Summary of Educational Regulations for the Phd's Degree Course

Regulations for the Technology-Based Research Doctorate Program Shazand school of nursing

Definition

The PhD by Research / Technology-Oriented course is one of the highest levels of postgraduate education in higher education, leading to the award of the PhD by Research / Technology-Oriented degree. The PhD by Research / Technology-Oriented course is a coordinated set of fundamental and applied research activities aimed at advancing science and expanding the boundaries of knowledge.

Note: In this regulation, for the sake of brevity, all universities, research institutes, higher education institutions, and educational and research institutions licensed by the Council for the Development of Medical Sciences Universities that are active in the field of postgraduate education are referred to as institutions.

Purpose

The purpose of establishing the PhD by Research / Technology-Oriented course is to train individuals who, while mastering a specific field and familiarizing themselves with related sciences using advanced research methods and the latest research principles, can take a step towards meeting the domestic needs of the country, sustainable development, expanding the boundaries of knowledge, and achieving superior technologies. Graduates of this course will take the lead in innovative research and developing methods. Modern and bridging the gap between basic and applied sciences with the aim of promoting health and reviving the spirit of self-confidence to achieve the latest in the world of knowledge

Main axis

The main axis of the activities of the technology-oriented research doctoral courses is the acquisition of knowledge and skills through targeted, product-oriented research in the form of knowledge-based companies and innovation in a specific scientific field.

Course Description

- 14 The duration of the course is 4 years, with a maximum of one year dedicated to the first part of the course. During this course, the student will implement his research thesis in accordance with the goals of the research center and knowledge-based companies with the skills he acquires.
- 1-1-2 The duration of the course can be increased or decreased by a maximum of 2 years in special circumstances at the discretion of the Institute's Postgraduate Education Council.
- 2-1-3: The student's start date is after the candidate passes the written and oral exam and the focused interview held by the Medical Sciences Education Assessment Center of the Ministry of Health and Medical Education and the official announcement of the candidate's acceptance on the information website www.sanjeshp.ir and registration at the implementing institution.

The course consists of two parts:

- 2-2 The first part of the course, which lasts a maximum of one year, during which the student learns the fundamental theoretical and practical skills of research and technology.
- 1-2-4 The number of units in the first part is 18 educational units, which includes 1 general unit and 9 specialized units. The titles of specialized units are determined upon the recommendation of the

supervisor and the approval of the Institute's Graduate Education Council, and the desired units will be presented in the relevant educational groups through the introduction of the Institute's Graduate Education Management.

Advanced Biostatistics and Epidemiology (2) units)

Advanced Research Methods (2) units)

Research Ethics (Ethics) (Unit)

Documentation and Report Writing (Report Writing) and Scientific Writing (2) units)

(2 units) Communication Skills

Specialized Educational Units

Note 1: If the general education units have been completed by the student in previous academic levels. The selection of course educational units is at the discretion of the supervisor and the student's needs during the academic period based on the thesis project.

Note 2 In the first part of the course, the student is required to choose a thesis topic, conduct preliminary studies, write a proposal, and finally have it approved by the Institute's Graduate Education Council.

Note 3 In the technology-based doctoral program, the specialized units include the following:

Technology and entrepreneurship Management of innovative projects Business law and financing Creativity and the business environment Marketing and export principles Intellectual property and patent registration Formation and registration and the pillars of commercial and knowledge-based companies Microeconomics and familiarity with corporate finance issues Legal licensing process

- 2-2-4 The minimum passing score in the first part of the courses is 14 out of 20.
- 3-2-2 The topic of the thesis must be in line with the mission of the research center implementing the research financial credit (grant) of the supervisor and

in order to solve the problems and needs of the health system, design and manufacture new products, resolve industrial challenges, and improve the quantity and quality of products, or register an international patent.

13-2-3 If the student withdraws or fails to complete the course for any reason, a certificate of completed courses will be awarded to him/her with the approval of the Institute's Graduate Education Council, and the student is required to pay all damages according to the obligations taken to the relevant institution.

- The second part of the course includes completing the implementation stages of the student's research thesis, and the condition for entering it is to pass the courses of the first part of the course and approve the thesis proposal by the Institute's Graduate Education Council.
- 1-3-4: In this part, the student implements his/her thesis with the skills acquired in the first part and defends its achievements.
- 2-3-3: The duration of the second part of the course is three years.

