This is an official translation of the Regulation for Doctoral Studies, approved by Resolution No. 40 of the KTU Senate of 29 June 2011. Lithuanian version of this Regulation prevails over this translation in case of dispute.

#### KAUNAS UNIVERSITY OF TECHNOLOGY REGULATION ON DOCTORAL STUDIES IN THE FIELD OF ELECTRICAL AND ELECTRONIC ENGINEERING

#### I. GENERAL PROVISIONS

1. This Regulation on Doctoral Studies in the field of Electrical and Electronic Engineering (hereinafter – field of science) is prepared in accordance with the Regulations on Doctoral Studies approved by Resolution No. 561 of the Government of the Republic of Lithuania of 12 May 2010 (Valstybės žinios (Official Gazette) No. 59-2900, 2010).

2. This Regulation lays down the procedures on admission to doctoral studies, supervision of doctoral students, preparation and approval of doctoral study and research plan, doctoral studies, the assessment of doctoral student's knowledge, abilities and skills, doctoral research performance, preparation, analysis and defence of a dissertation, issuing of doctorate diploma, performance evaluation of a doctoral student and postponement of deadlines, as well as reviewing requests for external defence of dissertations, examination of appeals and complaints, funding of doctoral studies and document storage, approval of the doctoral committee's resolutions and their implementation procedure; the requirements for the doctoral committee, scientific supervisors, members of the dissertation defence boards; and functions and work procedures for persons, units or purposefully designed structures involved in the process of doctoral studies in the field of science to which Kaunas University of Technology (hereinafter – the University) was granted a right by the Ministry of Education and Science of the Republic of Lithuania.

In agreeement with the Research Council of Lithuania, the Senate forms and approves a 3. doctoral studies committee (hereinafter – the Committee) for a field of study, appoints its Chairman and approves the regulation on doctoral studies and amendments thereto. The Committee is to be composed of at least nine scientists, who have published at least five scientific works within the last five years: monographs or book chapters published by internationally recognized academic publishers; scientific articles in journals with Impact Factor higher than 0.2 in relation to the Aggregate Impact Factor for the correspondent ISI JCR subject category (if the journal is assigned to several categories, the calculation is made in accordance with the average of the Aggregate Impact Factors for the subject categories); patents granted by the European Patent Office (EPO), the United States Patent and Trademark Office (USPTO) or the Japan Patent Office (JPO), owned by Lithuanian natural or legal persons; other internationally significant works for the subject area. scientific supervisors and scientific advisors, as well as teachers teaching in doctoral studies shall meet the following requirements: within the last five years they have published at least 3 scientific articles in international scientific journals with Science Citation Index (SCI), or at least 1 scientific article in international scientific journal with SCI and 1 monograph, or at least 1 scientific article in international scientific journal with SCI and have carried out research and experimental development works of LTL 200 thousand in total.

4. Doctoral studies and research are coordinated by the Doctoral Studies Committee. The Committee carries out the selection of dissertation topics, submits a list of scientific supervisors to be approved, acts as a mediator in the appointment of scientific advisors, provides conclusions on the research level of the departments and the compliance with qualification requirements of scientists involved in the process of doctoral studies; doctoral studies, research and publication of

findings, as well as on doctoral dissertation preparation programmes and their implementation; provides with requirements regarding the language of dissertation, implements doctoral students' performance evaluation, guarantees the success of doctoral studies and implements the upgrade, acts as a mediator in the postponement of deadlines, evaluates the final draft of dissertations, forms dissertation defence boards (hereinafter – the Board). The Committee is to present all the submissions, proposals and decision protocols to the Research Affairs Department, which in turn prepares the material for the Rector, the Vice-Rector for Research and the Senate.

5. The purpose of doctoral studies is to train scientists capable of independently performing research and development (social) activities and able to solve scientific problems. A person who has completed doctoral studies and received a doctoral degree is expected to have acquired satisfactory competence: advanced knowledge in research work, scientific fields and their interaction; specialized skills and methods required to solve research-related and other problems, and to keep expanding this knowledge and use it for the enhancement of professional practice; a doctoral graduate is expected to be able to work independently and possess profound understanding of science and his profession in order to generate new ideas or processes and use them in his field of study or any other area. The duration of full-time doctoral studies is 4 years; part-time studies last 6 years. Doctoral studies involve studying, targeted research and preparation of a dissertation.

6. Doctoral studies are financed by the State budged through assignations, State investment programmes and State investment project funds, incomes received as tuition fees, as well as incomes received for economic and research activities and services provided, as well as programme based competitive research funding, funds allocated by the State, international and foreign foundations and organizations, and other legally obtained incomes.

7. Funds for doctoral scholarships, payments and social security of members of the Board, doctoral students' supervisors and scientific advisors, doctoral students' research (publication of scientific articles in international journals subject to availability), dissertation and its abstract duplication, and other costs associated with the doctoral degree granting shall be foreseen in the revenue and expenditure estimates of the University.

8. Doctoral dissertation is defended and doctoral degree is granted by the Board composed for the defence of the particular dissertation after the dissertation is finished and recommended for the defence. The Committee compose the Board out of at least three members. The Committee submits the composition of the Board and its Chairman to be approved by the Rector.

9. A doctoral degree is granted to a person who has accomplished the requirements of doctoral studies laid down in this Regulation, whose dissertation and scientific publications have shown his capability of applying research methods independently and critically, carrying out research, solving scientific problems, and who has successfully defended a doctoral dissertation.

10. The Committee annually evaluates the relevance of the field of study to scientific and social development, the level of research carried out for the dissertation purposes, the condition of doctoral studies in the University, as well as analyses the experience of doctoral studies of the University, the quality of the defended dissertations, and submits the summarized findings and recommendations on doctoral studies improvement to the research committee of the Senate, the Senate and the Rector.

11. The process of doctoral studies is supervised by the Vice-Rector for Research; the documentation is managed by the Research Affairs Department.

