusst/course-description/)

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