**DOCTORAL ACADEMIC STUDIES ACCREDITATION MATERIAL:**

**DOS HYDROINFORMATICS**

**Niš, 2014.**

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| **DOCTORAL ACADEMIC STUDIES ACCREDITATION MATERIAL:**  **DOS HYDROINFORMATICS** |

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**INTRODUCTION**

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| Name of the institution: University of Nis **Faculty of Civil Engineering and Architecture** |

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| Address: : Aleksandra Medvedeva 14, 18000 Niš **Web address: http://www.gaf.ni.ac.rs** |

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| **Scientific or art field** | | | | |
| Natural – mathematical sciences | Social-humanist sciences | Medical sciences | **Technical-technological sciences** | Arts |

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| **Number of students** |  |
| Basic academic studies | **720** |
| Graduate academic studies - master | **96** |
| Integrated studies | **900** |
| Doctoral studies | **1776** |
| Total number of students |  |

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| **Teaching staff with teaching titles** | Professor of Professional Studies | Assistant professors | Associate professors | Full professors |
| Full time employed |  | **20** | **2** | **21** |
| Part-time employed | **1** | **2** | **4** | **16** |
| **Total** | **1** | **22** | **6** | **37** |
| **Teaching staff with research titles** |  | Research fellow | Senior research fellow | Professorial fellow |
| Full time employed |  |  |  |  |
| Part-time employed |  |  |  | **2** |
| **Total** |  |  |  | **2** |
| **Teachers total** | **1** | **22** | **6** | **39** |

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| **Space, Library** |  |
| **Space, Library** total area of working space for the students of PhD studies in square meters | **120 m2** |
| Total number of library entries in field of a teaching process at PhD studies | **200** |
| Total number of computers available to the students of PhD studies | **30** |

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| **Study program title** | **Doctoral academic studies**  **Hydroinformatics**  **(DOS - Hydroinformatics)** |
| **Title of the institution with which a joint study program is realized (in cases where there are multiple institutions realizing the program)** |  |
| **Higher education institution where the study program is realized** | **University of Nis**  **The Faculty of Civil Engineering and Architecture** |
| **Educational-scientific/educational –art field** | **Technical and technological sciences** |
| **Scientific or art filed** | **Construction engineering** |
| **Scope of studies, expressed in ECTS** | **180** |
| **Diploma title** | **Doctor of sciences in Civil Engineering** |
| **Study duration** | **3 years (6 semesters)** |
| **Year in which the implementation of the study program started** |  |
| **Year in which the implementation of the study program will start (if the program is new)** | **2014** |
| **Number of students studying at this study program** |  |
| **Planned number of students to be enrolled to this study program** | **10** |
| **Date when the program was approved by the adequate body** | **25. 11. 2013.**  **Senate of the University of Niš** |
| **Languge of instruction** | **English and Serbian** |
| **Year of program accreditation** |  |
| **Web address containing the data on the study program** | **www.gaf.ni.ac.rs** |