12. The personal file of a doctoral student (or person wishing to obtain a doctoral degree externally) is stored in the Research Affairs Department during the period of doctoral studies and two years after completion, and afterwards placed into the University Archive. The file shall be composed of the following documents:

12.1. an application for enrolment in doctoral studies, including supplements specified in the announcement of admission to doctoral studies;

12.2. documents related with the enrolment to doctoral studies;

12.3. documents related with the appointment of scientific supervisors and scientific advisors;

12.4. programme (plan) of doctoral study and research, publication of findings and preparation of doctoral dissertation;

12.5. documents related with doctoral student's annual performance evaluation;

12.6. documents related with any postponements of the time limits specified in the doctoral programme (plan);

12.7. records of doctoral examinations taken;

12.8. a list of scientific articles published and accepted for publication and their copies;

12.9. the decision on termination of doctoral studies, in case the doctoral student was expelled from the doctoral studies programme due to the findings presented in evaluation or any other reasons, or due to the failure of presenting doctoral dissertation for the defence before the end of doctoral studies;

12.10. copies of doctoral diploma and diploma supplement;

12.11. an application for the defence of doctoral dissertation and other documents relating thereto (records of initial discussions, final evaluation of a dissertation and etc.);

12.12. a declaration by the doctoral student that the dissertation was written independently;

12.13. an abstract of dissertation;

12.14. a copy of doctoral diploma.

## II. ADMISSION TO DOCTORAL STUDIES

13. A doctoral candidate must hold a Master's degree or a higher education degree equivalent to it.

14. State financed doctoral positions for each field of science are determined by the Ministry of Education and Science (hereinafter – the Ministry). The positions are distributed among academic units of the University by the order of Rector in accordance with the order of priority of dissertation topics.

15. No later than one month prior to an open invitation to a competition for admission to doctoral studies, the Vice-Rector for Research, acting on a proposal of the Committee, announces a competition for dissertation topics and scientific supervisors. The competition is organized by the Research Affairs Department and implemented by the Committee. The topics of doctoral dissertation shall correspond to the areas of research of the University. The competitive lines of doctoral dissertation topics (scientific supervisors) compiled by the Committee shall be finalized in the protocol of the Committee signed by the Chairman and the secretary to the meeting. Upon request, the protocol may be signed by all members of the Committee. The protocol of the meeting is presented to the Research Affairs Department. The competitive line of doctoral dissertation topics is published on the University website by the Research Affairs Department.

16. A competition for admission to doctoral studies is announced by the Rector, acting on a proposal of the Committee. The announcement shall specify the documents to be presented by the candidates.

17. A candidate presents an application for admission to doctoral studies, addressed to the Rector, to the Research Affairs Department. Along with the application, indicating the field and form of studies, as well as choices of dissertation topics in order of priority (up to two), a candidate shall present the following documents:

17.1. a Master's diploma and diploma supplement (originals and copies (originals to be returned immediately), a document certifying the academic qualification acquired abroad issued by the Centre for Quality Assessment in Higher Education);

17.2. Curriculum Vitae;

17.3. recommendation by two academic referees from the relevant field of science;

17.4. a list of research works and their copies, and in the absence of such works – research project on the topic selected in accordance with the results of competition for doctoral research topics;

17.5. other relevant documents.

18. The competition for admission to doctoral studies is held in July. The admission is organized by the Research Affairs Department and implemented by the Committee. An interview with the Committee members must be attended by all candidates.

19. Doctoral candidates are enrolled to full-time or part-time doctoral studies in accordance with the competition procedures. The applicants who fulfil the doctoral studies requirements but have failed to be accepted to the state funded study positions may choose the paid doctoral studies and pay the determined tuition fee. Persons admitted to doctoral studies sign bilateral agreement with the University.

20. The criteria for enrolment are as follows:

20.1. publications evaluated in points according to the evaluation method of scientific production approved by the Ministry of Education and Science of the Republic of Lithuania;

20.2. the applicant's grade point average (GPA);

20.3. scientific qualifications, research publications and scientific experience correspondence to the dissertation topic;

20.4. interviewing and etc.

21. Enrolment criteria and competitive grade calculation shall be approved annually by the order of Rector, acting upon a proposal of the Committee.

22. According to the enrolment criteria, the Committee evaluates the candidates in grades and compose the priority ranking for topics according to the highest competitive grade. The lists of candidates and the decision to accept or reject the enrolment to doctoral studies shall be finalized in the protocol of the Committee. The protocol is signed by the Chairman and the secretary to the meeting. The protocol is presented to the Research Affairs Department.

23. If the Committee determines that the candidate attended insufficient amount of subjects of the relevant field of science, or that his knowledge in particular subjects is insufficient, the Committee may assign the doctoral student with additional study courses to be attended within the first year of studies.

24. In cases where not all available state funded doctoral studies positions are filled during the regular admittance procedure, an additional competition may be held by the Research Affairs Department under the same procedure.

25. A person is admitted to doctoral studies by the order of the Rector, indicating the field of science, topic of dissertation, form of studies, length of studies and the source of funding. The order

is prepared by the Research Affairs Department in accordance with the protocol of the Committee and bilateral agreement signed.

26. The Committee no later than during the first two weeks of the academic year organize a meeting of the Committee involving the newly admitted doctoral students and supervisors who won the dissertation topics competition. During the meeting, the newly admitted doctoral students are appointed with scientific supervisors, department/academic unit of the University and the dissertation topic. The proposal of the Committee shall be finalized in the protocol of the meeting to be presented to the Research Affairs Department.

27. The applicants who have failed to be accepted to the state funded study positions may choose the paid doctoral studies and pay the study fees determined by the University.

28. Citizens of foreign states (other than the European Union (EU) Member States) who hold a Master's qualification degree or a higher education degree equivalent to it and are applying to doctoral studies, in addition to the documents listed in paragraph No. 17, are also required to present a document certifying the academic qualification acquired abroad and pay the study fee established by the University.