Note: The length of the second part can be increased or decreased up to a maximum of 2 semesters, according to the provisions of paragraph 3-1-1

- 2-2-3: The number of units in the second part is a maximum of 6 work units in the field appropriate to the topic of the thesis and 22 research units in the form of thesis implementation. While completing the thesis, the student, if necessary, completes a maximum of 6 work units in the field of equipment, as determined by the supervisor, in connection with various industries, including pharmaceuticals, production of new technology equipment, medical equipment, laboratory work, etc., according to the needs of the thesis and the labor market, to acquire skills and experience in line with the goals of the institution.
- The thesis defense is possible after publishing or receiving acceptance of at least 3 articles resulting from the thesis during the course as the first author in internationally indexed scientific research journals (PubMed or Web of Science), with at least one of these three articles in journals with an Impact Factor equal to or higher than 1. Only one of these three articles can be in the institution's own journals.
- Note 1: If the research project results in the international registration of an invention, discovery, patent, prototype, or production of valuable medical and pharmaceutical products, this can be replaced by one to three of the above articles at the discretion of the Graduate Education Council and the Institute's Research Council, if the patent is submitted with the approval of the Patent Center of the Vice-President for Science and Technology and other vice-presidents related to the prototype resulting from the thesis. According to Article 2 of the Regulations for the Promotion of Faculty Members)
- Note 2: If an article resulting from the thesis is published as the first author in internationally indexed scientific research journals of the original type and is among the top 10% of articles in the relevant field based on Web of Science. It can be replaced by three defense articles at the discretion of the Graduate Education Council of the Institute alone.
- Note 3: If the article resulting from the thesis is published as the first author in internationally indexed scientific research journals of the original type and is among the first quartile articles of PubMed or Web of Science, it can be replaced by three defense articles at the discretion of the Graduate Education Council of the Institute.
- -- All student educational and research matters during the course are under the supervision of the Institute's Graduate Education Council.
- 13- The applicant research center must conclude a memorandum of understanding for scientific and research cooperation with one of the educational groups related to the requested research/technology-oriented PhD field of the University of Medical Sciences.

Thesis Preparation

The topic of the PhD thesis by Research/Technology

Oriented must be in line with the mission of the research center and the knowledge-based company implementing it and be aimed at solving the problems and needs of the health system.

Note on technology-oriented theses implemented in knowledge-based companies Proposal for admission

The student must be a unit of one of the following characteristics:

- A. Be purposeful and feasible.
- B. Be product-oriented and market-oriented.
- C. Resolve an industrial challenge.
- D. Have the possibility of achieving a product prototype.
- E. Have a valid international patent registration.

The institution is responsible for announcing the approval of the research field and registering the thesis topic to the student and the professor with the supervisors, in writing.

All educational and research activities of the student during the course must be carried out under the guidance and supervision of the professor with the supervisors. The student is obliged to report the results of his research to them, in addition to the prescribed times, at any time determined by the professor with the supervisors.

The student can enjoy a maximum of 6 months of supplementary course abroad in accordance with the laws of the relevant ministry.

After completing and compiling the thesis and the supervisor's approval that the thesis is complete and defensible, the student is required to defend his thesis in the presence of the referees in a meeting whose time is approved by the Institute's Graduate Education Council, in compliance with the conditions stated in this article.

- 1-19 The approval of the professor with the supervisors and advisors must be included in the first pages of the thesis.
- 2-19 The scientific quality and accuracy of the student's thesis must be approved by the supervisor before the defense and notified to the Institute's Graduate Education Council.
- 2-19: The student is allowed to defend his thesis when the conditions mentioned in paragraph 4-3-4 or its notes have been met.
- 2-19: After the supervisor's approval, the student is required to have a meeting called pre-defense in the presence of the members of the board of referees

The composition of the jury is as follows:

(1) Professor with supervisors

- (2) Professor with advisors
- (3) Four members of the faculty specializing in the relevant field with the rank of at least associate professor, selected by the Institute's Graduate Education Council, two of whom are selected from other institutions.
- (2) The academic representative of the Institute's Graduate Education Council
- (5) The representative of the Presidential Vice-Chancellor for Science and Technology in cases of technology-oriented theses that benefit from the support of that vice-chancellor.