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| **Special standard : Higher Education Institution Competence for the Implementation of PhD studies** |
| The Faculty of Civil Engineering and Architecture (GAF) possesses academic staff, classroom capacity and technical-technological and library facilities appropriate for the study program character and planned number of students. The GAF has a short-term and long-term plan and is accredited as a scientific and research institution, as required by law.  The ability of the GAF to administer doctoral studies can be indicated by •the number of PhD and Master theses defended at the faculty belonging to the field for which the study program is accredited, the number of papers published in the journals with impact factor, mentorship of the fully employed teachers and the ratio between the number of teaching-only teachers and the number of teachers involved in scientific and research projects. |
| **Records:**  [**Table P.1.** Total list of the defended theses and publications](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%20P.1%20Zbirni%20pregled%20broja%20odbranjenih%20teza%20i%20objavljenih%20publikacija.doc)  **Table P.2**. Total list of scientific-research projects currently being realized at the university  [**Table P.3.** List scientific-research projects currently being realized at the higher education institution](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%20P.3%20Lista%20naucno-istrazivackih%20projekata%20koji%20se%20trenutno%20realizuju.doc)  [**Table P.4.** List of the higher education institution staff included in scientific-research and artistic-research projects](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%20P.4%20Lista%20osoblja%20VU%20ukljucenog%20u%20naucnoistrazivacke%20projekate.doc)  [**Table P.5.** List of scientific research results in the institution in the previous academic year](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%20P.5%20Zbirni%20pregled%20rezultata%20istrazivanja%20u%20prethodnoj%20skolskoj%20godini%20-%20GAF.doc)  [**Table P.6.** List of institutions in the country and abroad with whom the higher education institution has cooperation with.](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T.P.6%20Lista%20ustanova%20u%20zemlji%20isvetu%20sa%20kojima%20ustanova%20saradjuje.doc)  [**Table P.7.** List of full time employed teachers who were mentors in PhD thesis production](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%20P.7%20Lista%20nastavnika%20koji%20su%20bili%20mentori.doc)  [**Appendix P.1**. Program of scientific research work](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%20P.1%20Program_NIR_GAF_2011-14.doc)  [**Appendix** **P.2.** Decree of accreditation of scientific research organization](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%20P.2.%20Resenje%20o%20akreditacija%20naucnoistrazivacke%20organizacije.pdf) |

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| **Standard 1. Program structure** |
| The study program of **Hydroinformatics PhD studies** is defined through the clearly formulated learning outcomes, enrollment requirements, list of the subjects with their contents and method of implementation, according to the Law on Higher Education. The students who finished the studies acquire the degree **Doctor of sciences – Civil Engineering** (PhD).  The studies last three years (six semesters) and amount to a total of **180 ECTS**. Of this number, 74 ECTS is acquired by passing the teaching subjects examinations, 16 ECTS by study research work, 70 ECTS by scientific-research work related to the production of the doctoral dissertation, and 20 ECTS by production and defense of the doctoral dissertation. The doctoral studies cannot last longer than 6 years.  The study program is based on the combination of core and elective subjects, which introduce the students of PhD studies to the field of hydroinformatics. The instruction is either performed in groups or individually (mentor) teaching. If five or more students elected one subject, there will be a group instruction. The decision on the type of instruction is made by the Head of Doctoral Studies following the proposal of the Committee for the Quality of the study program.  A particular emphasis is placed on the independent scientific-research and practical work in the field of interest of the candidate, on all three years of studies. It is planned that the candidates produce and publish an independent paper on the first years. Publishing a SCI list rated paper, for the purpose of presenting the results of the PhD dissertation is planned for the fourth and fifth semester. The basic activity on the third year of studies is a research work in the function of production of doctoral dissertation.  The doctoral studies finish with the production and defense of doctoral dissertation. The choice of the topic and the mentor is proposed and defined in agreement with the candidate. The defense of the doctoral dissertation is oral and public, in front of the committee of no less than three members, which also evaluates and assesses the dissertation. The PhD dissertation is presented to the committee members in writing and electronic form. |
| **Record:**  [**Appendix** **1.1.** Institution publication](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%201.1%20%20Publikacija%20ustanove) |

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| **Standard 2. Program objectives** |
| Primary objective of the Hydroinformatics study program is education of the competent scientific staff in the field of Hydroinformatics, capable for independent and team scientific-research work in the area of Hydroinformatics, and for multidisciplinary research in the area of planning, using and integral management of water resources implementing information tools.  On the other hand, the objective of this study program is the development of professionals who will be capable of critically assessing the scientific-research work of other researchers and simultaneously to create original works of art, contributing the general development of society.  The study program is thus conceived to provide acquisition of socially justifiable competences, its objective being fully in accordance with the defined goals and tasks of the Faculty of Civil Engineering and Architecture, where it will be implemented. |
| **Record:**  [**Appendix** **1.1.** Institution publication](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%201.1%20%20Publikacija%20ustanove) |