29. Non-EU citizens admitted to doctoral studies have to acquire the residence permit under the procedure established by the laws of the Republic of Lithuania.

30. EU citizens participate in the competition under the regular procedure.

31. Personal file of a person who has failed to be accepted or have not completed the doctoral studies shall be stored at the Research Affairs Department, and later transfer to the University archive.

### III. SUPERVISION OF DOCTORAL STUDENTS

32. The studies and research of doctoral student are supervised by the scientific supervisor (hereinafter – the supervisor). A supervisor has to be a scientist of the corresponding science field. A supervisor my at the same time supervise the study of up to five doctoral students.

33. If necessary, a doctoral student can be assigned scientific advisors (up to two), who can be scientists from another field of science. Scientific advisors can be appointed no earlier than after approval of the dissertation topic.

34. The Research Affairs Department no later than within the first three weeks since of the academic year shall coordinate the lists of scientific supervisors and departments with the Vice-Rector for Research and present them to be approved by the Senate. The supervisors shall be approved by the Senate no later than within one month after the admission of doctoral student. Scientific advisors (if considered necessary by the supervisor and the Committee) shall be approved under the same procedure as the supervisor.

35. Scientific supervisor and scientific advisors' written consents and documents, showing the compliance with the qualification requirements of the doctoral studies process, are presented to the Research Affairs Department by the department or other academic unit.

36. Scientific supervisor:

36.1. together with the doctoral student, prepares a study and research programme (plan) project;

36.2. propose candidates for scientific advisors, if considered necessary;

36.3. provides the doctoral student with methodical assistance, supervises his scientific activities and constantly monitors the doctoral student's success in the doctoral studies process;

36.4. renders assistance to the doctoral student on the issues related with the organization of studies, carrying out research and the preparation of a dissertation;

36.5. for each performance evaluation of the doctoral student presents an opinion on the results of doctoral student's studies and research and the expedience of continuing the doctoral studies;

36.6. along with the doctoral student is responsible for the quality preparation of the doctoral dissertation.

37. Scientific advisor:

37.1. consults a doctoral student on the issues related to some branch of the research field;

37.2. organizes research and experiments in other departments of the University or other institutions.

38. Scientific unit to which the doctoral student is assigned:

38.1. Establishes conditions for a doctoral student to successfully implement an individual study and research plan;

38.2. monitors the doctoral student's success in the doctoral studies process;

38.3. provides methodological assistance; encourages doctoral student's mobility;

38.4. helps the doctoral student to gain teaching experience;

38.5. helps to develop excellence in research throughout the doctoral studies period;

38.6. for each performance evaluation of the doctoral student presents an opinion on the results of doctoral student's studies and research and the expedience of continuing the doctoral studies;

38.7. upon the preparation of a dissertation, organize initial deliberations on the doctoral dissertation, in accordance with the procedures of deliberations in the departments set by the University, presents the Committee with an opinion on doctoral dissertation correspondence to the requirements.

39. In cases where due to significant reasons there is a need to change the supervisor or the advisor, this intention shall be coordinated and approved under the same procedure.

40. A doctoral student has a right to file a reasoned appeal with the Research Affairs Department requesting to replace his supervisor. The appeal may be submitted no later than one year before the end of the doctoral studies. The appeal of the doctoral student shall be examined by the Committee and a decision taken within one month of the filing date. If the doctoral student's appeal is satisfied, the Committee, with regard to the doctoral dissertation topic, announces the competition for the scientific supervisor position. If the appeal is repulsed, the scientific supervisor continues the supervision.

### IV. DOCTORAL STUDENT'S STUDY AND RESEARCH PLAN

41. A supervisor together with a doctoral student no later than within one month of the supervisor's approval prepare the study and research plan of the doctoral student, including the programmes of doctoral studies and research, and a project. The study and research plan shall include the deadlines of all the works to be carried out. The purposeful research is to be carried out from the beginning of the doctoral studies.

42. The doctoral studies consists of no less than four study subjects with the total volume of no less than 30 ECTS credits. The programme of doctoral studies is to be approved by the Vice-Rector for Research. The programme shall include the main study subjects of the doctoral studies field, study subjects of alternative branches of doctoral field of science, and elective study subjects of doctoral studies and adjacent fields of science. One study subject chosen by the Committee is

obligatory to every doctoral student of the particular field of science. Other courses can be proposed by the supervisor, the department or academic unit, or the Committee. Upon the agreement with the supervisor and the Committee, a doctoral student fills in the selected courses into the individual study plan, which is an integral part of the doctoral student's individual programme of doctoral studies and research. The plan is to be presented within one month from the beginning of the doctoral studies to the Research Affairs Department to be approved by the head of department. A doctoral studies. The remaining examinations in three study subjects within the first year of the doctoral studies. The remaining examinations, of the electively chosen courses, may be taken in any time during the doctoral studies. In accordance with individual study plans, the schedules of study subjects, consultations and examinations are prepared.

43. The doctoral studies programme shall only consist of modules certified by the Committee in accordance with the procedures set by the University. The Research Affairs Department is responsible that the study modules entered into the individual study plans would be certified and corresponding with the doctoral studies programme.

44. Lectures and consultations in the doctoral studies can be given by the scientists whose research and scientific publications of the last five years correspond to the subjects of study. The modules of the doctoral field of science can be taught by professors who meet the requirements of doctoral studies programme participants. Associate professors, meeting the requirements of doctoral studies programme participants, can teach modules in doctoral studies only upon the approval of such exception by the board of the faculty on a proposal of the Committee.

45. Lectures for doctoral students are organized by the deans of faculties, responsible for the doctoral studies modules, along with the departments and the Research Affairs Department. Lectures can be organized provided that they are included in the individual study plans by at least four students. In all other cases the course is studied individually with regular consultations. The schedule of doctoral studies classroom courses is announced publicly.

