# **VUZF UNIVERSITY FOR FINANCE AND INSURANCE - SOFIA**



# PhD ROAD MAP

Sofia, July 2016

# **1.** Preliminary theoretical preparation

The preliminary preparation of a PhD student should be realized individually or institutionally. The goal is to restore, complement and systemize the PhD student personal theoretical knowledge in Micro-Economics, Macro-Economics, Statistics, Mathematics, Econometrics and the chosen specialization in Economics. The preparation is selective and in accordance with the personal scientific interests of the PhD student. Experience shows that without such a preliminary preparation an effective research in the domain of the dissertation under development is impossible.

The preliminary theoretical preparation includes a systematic study of several (5-10) classic and several (5-10) new (form the last 5 years) and actual monographs and scientific papers connected with the domain of the dissertation topic.

#### 2. Preliminary practical preparation

In the frames of a practical preparation national and international practical problems should be studied too, all of them in the chosen research domain, and also efforts should be examined that are related to corresponding solutions. The goal is to create a background for new investigations and scientific results. It is necessary for the purpose to use not only media and Internet information but also accumulated knowledge by concrete representatives of the chosen scientific domain. Optimization of the number of the selected sources is needed in looking for best results of the future research.

## 3. Application for PhD studies

The VUZF University doctoral programs cover all domains of Economics in large: Finance, Business, Insurance, Social and Health Insurance, Banking, Marketing, Accountancy, Control, Audit and Analysis, Financial mathematics, Management, Innovations, Entrepreneurship and anything connected with Economics. The doctoral study duration is 3 years. It could be prolonged if necessary and finishes when the dissertation is ready. The application is directly dependent on the chosen form of the PhD studies. The VUZF University proposes all the four forms, namely "Full-time form", "Part-time form" "Distant learning form" and "On individual plan form". For "Full-time" and "Part-time" forms the VUZF University announces a competition, which is carried out under the VUZF University Regulations for acceptance and preparation of PhD students. Concerning the "On individual plan form", an additional advantage is that the VUZF University offers several stages of the doctoral studies. At the beginning a special meeting is organized by authorized representatives of the University with the PhD student. The domain of the PhD student's interest is discussed. When the domain is fixed, a professor, who is specialist in the domain, is appointed to be the mentor (scientific adviser) of the doctoral studies. The topic of the dissertation is fixed in the presence of the PhD student. From then on a preliminary period begins. Its duration is about one year or year and a half. A considerable part of the dissertation should be finished during the preliminary period, which ends by a scientific presentation of the dissertation part. The Council of the VUF University doctoral programs gives opinion whether the work on the dissertation is in the right direction. If yes, the second stage begins. This is the stage of the essential work on the dissertation. The mentioned Council decides for the exact topic of the dissertation. There is no competition, i.e. no entering exam exists for the "On individual plan" doctoral studies. It is enough to apply for it to the Rector. The choice of the form depends on personal wishes and preferences.

# 4. Determination of the research topic

The topic is specialized by the mentor and the PhD student. It is not only the scientific domain, which should be determined but also a concrete segment of it. The choice depends on the character of the research: theoretical, empirical or mixed. Experience shows that the considerable part of the dissertations is with mixed character. An important element of the choice is the acquaintance with already defended dissertations in the domain. It should not be underestimated the necessity of exact formulation of the basic and the secondary problems of investigation, also of the goals, the tasks and the hypotheses of the dissertation is directly connected with the dissertation content. The topic should account for the normative requirements, including the volume, which should be in the frames of 150 - 250 pages or so.

## 5. Elaboration of a research plan

The elaboration of a research plan is realized after a discussion between the mentor and the PhD student. The plan contains the basic components of the dissertation (parts and chapters). Paragraphs and sub-paragraphs are differentiated after. The goal is to realize logic relations between the components, thus achieving systematization and succession, avoiding unnecessary repetitions. The plan under question is a working instrument and could be changed along the research process. The changes could be less or more considerable. Some cases are known when the PhD student falls into extremely interesting details, which lead the investigations to a completely different direction. A change of the dissertation initial topic is possible too, which should be executed not later than three months before the official defense.

# 6. Examination of the reference sources

During this examination the PhD student should list a full bibliographic reference individually or under tasks assigned by the mentor concerning the chosen topic of the dissertation. The references should include all sources respecting the languages used by the student but also languages which guarantee a better and useful conversance in the chosen domain of research. The bibliographic reference should be examined carefully and critically according to the dissertation hypothesis. To do this the student could apply the conspectus method. The places from where corresponding texts, formulae and graphics are taken should be marked exactly during reading because their later recover is extremely difficult. The examination of the bibliographic reference should continue until an exact estimation appears and the PhD student obtains a clear opinion about the answers of the considered questions.