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| **Standard 3. Program goals** |
| The goal of the study program is that the students achieve scientific competencies and academic skills in the field of Hydroinformatics for the purpose of realization of scientific-research project in the domain of defining the available water resources and sustainable usage and protection of water as a strategic resource. Among other things, this also includes the development of creative abilities in considering problems and the ability of critical thinking, and the mastering of specific practical skills necessary to work in the profession for the purpose of a personal contribution to the development of the society.  The objective of the study program is also the education of experts in the field of teamwork, and the development of technical capacity for communication and presentation of their original results to scientific public. |

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| **Standard 4: Graduates’ competences** |
| The Hydroinformatics PhD programs provides the students after the completed studies with knowledge, skills and competences to implement the most contemporary knowledge, observe the principles of ethical code and good scientific practices and with the ability to realize and present new technologies. The students acquire skills for independent solving of practical and theoretical problems, realize scientific research, present the scientific-research results at national and international scientific conferences and publish them in scientific journals. The mastered specific skills will enable students to verify the research results through the patents and new technical solutions.  Students improve their competences by the selection of the subjects which will be studied and passed, and which contributed to the profound knowledge and understanding of the field of their doctoral dissertation.  PhD students verify the acquired competences by publishing scientific papers. Prior to the defense of the PhD dissertation, the candidate must publish at least one paper in a SCI list journal, or prove that it is approved for publishing. In addition, during the doctoral studies, through the scientific work method and two study research papers, the candidate acquire skills of writing quality scientific papers.  In the course of PhD studies, the candidates can participate in the teaching process at the Study program of Civil Engineering, as well as in the scientific-research projects which are managed by the members of the Chair of Hydraulic Engineering. After finishing the PhD studies, the PhDs became the experts in the field of Hydroinformatics.  A person with the PhD in technical sciences in the field of Hydroinformatics is enabled to deal with theoretical researches, in addition to the practical work in scientific-research institutions. The person can create and promote the original scientific-research approaches in realization of the scientific projects and solving of practical problems in the research domain. |

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| **Standard 5: Curriculum** |
| The Curriculum of the PhD studies in Hydroinformatics is a publicly available document, listing knowledge and skills acquired during realization of the teaching process (www.gaf.ni.ac.rs). The study program is in accord with the European standards in terms of the enrollment requirements, duration of the studies, requirements for enrolling to the following academic year, acquisition of the diploma and the mode of study.  The doctoral studies last three years (six semesters) and are worth a total of 180 ECTS credits. Of them, 74 ECTS credits are obtained by passing the course tests assigned by the study program, , 16 ECTS by the research work of the studies, 70 ECTS by the scientific-research work related to production of the doctoral dissertation, and 20 ECTS are obtained by production and defense of the doctoral dissertation.  The elective courses constitute 50 % of ECTS credits, and the studies are organized through teaching, scientific worked, production and defense of the doctoral dissertation. The course lectures (core and elective) are carried out either through group or individual work (with a mentor).  The curriculum enables students to attend 7 courses during the first three semesters. During the first  semester two core courses and one elective course are taught. During the second and third semesters (each containing two elective courses) students opt for elective after consulting their co-mentor, one being assigned to every student of the doctoral studies.  The list of elective courses is thus conceived to encourage the students of doctoral studies specialize in the specific field of study, each individual course being defined with the name, the year and semester when the course is lectured, the course objective with the expected outcome, contents and methods of the teaching process and the knowledge evaluation method. The core courses are related to the independent research work of the candidates, which are in the function of achieving the goals defined by the topic of the doctoral dissertation.  All the courses last one semester and are worth a certain number of ECTS, whereby one credit corresponds to approximately 30 hours of student’s activities. |
| **Record:**  [**Table 5.1.** Course specification of the doctoral studies program](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\Т%205.1%20Specifikacija%20predmeta.docx)  [**Table 5.2.** Timetable of courses, by semesters and academic years](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%205.2%20Raspored%20predmeta%20po%20semestrima%20i%20godinama%20studija)  [**Table 5.3**. Requirements related to preparation of the doctoral dissertation](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%205.3%20Zahtevi%20vezani%20za%20phd%20eng.docx)  [**Table 5.4.** List of courses of the doctoral studies](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%205.4%20Lista%20predmeta%20DOS%20H%20engleski.docx)  [**Annex 5.1.** Statute](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%205.1%20%20STATUT%20%20GAF-a.pdf)  [**Annex 5.2.** Book of courses](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%205.2%20KNJIGA%20PREDMETA%20-%20BOOK%20OF%20COURSES)  [**Annex 5.3** Acceptance of SP DOS H by appropriate authorities](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%205.3%20Odluka%20o%20prihvatanju%20SP) |