46. The research programme of a doctoral student is composed of: the analysis of scientific literature, research, a part of which may be carried out in foreign high-level research centres, the analysis of data obtained, scientific publications, scientific reports in international conferences, the preparation of a dissertation, and etc.

47. An individual study and research plan of a doctoral student is authorized by the department or academic unit, approved by the Committee and presented to the Research Affairs Department.

48. A doctoral student carries out research in accordance with the approved study and research plan. The content, quality, scope and deadlines are evaluated during the doctoral student's performance assessment.

49. A doctoral student is entitled to have access to any necessary research equipment contained in the departments, laboratories and other units of the University. If any research can not be carried out within the University, it may be carried out other local or foreign science institution.

### V. DOCTORAL STUDENT'S KNOWLEDGE, ABILITIES AND SKILLS ASSESSMENT AND PERFORMANCE EVALUATION

50. The study course of each subject ends with an examination. A three-member examination commission is formed for the purpose. The composition of the commission is offered by the department, authorized by the Committee and approved by the Vice-Rector for Research. The members of the commission may include the module teachers, members of the Committee and other scientists – active specialists in the particular field of science, including scientific supervisors and scientific advisors. Examinations are commended to be organized during the regular exam sessions. Examinations can be conducted both orally and in writing. Examination protocols are presented to

the Research Affairs Department; examination results are entered and stored in the academic information system database.

51. The results of the passed examination are recorded in the examination protocol and signed by all members of the examination commission. The original copies of these protocols are stored in the personal file of a doctoral student in the Research Affairs Department.

52. Upon the submission of the scientific supervisor, the previously taken examinations in the subjects studied within the framework of the doctoral programme may be accepted as passed.

53. After all the doctoral examinations are passed, the Committee issues a protocol stating that the doctoral studies are completed. The Committee specifies the dissertation topic, research programme and the schedule of the preparation of dissertation. The extract from protocol is presented to the Research Affairs Department.

54. Every year at the end of the fall and spring semesters, the department conducts a performance evaluation of doctoral students. The department or the academic unit with the presence of doctoral student and his supervisor evaluates the implementation of the study and research plan of the doctoral student and provides the conclusions to the Committee which gives the doctoral student a positive (thereby approving the continuation of the doctoral studies and specifying the programme for the next year) or negative (thereby suggesting the termination of the doctoral studies) evaluation. The Committee meeting includes doctoral student and his supervisor. A protocol on performance evaluation and documents submitted by the doctoral student is presented to the Research Affairs Department. The results of performance evaluation are also presented to the dean or the head of other unit to which the doctoral student is assigned. A doctoral student who received negative evaluation is expelled from the doctoral student may be conducted on a proposal of scientific supervisor, head of the department or the Committee in cases where doctoral student demonstrably fails to fulfil the requirements of study and research programme

55. For important reasons (illness, childbirth, parental leave, etc.) the Rector can grant a doctoral student an academic leave of absence, extend the period of doctoral studies, research, examinations, preparation of a dissertation and other evaluation. Doctoral students' requests for postponements are registered and the orders of the Rector are prepared by the Research Affairs Department.

### VI. VACATION, TRIPS, SCHOLARSHIPS, APPELLATIONS, OTHER CIRCUMSTANCES

56. Doctoral students are on vacation in July and August each year.

57. Persons admitted to regular state-financed doctoral studies are paid with a scholarship determined by the Government of the Republic of Lithuania. As a result of assessment delays or violation of the internal order a doctoral student may lose under the Rector's order a one month scholarship in that year. When studies are temporally interrupted and student rejoins study, calendar days of incomplete month are included into the doctoral studies duration term and a student receives adequate part of scholarship, except if a student rejoins his study on the first or the last day of month.

58. Given the important reasons, after coordination with the doctoral student's supervisor, the head of the core academic unit, the Committee and the Research Affairs Department, doctoral student might be permitted under the Rector's order to interrupt studies temporally, but not more often than once a year and for the period up to one year in total.

59. In case of illness, doctoral student himself or his close people must inform the Research Affairs Department about this fact no later than in three days. Student must deliver a medical report for the period of illness after he rejoins his work. On the basis of this report student is permitted to

delay the terms of assessment under the Rector's order. The illness does not influence the duration of doctoral studies. In case the illness lingers, student may apply for permission to temporally interrupt studies or to take an academic leave of absence.

60. Doctoral student may perform research or take a period of study in other institutions or abroad. This period is included into the total study period and student receives his scholarship. Student takes such trips under the Trip Regulation established by the Government, under the Rector's order based on student's application endorsed by the supervisor, head of the core academic unit, dean and Research Affairs Department. Study trips may be financed from projects and programmes administrated by the Research Council of Lithuania, funds of academic unit, from University's international relations fund for students, may be reimbursed by the host party, or financed from other resources. Pay for trip expenses or a part of it may be disbursed before departure. After student returns from the trip, he must submit the documents that vouch the expenses to the Accounting Department of the University in three working days.

61. Doctoral student may have each year an academic load, established by Senate, if it corresponds to the needs and possibilities of the Department.

62. Doctoral students may be employed in the academic units for a full time or part time equivalent after they receive consent from supervisor and approval from department / academic unit.

63. Doctoral students receive certification about completion of doctoral studies after they pass assessments of all study modules and submits affirmatively evaluated doctoral thesis according to the order established in paragraphs No. 68 and No. 73 of this Regulation. For those who have not fulfilled the requirements of individual study and research programme and (or) have not submitted the doctoral thesis, the certificate with indicated period of doctoral studies and partial results is issued.

64. Expenses for the publication and sending of doctoral thesis and abstracts, firstly rendered by University's doctoral students, are covered from the University's Science Foundation.

