

Note: This English translation is provided for reference purposes only. The original Japanese version is the official draft and shall prevail in the event of any discrepancy between the two versions.

## Yamaguchi Future Creation School (YFCS)

### 1. Outline of YFCS

The Yamaguchi Future Creation School (YFCS), the president of which is the program manager, was established to foster doctoral students who take responsibility for the creation of innovation to realize Society 5.0, and human resources with high levels of expertise and innovation mindsets who can practice interdisciplinary research. The YFCS is a place for interdisciplinary research and plays an important role in expanding innovation education across all graduate schools. Furthermore, the YFCS provides educational programs that cultivate students' transferable skills, career design, international perspectives, and research abilities (the driving force in interdisciplinary research). Shin Monju Groups (interdisciplinary groups of three students) have been established to enable students to be mutually inspired and acquire multidisciplinary knowledge. Students hone transferable skills and engage in challenging interdisciplinary research through group activities. The YFCS will conduct a follow-up survey approximately ten years after students' graduation to verify the effect of these practices on human resource development. Participation in the career tracking survey using JGRAD (\*1) is a mandatory requirement for students who have received support.

### 2. Ideal type of human resources graduating from YFCS

The YFCS aims to foster human resources that do not withdraw into their own research area and have a mindset to actively conduct interdisciplinary research.

The "Creation of Innovation" is a typical phrase used by many graduate schools to describe the ideal type of human resources. YFCS students are expected to obtain five abilities: the ability to correlate, the ability to enquire, the ability to observe, networking abilities, and the ability to experiment.

#### Ideal type of human resources after graduation from each graduate school

##### Graduate School of Science and Technology for Innovation

Researchers and highly specialized professionals who possess an innovation mindset and basic skills and interest to conduct interdisciplinary research and collect related knowledge.

##### Graduate School of Medicine

Healthcare professionals who change the medical field and ideas about medicine by developing medical technologies with an interest in the various needs of the field and interdisciplinary research,

which realizes treatment techniques based on new ideas.

#### **Joint Graduate School of Veterinary Medicine**

Veterinarians and persons who change the animal medical field and ideas about animal medicine by developing treatment techniques with an interest in the various needs of the animal medical field and interdisciplinary research that realizes treatment techniques based on new ideas.

#### **Graduate School of East Asian Studies**

Researchers and highly specialized professionals who are interested in interdisciplinary research who possess an innovation mindset and basic skills to conduct interdisciplinary research and collect multidisciplinary knowledge.

### **3. YFSC Program**

YFSC provides educational programs in which students can not only cultivate transferable skills that are the foundation of the abilities to correlate, enquire, observe, network, and experiment, which are necessary for innovation, but also career design, internationality, and research abilities (the driving force in interdisciplinary research). Details about participation in the program will be provided after students enter the YFSC.

#### **① Provision of a place for students to cultivate and practice transferable skills.**

All selected students are required to take at least one of the inter-graduate classes at the Graduate School of Science and Technology for Innovation to cultivate the skills necessary to meet challenges and organize information; they can choose from Advanced Course in Research Methodology, Advanced Innovation, Advanced Course on Technology Roadmapping, and Advanced Course on New Product Development. Students will be notified about when the course starts, the mode of participation, and other details after enrolling at YFSC.

To cultivate skills that enable them to manage themselves, students are expected to analyze their research based on the above-mentioned abilities that they have cultivated. Furthermore, students develop their abilities by attending scheduled seminars.

To cultivate skills to communicate and build relationships with other people, students are recommended to take inter-graduate school classes on advanced presentation skills and scientific writing.

To practice cultivated transferable skills, groups of three students from different grades, graduate schools, and majors (Shin Monju Groups) will be established. The selected students are required to actively engage in group activities. The details of these activities will be provided later.

## **②Provision of a place for students to cultivate career design and practice skills**

The school will hold the class Career Design II to inspire students to contemplate their career paths. Extramural lecturers, including those presented by businesspeople and entrepreneurs, and lecturers from members of the university, such as the Dean of the graduate school, will discuss the various career paths students might pursue after completing the doctoral course. Students are strongly recommended to attend these lectures. Furthermore, seminars that help students build their career paths are regularly held.

Internships serve as practical opportunities for career design. Regarding the placement of doctoral students at internship sites, methods such as utilizing the Job-Based Research Internship Promotion Council system (\*2) are available. Please contact the University Career Center or the specialized career support department.

## **③Provision of a place for students to cultivate internationality and practice skills**

The school will hold various seminars in which English will be used as a communication tool. Students are required to actively attend such seminars.

The overseas training program provided by each graduate school will be utilized to develop students' internationality. Students are able to use the provided research expenses for overseas travel expenses.

## **④Provision of a place for students to cultivate their research abilities and practice their skills, with a focus on interdisciplinary research.**

The school requires students to develop interdisciplinary research skills. To this end, groups of three students from different grades, graduate schools, and majors (Shin Monju Groups) have been established. Group activities are expected to enable students to inspire each other, and to make interdisciplinary research more practical.

### **Outline of Shin Monju Groups**

The group provided students the opportunity to practice the skills that the school expects to cultivate. Mentors in each group check the progress of the activities and provide students with advice as needed. However, mentors are expected to avoid excessive interference.

Mentors are not only Yamaguchi University professors, they may also be businesspeople and members of public testing/research laboratories.

(\*1) JGRAD

JGRAD (Japan Graduate School and Career Database) is an information infrastructure platform developed and maintained since 2014 by the National Institute of Science and Technology Policy (NISTEP), a national research institute under the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Its purpose is to comprehensively understand the career paths and activities of doctoral human resources in society.

For further details, please refer to the "About JGRAD" section at the URL below.

Note: All students of the Yamaguchi Mirai Sohatsu Juku are required to register.

Reference URL: <https://jgrad.nistep.go.jp/>

NISTEP Official Website: <https://www.nistep.go.jp/>

(\*2) Job-type Research Internship Promotion Council

The Job-type Research Internship Promotion Council is an organization established to align employment practices suitable for Society 5.0 with the learning provided by higher education. This is achieved through the promotion of long-term, paid research internships conducted as part of graduate school education.

All students must register for the matching system, regardless of whether you currently intend to participate in an internship. Please refer to the regular information sessions (held online approximately once a month) for guidance.

**Important Registration Instructions:** When registering, you must include the following two email addresses:

(1) Your academic supervisor's email address.

(2) tryjb\_at\_yamaguchi-u.ac.jp (Please replace "\_at\_" with "@")

This registration is essential for us to track your participation in the Job-type Research Internships and the progress of your matching with companies. Thank you for your cooperation.