Development of Multidisciplinary Field of Study in Technical University: from Biomedical Engineering to Gerontology

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Global network society demands engineers who has studied in the multidisciplinary field. The multidisciplinary field of study should be developed in the educational systems in the technology. To develop a department of the multidisciplinary field of study in a university, you have to check several important aspects: professors of multi-disciplinarian [1, 2], bridging curriculum [3], and common facilities [4]. Activity by a team, which consists of members from a variety of backgrounds, is effective to learn multidisciplinary topics [5]. A cross cultural training is also effective to break through the barrier between disciplines [6]. “Biomedical Engineering” is one of the multidisciplinary fields of study [7]. It is not only related to engineering and medicine, but also to variety of natural sciences, human sciences and social sciences. It is not only combined field between two disciplines, but also new field to create new discipline. New methodology is necessary to solve the communication problem at the interface between the engineered system and the biological system [8]. “Gerontology” is picked up in the aging society in the world [9]. Gerontology is also multidisciplinary field of study. The article is based on the experiences of the author [9], who creates the first department of Biomedical Engineering in Japan [10]. Japan is one of the country, in which the generation balance will change in few years. The multidisciplinary technology will support the ageing society.

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