65. Motivated appeal concerning not granted doctoral degree, complain concerning the rejection of request to defend doctoral theses by extern or doctoral student, or other paragraphs concerning doctoral studies must be submitted to University's Secretariat on behalf of the Rector within 14 calendar days. The Rector submits the appeal to the committee, subdivisions or purposefully formed structures for approval. Appeal must be processed and the decision must be made within 15 calendar days after receiving. Research Affairs Department writes the response concerning the decision on behalf of the Rector and dispatches it to the declarant in 3 working days after the decision has been made.

#### VII. PREPARATION AND EXAMINATION OF DOCTORAL DISSERTATION, ISSUANCE OF DIPLOMA FOR DOCTOR OF SCIENCE

66. Doctoral dissertation is prepared following the paragraphs No. 20 and No. 21 of Regulations on Doctoral studies approved by the Government of the Republic of Lithuania, and the abstract is prepared following the paragraph No. 22. Scientific monograph may be also submitted as doctoral dissertation, if it has no co-authors. The abstract of monograph must be submitted as well. In this case, other scientific publications must be submitted if they are necessary for a comprehensive presentation of the dissertation topics. Doctoral dissertation must be original research work, summarizing all research performed by doctoral student, examining the problem of science field. The volume of 4-10 printer sheets is recommended. In the dissertation the aim, objectives and tasks of research must be defined, novelty of research work must be indicated, the worldwide survey of research on this topics must be performed, applied research methods must be presented, research outcomes must be discussed, and their reliability and relation to the data gained by other researchers

must be substantiated. The conclusions may be submitted in a separate section. Dissertation must contain lists of used scientific literature, sources, and doctoral student's scientific publications related to the dissertation topics. If dissertation is written in Lithuanian, abstract must be written in foreign language with a comprehensive summary in Lithuanian. If thesis is written in foreign language, abstract must be written in Lithuanian with a comprehensive summary in foreign language. Abstract must include definition of the issue under research, goals and tasks of the research work, description of scientific novelty of the work, research methodology, main outcomes and resultant conclusions defended by doctoral student, list of student's publication on the subject of thesis and short information about the doctoral student. Abstract must amount about one printer's sheet (equals 40 000 characters). Dissertation and abstract must be written in correct language.

67. Scientific supervisor and scientific advisors must be indicated in dissertation and its abstract, and abstract must also state the composition of the Dissertation Defence Board. In the case where scientific supervisor was replaced, the previous scientific supervisor and time period of his supervision must be indicated in dissertation and abstract. The title page and the second page of a dissertation and its abstract are laid out in the annex No. 1.

68. Doctoral student presents his thesis during the meeting of his department, with supervisor and scientific advisors participating in it. The dissertation, its draft abstract and student's scientific publications, his capabilities and achieved scientific qualification are estimated according to the order established by the Vice-Rector for Research and then the conclusion is submitted to the Committee. It is requested that doctoral student would have been presented the outcomes of his research work on the dissertation subject in no less than two international conferences, and that he would have been published his key research outcomes in no less than two scientific journals, requirements for which are established by the decree of the Senate. If doctoral student submits his thesis until the ending of his doctoral studies, but does not defend it on time, the dissertation may be defended as a matter of routine during the period of 12 months after doctoral studies are finished. If dissertation is not defended by then, it must be defended externally following the requirements indicated in article No. VIII of this Regulation.

69. Doctoral student submits a request on behalf of Rector for dissertation defence and renders it to the Research Affairs Department along with the following documents:

69.1. A copy of the Master's diploma or of a higher education diploma equivalent to it;

69.2. Curriculum Vitae;

69.3. Certified copies of protocols on examines passed according to the doctoral study programme (they are arranged by the Research Affairs Department according to the documents in student's file and the records in databases);

69.4. Author's guarantee for the originality of the dissertation (Annex No. 2);

69.5. Commitment to publish the dissertation in the Lithuanian Electronic Theses and Dissertations Database (ETD) within two weeks after the public defence of the dissertation;

69.6. List of scientific works related to the dissertation topics and their copies (if the material is not published yet, it is necessary to include the certification from the editorial office confirming that the publication is pending).

69.7. Printed doctoral dissertation (2 copies) and its draft abstract (2 copies);

69.8. Reviews by supervisor and scientific advisors (if any). If the reviews have been submitted to the Research Affairs Department, there is no need to submit any copies; the Research Affairs Department will make necessary copies.

69.9. Extract from the dissertation evaluation protocol of Department or other unit, where the dissertation has been prepared. This protocol must include a conclusion of a particular content,

indicated in the paragraph No. 62 (if the extract from the protocol has been submitted to the Research Affairs Department, there is no need to submit any copy; the Research Affairs Department will provide it). In case if the dissertation is provided by doctoral student from other institution, the student must submit the extract of the dissertation evaluation protocol from institution concerned with a submitting for defence, signed by the head of institution.

70. Research Affairs Department examines if the documents provided complies with the formal requirements and then submits for the Rector the request along with all annexes.

71. The Rector forwards the request along with the documents listed in the paragraph No. 69 to the Committee of Science Field; Research Affairs Department provides those documents to the Committee.

72. The Committee Chairman convokes the meeting of the Committee no later than within two weeks after the documents have been received. During this meeting two opponents from the Committee members (thereinafter: Opponents) must be appointed and, if the Committee decides so, one opponent from outside the Committee (a scientist from the University or other Lithuanian or foreign institution).

73. No later than in one month after the documents concerning the defence have been received, the Chairman of the Committee convokes open meeting with doctoral student (defendant) and his supervisor participating in it. The Committee hears the defendant's discourse about his dissertation work (no less than 20 minutes), with goals, tasks, novelty, relevance, originality of the work along with the outcomes, statements and solutions revealed in it; opponents' reviews (they must be submitted to the Research Affairs Department in written) and the defendant's answers to the remarks and comments laid out in the reviews; and the dissertation review provided by the supervisor.