The defense session is chaired by the academic representative of the Institute's Graduate Education Council and attended by at least four members of the jury: the main supervisor, one of the advisors, two of the judges from within the Institute, and two of the judges from outside the Institute. The student is required to present a report on his/her thesis and defend it at this session.

At the end of the defense session, after discussing and reviewing the originality and accuracy of the thesis, the jury will grade it with emphasis on the rank as follows.

Rank
Excellent
18-18/99
Very good
Good
20-14

Score

16/5-17/99

15-16/29

Acceptable

Unacceptable

Less than 15

1-22: The criteria for deciding on the thesis score are as follows:

Average scores of supervisors out of 20

Average scores of consulting professors out of 20

Average scores of internal referees out of 20

Average scores of external referees out of 20

Score of the institution out of 20

Support of that vice-chancellor

Score of the representative of the Vice-Chancellor of Science and Technology of the President out of 20 in cases of technology-oriented theses that are

Final score - the average of the above scores is out of 20.

2-22: If the jury, during the pre-defense or defense stage, identifies the thesis as incomplete, the jury mentions the deficiencies in its decision and asks the student to complete and defend his thesis again within a period that does not exceed the maximum number of years allowed for his education.

If the student is unable to continue the course due to an unjustified reason or is prohibited or deprived from continuing the course for any reason, he is required to pay all damages to the relevant institution in accordance with the obligations assumed.

If a student fails to complete and defend his/her thesis within the maximum permitted period of study, and in special cases within the extension period as determined by the Postgraduate Education Council, he/she will be denied the right to continue his/her studies in this period.

Students of PhD by Research / Technology (Oriented) courses can take a maximum of two academic years of academic leave at a time during their studies.

Note 1: Taking academic leave in the first half of the academic year is not permitted. In exceptional cases, the decision is made by the Institute's Graduate Education Council.

Note 2 The academic leave period is considered part of the student's academic years.

Students of PhD by Research / Technology (Oriented) courses must engage in research and study full-time in order to enjoy the student benefits of the course.

The graduation of a student will be carried out by the Institute in accordance with the provisions of this regulation and upon obtaining the results of the student's research activity.

The educational and graduation affairs of these students are under the responsibility of the Education Deputy of the relevant Ministry.

After graduation, the graduation documents of graduates, like those of graduates from abroad, are reviewed by the Academic Documents Evaluation Committee of the Education Deputy of the Ministry of Health and are issued in accordance with the units Passed, thesis title and published articles during the study period will graduate with one of the approved doctorate (Ph.D.) titles.

Graduates of this course can work as research faculty in universities, research and educational institutions, if they meet other conditions and comply with the regulations.

Note: Individuals who are instructors of educational faculty and succeed in obtaining a specialized doctorate in technology-based research. They cannot use this degree to convert their status to PhD by Research / Technology-Oriented (PhD by Research / Technology-Oriented), but they can become a research assistant professor in one of the university's research centers if approved by the university and if they meet other criteria.

Graduates of these courses cannot use their PhD by Research (PhD by) to intervene in clinical and paraclinical affairs and establish a pharmacy and office unless they are allowed to do so based on the degree obtained before and solely based on the points or conditions of the previous degree.

Due to the professor-oriented nature of the course, after the student is accepted by the supervisor, the student cannot change his or her supervisor, but in special circumstances, at the discretion of the educational council of the institution, a change of supervisor can be reviewed.

Scholarships for students of PhD by Research (PhD by Research) courses in research centers of medical universities, research organizations and institutions of the country that have an approved research faculty position. According to the regulations, they are free to do so, like other PhD (Ph.D.) students.

Transfer of students in PhD by Research (Technology-Oriented) courses is prohibited unless the student's supervisor is transferred to another university or research center. In this case, if the destination center meets the other conditions stated in Chapter 4, the transfer of students is permitted after approval by the Deputy for Research and Technology of the Ministry of Health. In the case of technology-oriented theses that benefit from the support of the Presidential Vice-President for Science and Technology, it is permitted after approval by the Deputy for Research and Technology of the Ministry of Health.

of this regulation was revised and approved in 6 chapters, 35 articles, and 21 notes at the seventy-seventh meeting of the Supreme Council for Medical Sciences Planning dated 18/8/1399 and is effective for those students who are accepted from the first semester of the academic year 1301-12000 and onwards. From this date onwards, all regulations, circulars, and instructions contrary to it will be canceled for this group of students.