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| **Standard 6: Program quality, contemporaneity and International compliance** |
| The study program of the Hydroinformatics is consistent with the modern world`s scientific developments and comparable to similar programs in foreign higher education institutions in European educational zone.  The basis for formation of teaching curricula of Hydroinformatics was combination of experiences from the foreign higher education institutions. The specificity of our program of doctoral studies is reflected in creation of independent, unique and completely defined profile of a doctor of sciences in the field of Civil engineering which is at the same time acquainted with Hydroinformatics tools it is complete and comprehensive and offers students the latest scientific and technical knowledge in this area and follows the new achievements in science.  The study program is formally and structurally consistent with the adopted subjects and specific  standards for accreditation and conforms to European standards in terms of enrolment, length of study and method of study, with:   * NTNU - Trondheim, Norwegian University of Science and Technology, Faculty of Engineering Science and Technology   curriculum: PhD in Hydraulic and Environmental Engineering  <http://www.ntnu.edu/studies/phvann>   * Sapienza, Universita di Roma, Civil Engineering and Architecture   curriculum: PhD Hydraulic Engineering  <http://en.uniroma1.it/node/12730>   * UNESCO-IHE Institute for Water Education, Delft, the Netherlands   <http://www.unesco-ihe.org/phd-programme> |
| **Record:**  [**Appendix** **6.1.**Three accredited foreign programs (program copies or web address of the institution)](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%206.1%20Tri%20akreditovana%20inostrana%20programa)  [**Appendix 6.2.** Evidence that the program conforms to the European standards](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%206.2%20Dokaz%20da%20je%20program%20usaglasen%20sa%20evropskim%20stand) |

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| **Standard 7: Student enrollment** |
| The Faculty of Civil Engineering and Architecture (GAF) enrolls the students to the doctoral studies of the study program Hydroinformatics, based on the competition used by the University of Nis. The competition conditions are determined by the Law on Higher education and the Statute of the University. In the admission procedure are applied the general provisions of the Code on enrollment of students to the study programs of the University of Nis, and the Code of studying of doctoral studies and acquiring the degree of the doctor of science at GAF.  The number of students who will be enrolled and the financing (budget or self-financing) is defined each year by a special decision of Educational-Scientific Council of the Faculty,, based on the available resources of the education institution and estimated demand of the society and the market.  The doctoral studies may be enrolled by a person who has completed undergraduate academic and graduate academic studies in the field of civil engineering with at least 300 ECTS credits and grade point average not less than 8.00 on the undergraduate academic and graduate academic studies - Master. The Committee for enrollment evaluates the previous study program finished by all the candidates and determines whether a candidate can enroll doctoral studies or not. Those candidates, who, according to the Committee have finished the adequate study program are granted the right to enroll to the doctoral academics studies. The Committee will decide if the candidates with the right to enroll should pass an admission test. If the Committee for quality makes a decision to organize admission test, the candidates must pass the admission test.  The ultimate list of candidates is formed based on the achievements in the previous education, length of studies and admission test performance, as defined by the Code on the enrollment of students to the study programs of the University of Nis |
| **Record:**  [**Table 7.1.** Number of students enrolling to a given study program](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%207.1%20Broj%20studenata%20koi%20se%20upisuje%20na%20SP%20DOS%20H.docx)  [**Appendix 7.1.** Competition for enrollment to the doctoral studies (if their realization commenced)](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%207.1%20Konkurs%20za%20doktorske%20tudije%20%202013-2014) |