74. The Committee evaluates with an unprejudiced reasoning the aims and goals of dissertation, scientific novelty and relevance of the work; survey of research on this topics in Lithuania and worldwide and described researched methodology; reliability and validity of outcomes obtained; validity of statements of defended conclusions and conformity to research substance; conformity of draft abstract to the content of dissertation; conformity of scientific publications and published research outcomes to the fundamental statements of dissertation.

75. The Committee may conclude that:

75.1. Dissertation or its abstract must be corrected. Dissertation is returned to the doctoral student. Corrected dissertation is discussed starting from requirements listed in the paragraph No. 72 and / or the subsequent paragraphs;

75.2. Dissertation is prepared correctly, it complies with the paragraphs No. 19-21 of Regulations on Doctoral Studies approved by the Government of the Republic of Lithuania, doctoral student has pursued the requirements listed in the paragraph No. 24 of Regulations on Doctoral Studies, and the dissertation may be submitted for defence without any changes need to be made;

75.3. Dissertation does not meet the requirements.

76. If the Committee decides that dissertation may be presented for defence, the Committee:

76.1. Substantiates the decision to defend dissertation in closed meeting in the exceptional cases;

76.2. Prepares project of the constitution of Dissertation Defence Board of no less than three members;

76.3. With the aid of Research Affairs Department collects the agreements of intended members of the Board and the documents that prove their conformity to the qualification requirements for the members of doctoral study process (lists, certifications etc);

76.4. Draws the list of Lithuanian and foreign research and study institutions to which the dissertation abstract (paper) must be sent, considering the topics of dissertation;

76.5. Suggests the date for dissertation defence;

76.6. Delegates the member of the Committee to participate in the Board's meeting as an observer and refers to the Committee about the process of defence in the Board.

76.7. Prepares presentation to the Rector and renders it to the Research Affairs Department.

77. Dissertation is defended in open meeting of the Board (except for cases listed in the paragraph No. 76.1.) following the Regulation on the Defence Board of Doctoral Dissertation of Science Field (annex 3). The meeting is in Lithuanian. In case other language than Lithuanian is used during the meeting, translations to the Lithuanian has to be performed. Chairman of the Defence Board conducts the meeting. The meeting is legitimate if more than half of all members of Defence Board participate in it (including those who participate in a teleconference). If the Board comprises three members, meeting is legitimate if all those three members participate in it. Meeting is grounded with principles of equity, transparency, tolerance, correctness and legitimacy as well as with members' personal responsibility for their activity and decisions. Reviews about dissertation, received from the members who do not participate in the meeting and other reviews must be read during the meeting.

78. The defendant presents main outcomes and findings of his work, indicates his input into the publications presented in the dissertation. Members of Defence Board evaluates reasonably the scientific level of dissertation, novelty and originality of outcomes, reliability and validity of conclusions, notes weaknesses and inaccuracies of the work and during the defence also evaluates defendant's scientific competence. The defendant responses to questions and commentates provided notes and remarks. During the discussion the defendant must defend the outcomes of his work and reveal his research competence.

79. After the discussions with the defendant, members of the Defence Board decide by voting on the granting of doctoral degree to the student. Members who participate in teleconference vote as well. Decision to grant a degree is made if more than half of all members of the Defence Board votes for it. The voting protocol must be signed by all members of the Defence Board who have directly participated in the meeting.

80. Members of the Board must be scientists of particular science field having no joint publications with doctoral student. Conflict of interests must not be possible among the members of the Board and the defendant or his supervisor (or scientific advisor, if dissertation is defended externally). At least two members of the Board must be scientists from other institutions (one of them must represent foreign science and study institution). Doctoral student's supervisor (or scientific advisor, if dissertation is defended externally) may not be a member of the Board. Two members of the Board represent other science fields, if the work comprises two science fields or if it is necessary for comprehensive evaluation of the work.

81. Member of the Board must comprehensively analyze the dissertation and indicate positive and negative points of it. Novelty, relevance and originality must be evaluated, the opinion about the conformity of work to the requirements for doctoral dissertation must be declared. Member of the Board must provide dissertation review in written to the Research Affairs Department no later than in five working days before the defence. The defendant has a right to familiarize with submitted reviews.

82. In the case where dissertation includes information considered to constitute a State, trade or commercial secret, dissertation may be defended in closed meeting.

83. Research Affairs Department examines documents and prepares project of Rector's order, confirming the Board, date and place of defence.

84. After the Rector signs the order:

84.1. Doctoral student finishes his dissertation abstract;

84.2. Research Affairs Department organizes publishing of the abstract in required edition;

84.3. Research Affairs Department no later than within one month before the defence sends copies of dissertation and abstract to members of the Board and to addressees listed in the paragraph No. 76.4, one copy for each;

84.4. Research Affairs Department announces the dissertation defence in the intended sections of websites of the University and the Research Council of Lithuania. Announcement about the dissertation defence may also be published in press. Name and surname of defendant, institution, in which dissertation has been prepared, address of website where dissertation is published, title of dissertation, time and place of defence, name and surname of supervisor and members of the Board along with their fields of science and institutions must be published in the announcement;

84.5. Research Affairs Department exhibits dissertation in the University Library and website.

85. Research Affairs Department keeps and arranges all documents of the Board. All documents of defence are presented to Research Affairs Department after the defence, including meeting protocol with phonogram and decision of the Board on granting of doctor degree to defendant. On the ground of this decision Research Affairs Department writes out the doctoral diploma.

86. The Rector appoints by his order the employee of Research Affairs Department who must observe the Board's work and together with the Chairman of the Board strives to prevent the violation of the Regulations on Doctoral Studies approved by the Government of the Republic of Lithuania and this Regulation. If some violation occurs, and the degree is decided to be granted despite of those violations, the employee informs the Rector about it.

87. The Rector signs the diploma after he receives the decision of the Board to grant the doctoral degree.

88. If the Board decides that doctoral degree cannot be granted, the defendant is entitled to defend the amended and supplemented dissertation not earlier than after a period of one year. In this case, the dissertation is defended externally following the requirements listed in article VIII of this Regulation. In that case if a fact of scientific dishonesty (plagiarism, etc.) is established, dissertation cannot be defended.

