

# Activities of Certified Professional Ergonomist in Japan

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## ABSTRACT

In Japan, 10 years pass after certified professional ergonomist starts. About 200 specialists, an associate specialist and an assistant are certified. However, as these activities and their effects are not known widely, these important outcomes are not handed down to many specialists and their specialty is not recognized enough. Thus, it is important for specialists to know many activities and effects by professional in other accredited organizations.

**Keywords:** Certified Professional Ergonomist, Ergonomics

## OVERVIEW

### Overview of the Japan Ergonomics Society Certification Program for Professional Ergonomists

The ergonomic role is to be able to make a comfortable products and system with safety for a human being. To play such a role, not researchers, experts / professionals who spread ergonomics in the society and can practice is necessary (Kawai, et al., 2012). Experts / professionals of ergonomics have been certified in U.S.A. and Europe, and its necessity has been recognized in Japan. From this, Japan Ergonomics Society established committee of certified professional ergonomist in 1994 and started discussion for certification of ergonomics experts. This certification system is to certify ergonomists that ergonomic knowledge, a technical skill and ability for solution to the problem satisfy any criteria. After that, certification of the first ergonomic experts was carried out. This time, 126 ergonomists were certified as professional ergonomists.

This qualification acquired IEA (International Ergonomics Association) endorsement in 2007. Though this qualification is to spread ergonomics, as this requires practice experience, they are trade-offs. Thus, “Certified associate ergonomist” and “Certified assistant ergonomist” were established in 2007. They are qualification for a few practice experience ergonomist and for ergonomics worker who does not graduate from a university, respectively. Table 1 shows eligibility requirements for certification examination (Yokoi, 2012). These qualifications are certified by Committee on Certification of Professional Ergonomists in the Japan Ergonomics

Society. Ergonomist who received certification becomes a member of this committee. As of November 1<sup>st</sup> of 2013, there are 182 certified professional ergonomists, 105 certified associate ergonomists and 14 certified assistant ergonomist in this committee.

Table 1. Qualification: Three stage certifications

	Target persons	Educational background
Certified Professional Ergonomist	Ergonomics engineering expert in company, etc.	University graduate
Certified Associate Ergonomist	-University graduate -Enrollment in graduate school person	University graduate
Certified Assistant Ergonomist	-Engaged in business or task	Special educations more than 6 units (in Japanese system)

## ACTIVITIES

### Activities of the Committee on Certification of Professional Ergonomists

In this committee, the activity about the enforcement of the certified examination and the administration of this system including the re-authorization of the qualification goes the activity such as dispatch, contribution for the society or the interchange of the member positively. Main activities for spreading ergonomics are shown below.

#### Lecture

In every plenary meeting, the lecture by experts is carried out. Because this lecture is available to the public and is free, a lot of participation out of the member is popular every year.

#### Bulletin (fourth a year)

The committee publishes a bulletin four times a year. It is full of interesting articles including activity introduction, reports and related information, etc. All the back number is shown by the homepage and can read anyone who does not depend on the committee members (Japanese only).

#### Seminar / Observing Meeting

The committee starts a seminar for members in 2010. Only a member can participate but it is significant as a place of the interchange of the expert.

#### Symposium

It is intended to share the activity of the ergonomics expert and to send information to the society, the committee holds a symposium hosted in societies related ergonomics. In these symposiums, many experts introduced their activities. Table 2 shows examples of their activities.

Table 2. Examples of activities of certified professional ergonomists

Comfort of chair
Ergonomic evaluation of compound product of electric, information and architecture
Practical use of behavior observation
Auditory universal design
Web usability
Ergonomics for system developments
Appeal to customer feeling
Ergonomics for blood purification
Education and product design
Optimization of living activities
Nursing-care service

### Contribution to Ergonomics Good Practice Award

Japan Ergonomics Society started the use of the good practice database (GPDB) in 2008 as a part of the ergonomic spread, enlightenment activity and the contribution to society ([http://www.ergonomics.jp/e\\_index/e\\_gpdb.html](http://www.ergonomics.jp/e_index/e_gpdb.html)). Ergonomics experts cooperate with the choice of the prize for registration of this example and good practice overall.

## EDUCATION

### Action of the Universities for Professional Qualification

The correspondence at the existing stage to the ergonomics professional qualification in the Japanese university and graduate school has begun to just start except some universities. The representative action is curriculum setting for certified associate ergonomist (Fujii, 2012). On the other hand, there is the policy to instruct it to acquire work experience more than two years after graduation, and to aim at the expert qualification. We describe some actions in university related to acquire qualification of certified associate ergonomist in this section. Definition of certified associate ergonomist is “persons who regarded as having basic technical knowledge or work experience that could be applied for expert qualification acquiring ergonomic practice and self-improvement”. At present, 182 experts are authorized as “Certified Associate Ergonomist”. Curriculums related ergonomics in main universities which produced multiple authorized persons of “Certified Associate Ergonomist” are shown in table 3.

Table 3. Subject specialized in the acquisition for “certified associate ergonomist”

A university	B university	C university	D university
Kansei ergonomics Human body tectonics Psychological statistics Kansei engineering Environmental ergonomics Reliability Physiological information Industrial psychology Cognitive science Universal design Color psychology	Ergonomics Cognitive engineering Safety engineering Environmental engineering Human factors Human interaction Health engineering Physiological information Reliability Labor science Human machine system Welfare engineering Ergonomics design	Residence environment Living environment Living statistics Fundamental design Environmental psychophysiology Ergonomics Architecture planning	Design Ergonomics Sensory experiment Lighting planning Management engineering Behavior science Applied human factors Industrial ergonomics Product ergonomics Labor science Welfare support engineering

Many of universities and faculty is engineering, but some of them are psychology or life science. Unfortunately, there are a few universities prepared study subjects like these in a Japanese university more than 1000. Demands of certification program from university are to acquire this qualification until first half of junior for job hunting and to reduce any costs (examination charge, registration fee and annual fee). Some universities wish to acquire their curriculums themselves. If certified associate ergonomist could be placed as a transition qualification for acquiring certified professional ergonomist future, its role is expansion of the range. To play role, this program has to clarify its merit that promotes a shift from certified associate ergonomist to certified professional ergonomist smoothly.

## CONCLUSION

This paper describes the summary of the expert qualification, actions as experts, importance from the view point of global and actions of education fields. However, these important activities are not necessarily recognized. It is fact that sometimes “why qualification as an expert is necessary?” whispered. To wipe out such a question, it is important to appeal activity achievements as experts and show merits international endorsement. But, the most important thing is that each expert be active every day with a pride and confidence for this qualification.

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