## 7. Collection and treatment of the empirical information

The first step of this stage is to choose the objects of the necessary empirical information. Optimization of the number of the objects is needed orientating to those, which are expected to be more useful for the questions under investigation according to a suitable estimation. After that, the PhD student should organize the collection of this information giving possibilities for its presentation by the corresponding subjects. Support by the mentor and the VUZF University should be expected. During the treatment of the collected information adequate mathematical, statistical and econometric methods should be applied. The selection should be subjected to the content of the problems under investigation. The

collection and the treatment of the empirical information should be connected fully with the components of the dissertation and with the preliminary chosen hypotheses.

# 8. Elaboration of the dissertation

In the process of the dissertation elaboration the PhD student together with the mentor should try consecutively to fill in all parts of the preliminary plan, which has been already approved. At the beginning a rough realization of the plan is possible instead of an accurate one, but a final specification is needed. Both approaches have their positive and negative sides. The more often practice is connected with a rough realization at the beginning, which allows the PhD student to obtain a general picture of the dissertation content, thus forming the final version more easily. A special attention is needed in the inclusion of parts of the bibliographic references and the empirical data to the content. Concerning the bibliographic references the already established way of citation should be used. A similar approach is necessary for the lay-out of the corresponding tables, graphics, diagrams, etc.

# 9. Lay-out of the dissertation

The lay-out of the dissertation should be realized individually by the PhD student or by fulfilling mentor's tasks. It concerns the style and the orthographic formation aiming at the clearest possible presentation of the research results. The essential part belongs to the author's point of view, which is expressed by his or her scientific, applied or scientificapplied achievements (scientific contributions). It is necessary for the purpose to present the opinion of other authors at the beginning and under the form of generalization to deduce the PhD student's point of view. Another important part of the lay-out is a promising bound between the dissertation text and the implemented set of tables, graphics, figures, etc. The dissertation should contain a well-performed introduction, suitable conclusions, selected applications, used references and a list of content. The introduction comprises the reasons for the choice of the corresponding scientific domain and topic, the aims and the tasks of the dissertation, the preliminary hypotheses and short presentation of the content. On the other hand the conclusions should contain confirmation or rejection of the chosen hypotheses and the PhD student's recommendations in regard with the investigated problems. All applications should be connected with the content of the dissertation. In fact, they enlarge the information that has been included shortly in the dissertation components. The references are listed in alphabetic order of the family name of the first author. The Internet sources are listed at the end of the reference list. The list of the content is placed in the beginning of the dissertation, i.e. before the introduction.

# 10. Discussion of the dissertation

The discussion of the dissertation is organized in one of the three departments in the VUZF University respecting the scientific domain of the dissertation. A discussion of the dissertation part after the first stage of the "On individual plan form" PhD studies is organized by the Council of the doctoral programs. Together with the dissertation or the dissertation part in the second case the PhD student should present a multimedia version and a project of an author-essay, which is a short version of the dissertation. The multimedia and the author-essay should give a generalized picture of the dissertation itself. Accounting for all these elements the corresponding department or the Council of the doctoral programs appoints two inner reviewers and organizes a discussion in the presence of the PhD student. After the discussion a decision is taken for an official defense of the dissertation part discussion a corresponding decision is taken to continue or not the work on the dissertation.

# 11. Doctoral exams

According to the VUZF University doctoral program regulations each PhD student should pass three exams, namely: General Economics, Methodology of Research and a specialized exam on the dissertation subject. The concrete latest date to pass an exam is determined in the individual plan, which is obligatory for each PhD student. The individual plans are approved by the Council of the VUZF University doctoral programs. The content of the General Economics exam and that of the Methodology of Research exam are already determined. Each semester there are courses on both subjects, 45 classes each. The presence in the courses is not obligatory for "On individual plan form" studies. One could be consulted by e-mail or skype. At the end of each semester a date for examination is fixed. A possible way to pass the exam is by developing a topic from the content in a written form (not less than 10 pages). One has the possibility to choose the topic by himself/herself. In that case the exam consists in defending the written material on the chosen topic. These two exams could be passed during the first stage of the "On individual plan form" studies. The most important is the third exam. The content is individual and is based on the topic of the dissertation. The content conspectus is proposed by the mentor.

# 12. Organization of the dissertation defense

The dissertation defense is organized according to *The Development of Academic Staff in the Republic of Bulgaria Act* and the *Regulations* of its application. Also it is in accordance with the *VUZF University Regulations* for acceptance and studies of PhD students. Scientific papers should be presented together with the dissertation - at least three. At least one of them should be in a scientific journal and the others in Proceedings of corresponding scientific events. The VUZF University edits several scientific journals, which could be used for the purpose. Thus, the dissertation must be accompanied by 3 papers at least. The papers are prepared in collaboration with the mentor. The mentor could be co-author. After a successful defense the degree "PhD in Economics" is awarded to the PhD student who receives a Diploma. The topic of the dissertation could be specified in parentheses, for example PhD in Economics (Financial Mathematics).