89. Registered doctoral diploma is awarded to the scientist during the Senate meeting after the dissertation is published in the Lithuanian electronic theses and dissertations database (ETD).

90. The University informs the Research Council of Lithuania about the outcome of defence within 10 working days after meeting of the Dissertation Defence Board. Within two weeks after defence of the dissertation doctoral student presents a copy of the defended dissertation to Martynas Mažvydas National Library of Lithuania and publishes in the Lithuanian electronic theses and dissertations database (ETD).

91. The University may revoke a decision on the granting of a doctoral degree if:

91.1. Fact of scientific dishonesty has been established;

91.2. Doctoral degree has been granted in breach of the Regulations on Doctoral Studies approved by the Government of the Republic of Lithuania.

92. Personal file of a person who has defended the doctoral dissertation at the University is kept in Research Affairs Department within two years and is delivered to the archive after. The file must include:

92.1. Request for defence of dissertation along with included documents and presentation for defence provided by the Committee;

92.2. Commitment to publish dissertation in the Lithuanian electronic theses and dissertations database (ETD) within two weeks after the meeting of dissertation defence;

92.3. Documents related with the constitution of the Board;

92.4. List of addressees the abstract has been sent to;

92.5. Document on rendering and sending of dissertation to Martynas Mažvydas National Library of Lithuania;

- 92.6. Protocol of dissertation defence meeting;
- 92.7. Board's decision about doctoral degree granting;
- 92.8. Copy of doctoral diploma.

93. If a person has passed doctoral studies and has acquired a degree at the University, documents listed in the paragraphs No. 12 and 92 of this Regulation may be kept in one place.

## VIII. OBTAINING A DOCTORAL DEGREE EXTERNALLY

94. A person may acquire doctoral degree externally if he meets the requirements listed in the paragraph No. 36 of Regulations on Doctoral Studies.

95. Request on behalf of the Rector on defence externally along with documents listed in paragraph No.37 of Regulations on Doctoral Studies approved by the Government of the Republic of Lithuania must be submitted to the Research Affairs Department. If the Research Affairs Department establishes conformity of the submitted documents to the requirements listed in the paragraph No. 36 and No. 37 of Regulations on Doctoral Studies, it submits the request along with all annexes to the Rector.

96. Rector forwards the request along with annexes to the Committee; it appoints no less than two experts with respective department or other unit of the University to evaluate the level at which dissertation is prepared. Scientists from the University or other research institutions may work as experts in this case. Department or other unit of the University organizes meeting and estimates whether the material provided meets the requirements listed in the paragraph No. 19-21 and No. 37 of Regulations on Doctoral Studies approved by the Government of the Republic of Lithuania.

97. After the conclusions are received, the Committee no less than in three months after the request has been submitted convokes the meeting, with external student participating in it. After hearing of experts and external student, the Committee decides, following the requirements listed in the paragraph No. 67 of Regulations on Doctoral Studies approved by the Government of the Republic of Lithuania, whether the material provided meets the requirements for doctoral dissertation.

98. In that case if the Committee decides that presented or corrected dissertation might be recommended for defence, the Committee:

98.1. Appoints the external student to the Department or other unit of the University;

98.2. Submits the scientific advisor for confirmation in the Senate; this scientific advisor will be provided with functions of external student's supervisor. If a person who has already studied in doctoral studies, but has not submitted the dissertation, strives to obtain doctoral degree externally, the Committee might appoint his former supervisor or other person as a scientific advisor;

98.3. Makes decision about the acknowledgment of exams passed during doctoral studies and sets the exams of doctoral studies that need to be passed and the deadline to pass them;

98.4. Settles the deadline for preparation of dissertation and abstract for defence, which cannot be further than one year after the decision has been made.

99. External exams are organized following the requirements listed in the Article V of this Regulation, and dissertation is examined following the requirements listed in article VII.

100. If the Committee decides that dissertation may not be prepared in one year, external student may submit the appeal, which is processed following the paragraph No. 40 of this Regulation. In case the resolution is negative, external student may submit his request repeatedly but not before the expiry of a period of one year.

101. External student covers only the expenses related directly to the acquisition of doctor degree.

### IX. PROCEDURE OF DOCTORAL STUDIES COMMITTEE

102. Activity of the Committee is based on the collegial counsel, principles of equity, transparency, tolerance and legitimacy, as well as on personal responsibility of Committee members for their activity.

103. Meeting secretary, elected from Committee members, arranges meeting documents and signs protocols.

104. Committee's decisions are legitimate if half of its members including the Chairman participate in the meeting. Those Committee members, who are not able to participate in the meeting, may express their opinion under the questions discussed in advance in written or by e-mail. Those messages must be written during the meeting. Committee makes final decision by voting: if votes are distributed equally, the Chairman's vote is deciding. Committee meeting protocol is written in two copies, one of which is kept in the Research Affairs department within 6 years and another one is kept by the Committee and later in the University archive.

105. Committee Chairman convokes and organizes work, and in case he is absent, he appoints Committee member to temporally deputize him. His obligations are following:

105.1. To examine documents in advance;

105.2. To analyze documents received, which must be presented during Committee meeting, or to assign it to Committee member;

105.3. To chair during the Committee meeting;

105.4. To sign documents of Committee meeting.

106. Committee member:

106.1. Familiarizes with documents received in advance;

106.2. Expresses his opinion under the question concerned;

106.3. Implements other Chairman's assignments.

107. Committee meeting is public.

108. After the meeting is over, Committee Chairman returns all documents to the Research Affairs Department.

# Annex 1 Sample title and second page of the dissertation

### KAUNAS UNIVERSITY OF TECHNOLOGY

NAME OF STUDENT AUTHOR

# TITLE OF DISSERTATION

Doctoral Dissertation Science Area, Science Field (code of Science Field)

2011, Kaunas

This dissertation was prepared in the X department (academic unit), Kaunas University of Technology in during 201x-20xx.