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| **Standard 8: Student evaluation and progress** |
| Evaluation and progress of students is accomplished according to the standing Code on passing the exams and evaluation of the exams of the Faculty of Civil Engineering and Architecture.  There are several ways students can progress: by fulfilling the course prerequisites and by passing the course examination, that is by obtaining a certain number of points. Each individual course at the study program has ECTS defined and a clear and transparent mode of obtaining points (including the points a student acquire according to individual activities during classes and by passing the course examination).  The maximum number of points obtained in a course is 100. Students obtain points from a course through their work during classes, completion of the prerequisites and taking the examination. The minimal number of points a student can obtain by fulfilling the course prerequisites during classes is 30, the maximum 70.  The final success of students at a course is presented with a grade from 5 (fail) to 10 (excellent). The student`s grade is based on the overall number of points obtained on fulfilling prerequisites and taking the examination, and in accordance with the quality of acquired knowledge and skills.  A special part of students’ progress is obtaining ECTS credits in the framework of th research work which builds the student capacity for the independent presentation of their results (publication of papers).  The Head of the Study Program (the study group), upon admission, assigns for every student a co-mentor from the existing teaching stuff at the study program, who will be their councilor until they choose a mentor. At the end of each semester, the co-mentor submits to the Head of the Study Program a report on the student`s work at a research project, passed examinations and the achieved results.  Admission requirements into the second year of the program are met by a student who obtains at least 30 ECTS credits during the first year of studying.  The examinations of doctoral studies can be taken only twice.  Production and defense of the doctoral dissertation constitute a final part of doctoral studies, and they are valued with 20 ECTS. The achieved scientific contribution is evaluated according to the number of scientific publications, patents or technical solution. It is a students’ obligation to publish at least one paper in the scientific journals with an impact factor in the course of the studies. |
| **Record:**  [**Table 8.1.** List of defended doctoral dissertations in the institution in the previous three academic years, with the results published or approved for publishing.](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%208.1%20Lista%20odbr.%20dok.%20dis.%20u%20pret.%20tri%20sk.%20god.%20sa%20rez\Tabela%208.1%20Lista%20odbranjenih%20doktorskih%20disertacija%20u%20prethodne%20tri%20skolske%20godine%20sa%20rezultatima.doc)  [**Appendix** **8.1.** Statute (part related to the doctoral studies)](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%208.1%20STATUT%20-%20deo%20koji%20se%20odnosi%20na%20doktorske%20studije.doc)  [**Appendix 8.2.** Code of the institution on the evaluation of doctoral dissertations](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%208.2%20Pravilnik%20o%20doktorskim%20studijama.pdf) |

