

Guidelines for Doctoral Dissertations

The Graduate School of Mathematical Sciences, The University of Tokyo, confers the Degree of Doctor (Mathematical Sciences) on those who have demonstrated their ability through the dissertation and the qualification examination in accordance with the guidelines below.

1. A doctoral candidate who submits his/her dissertation must comply with the Code of Research Ethics of The Graduate School of Mathematical Sciences, The University of Tokyo.
2. The dissertation must contain hitherto unknown mathematical results and/or methods of sufficiently high scholarly value. The candidate who will be awarded the degree of doctor is required to demonstrate a broad understanding of relevant fields of mathematics/mathematical sciences and the ability to do independent research. In order to test these requirements, an oral defense is held in the style of a public seminar.
3. Mathematics/mathematical sciences are international subjects, in which the principal languages are English, French and German. The dissertation must be written in one of these three languages (preferably in English). A resumé in Japanese is required to be submitted as well. However, the above language requirement may not apply to the exceptional case where the paper needs to treat intricate non-mathematical materials like economics, sociology, medical science, engineering and so forth, in which case the relevant parts may be submitted in Japanese.
4. When preparing the dissertation, the candidate should clearly distinguish his/her own contributions from those obtained in existing works. In the references, he/she should cite the original research papers, if available. Whenever essential ideas have been provided in writing or orally by other parties, this must be explicitly indicated.
5. Within a mathematical statement, assumptions and results must be clearly distinguished. Mathematical proofs should be complete and detailed. Mathematical models must be precisely and concisely described. The candidate should carefully check the validity of the hypotheses and numerical calculations used in simulations of mathematical models. The core of a paper is often contained in passages where the author has had difficulties during the preparatory phases. Such passages should be carefully elaborated and sketchy treatments should be avoided.
6. The accepted dissertation or its main body should be published in a refereed international scholarly journal in due time. In order that this requirement be met, the (main body of the) manuscript of the dissertation must be submitted in advance to a suitable journal.