Scientific supervisor:

Scientific advisor:

The dissertation is available on the Internet:

Reviewed by:

© Name of Student Author © Publishing house, 201x

ISBN xxxx-xxxx

# Sample title and second page of the dissertation summary

### KAUNAS UNIVERSITY OF TECHNOLOGY

NAME OF STUDENT AUTHOR

### TITLE OF DISSERTATION

Summary of Doctoral Dissertation Science Area, Science Field (code of Science Field)

2011, Kaunas

This dissertation was prepared in the X department (academic unit), Kaunas University of Technology in during 201x–20xx.

In cases where dissertation is defended externally write "Dissertation is defended externally"

Research sponsored by

Scientific advisor:

Scientific supervisor:

Board of Electrical and Electronic Engineering Science Field:

The official defence of the dissertation will be held at (time) on (date) in a public session of the Board of Electrical and Electronic Engineering Science Field in the Dissertation Defence Hall of Kaunas University of Technology.

Address: K. Donelaičio g. 73 - 403, LT – 44029, Kaunas, Lithuania. Tel. (370) 37 30 00 42; Fax (370)37 32 41 44, e-mail: mok.skyrius@ktu.lt.

The summary of doctoral dissertation was sent out on (date). The dissertation is available at: Address of Internet website where dissertation is published The library of Kaunas University of Technology (K. Donelaičio g. 20, LT – 44239, Kaunas).

### **AUTHORSHIP DECLARATION**

I, \_\_\_\_\_, hereby confirm that this doctoral entitled:

is prepared in accordance with the requirements laid down in Kaunas University of Technology Regulation on doctoral studies in the Field of Electrical and Electronic Engineering. Where I have quoted from the work of others, either directly or indirectly, the source is always referenced. My own contribution in the dissertation topic-related publications published together with the co-authors is sufficient.

In selecting and evaluating the material, as well as preparing the manuscript, apart from my scientific supervisor, I was advised by:

No contribution of other persons to the dissertation prepared is present. I have not made any other payments than those foreseen in the laws with regard to this work.

This work has not been presented for the defence of doctoral dissertation neither in this or in any other form in the State and abroad.

(date)

(signature)

### Annex 3

### **Regulation on the Defence Board of the Science Field for the Defence of Doctoral Dissertation**

1. This Regulation lays down the work procedures for the Defence Board of the Science Field for the Defence of Doctoral Dissertation, constituted under the Regulations on Doctoral Studies, approved by Resolution No. 561 Government of the Republic of Lithuania of 12 May 2010 (Valstybės žinios (Official Gazette) No. 59-2900, 2010).

2. Research Affairs Department arranges Board's documents and organizes the meeting for the dissertation defence.

3. Work procedures of the Board are organized by Chairman of the Board. The Chairman:

3.1. Analyzes in advance the personal file of the defendant and makes sure that the file and all meeting documents (ballot papers, blank of voting protocol and others) are prepared correctly;

3.2. Examines the reports received, which must be submitted during the meeting of the Board, or assigns this work for a member of the Board;

3.3. Ascertains that everything is prepared for the meeting correctly (to perform meeting phonogram or stenography, visual demonstration and translation, if needed);

3.4. Chairs during the meeting of the Board;

3.5. Signs the documents of the meeting.

4. Member of the Board:

4.1. Examines the dissertation in advance and evaluates whether it is a novel research work, which includes doctoral student's research work on the topics of science field, and whether its content meets other requirements for doctoral dissertation;

4.2. Estimates whether the defendant's publications are published in scientific journals and whether the key research outcomes are published in those publications.

5. The meeting is public (in case of the closed meeting, participants only include members of the Board, the defendant, his supervisor and scientific advisors, employee from the Research Affairs Department, delegated to observe the meeting, and the representative of the Committee; all members of the meeting sign the declaration of data confidentiality). The proceeding of the meeting is as follows:

5.1. The Chairman of the Board after he makes sure that more than half of members of the Board, including those who participate in teleconference, participate in the meeting (if the Board has three members, the meeting is legitimate when all three members participate in it), and those members who do not participate in the meeting have submitted their report in written, informs the participants of the meeting and the quorum about it and presents the file of the defendant;

5.2. The defendant introduces his dissertation topics, aims, goals, research data, main research outcomes and findings, and answers the questions;

5.3. Doctoral student's supervisor and scientific advisors are entitled to give their voice;

5.4. The Chairman of the Board initiates scientific discussion lead off by the members of the Board. They must evaluate reasonably the scientific level of the dissertation and the validity of outcomes, estimate whether the dissertation, abstract and publications meet the requirements of the Regulations on Doctoral Studies. Members of the Board must pose questions to the defendant;

5.5. The Chairman or his appointed member of the Board reads in public the reviews on the dissertation or, upon the agreement of the members of the Board, introduces the notes and conclusions presented in the reviews, and the defendant may deliver his remarks;

5.6. Members of the Board and guests are entitled to speak (in case of an open meeting); the defendant may ask for an opportunity to speak after any speech, which he is given;

5.7. The defendant makes his final speech when the discussion comes to an end;

5.8. When the members of the Board stays in the voting room:

5.8.1. The Chairman of the Board distributes the ballot papers;

5.8.2. The Chairman of the Board fills the voting protocol after the voting; members of the Board have a right to verify the voting results;

5.8.3. The members of the Board confirm by open vote the voting results and sign the voting protocol and Board's decision on the granting of doctoral degree.

5.9. The Chairman of the Board reads the decision to the members of the meeting and announces the end of the voting.

6. After the end of the meeting the Chairman of the Board returns to the Research Affairs Department the documents of the dissertation defence.

7. The Chairman of the Board reviews and signs the protocol of the meeting, arranged following the stenograph or phonogram.