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| **Standard 9: Teaching staff** |
| The Faculty of Civil Engineering is a Higher education Institution which has defined criteria for election of teachers, defined by the Law on Higher education, Statute of the University and Statute and Code of the Higher education institution. A total of 18teachers taking part in realization of the doctoral studies of Hydroinformatics published more than 200 papers in the recent 10 years in the journals with impact factors. In the realization of doctoral studies, there are 3 teachers from other faculties of the University of Nis, one from the Institute and 2 foreign teachers as guest professors.  All the teachers participating in realization of the doctoral studies at the Hydroinformatics studies prove their competences by personal references in the form of 10 most important papers and the number of scientific-research projects they participate in. More than 6 teachers, potential mentors of the candidates producing their doctoral dissertations at the study program of Hydroinformatics, have no less than 5 scientific works published or approved for publishing in the scientific journals with the impact factor in the last 10 years. It was provided that the mentor cannot head more than 5 doctoral candidates at the same time. The choice of mentor is thus defined, that each mentor must have no less than 5 papers published in the journals from the SCI list.  The number of teachers corresponds to the requirements of the program, and depends on the number of courses taught and the number of classes of these courses. The total number of teachers is sufficient to cover the total number of teaching classes of the study program, and thus a teacher typically realizes 180 active teaching classes (lectures, consultations, exercises, practical work…) a year, that is, 6 classes a week. Out of the total number of required teachers 67 % is full-time employed.  The number of full-time employed teachers participating in the Hydroinformatics is twelv.  None of the teachers has more than 12 classes a week. All the data on teachers and associates (CVs, academic degrees, references) are publicly available. |
| **Records:**  [**Table 9.1.** The list of employed teachers realizing the doctoral studies.](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%209.1%20Lista%20nastavnika%20angazovanih%20na%20realizaciji%20SP.doc)  [**Table 9.2.** The list of teachers involved in scientific-research and artistic-research projects.](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%209.2%20Lista%20nastavnika%20ukljucenih%20u%20naucno-istrazivacke%20projekate.doc)  [**Table 9.3.** Teachers’ competence](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%209.3%20Kompetentnost%20nasatavnika.doc)  [**Table 9.4.** List of mentors in past three academic years](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%209.4%20Lista%20mentora%20u%20protekle%20tri%20skol%20god.doc)  [**Table 9.5.** Mentors](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Tabele%20DOS%20H%20-%20eng\T%209.5%20Mentori.doc)  [**Appendix** **9.1.** Criteria for election of teachers](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%209.1%20Kriterijumi%20za%20izbor%20nastavnika.doc)  [**Appendix 9.2.** Decision of the competent body on appointment of mentors](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%209.2%20Odluka%20o%20imenovanju%20mentora)  [**Appendix 9.3.**Book of teachers](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%209.3%20Knjiga%20Nastavnika%20DOS%20He)  [**Appendix 9.4.**Book of mentors](file:///\\160.99.31.5\s10\3112\akreditacija2014\dos-h-en\dc\Prilozi%20DOS%20H\P%209.4%20Knjiga%20Mentora%20DOS%20He) |

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| **Standard 10: Organizational and material resources** |
| The teaching of the study program Hydroinformatics takes place in the building of the Faculty of Civil Engineering and Architecture of Nis, in Aleksandra Medvedeva street, no. 14, so the minimum of 4 m2 of space per student is satisfied. The adequate human, spatial, technical and technological, library and other resources adequate for the character of the study program and planned number of students are provided.  Faculty has the library and the study room and provides a seat for each student in amphitheatres,  classrooms and laboratories. The library possesses more than 200 library units relevant for the performance of the study program.  All the courses of the study program have adequate textbooks, teaching implements and supplementary equipment available on time and in a satisfactory number for the normal teaching process. There is also adequate information support.  The Faculty allows the students to utilize equipment or have access to necessary and adequate equipment in the possession of the Faculty, for scientific and research work. The Doctoral study students have the access to databases necessary for Doctoral dissertation elaboration and scientific and research work.  The Faculty provides students to utilize equipment or have access to the equipment necessary for scientific and research work on the basis of contracts on cooperation with other appropriate institutions.  The Faculty has a short-term and a long-term plan and the budget for the realization of scientific and research work.  Means for the realization of Doctoral studies, besides the ones provided by the resource ministries, are also provided in cooperation with other higher education institutions, accredited scientific institutions and international organizations. |
| **Record:**  **Table 10.1.** The list of equipment used in scientific-research work  **Table 10.2.** The space for lecturing provided, as well as the adequate laboratory space necessary for the experimental work  **Appendix** **10.1.** Plan and budget for erealization of scientific and research work  **Appendix** **10.2.** Contracts on cooperation with other higher education institutions and accredited institutes and international organizations  **Appendix** **10.3.** List ofavailable data bases and library resources |

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| **Standard 11: Quality control** |
| Verification of the study program quality is conducted regularly and systematically via self-evaluation and external quality control. Study program quality control is conducted by anonymous survey of the students at end of the semester. The self-evaluation procedures are defined by the: Code on the student’s evaluation of the pedagogical work of teachers, curricula and working conditions at the GAF., Code on evaluation of teachers and non-teachers, Code on evaluation of graduate students and Code on student evaluation of pedagogical work .  The committee for quality control of GAF consists of teachers, students and employees on the teaching administration at GAF. Subjects, areas standards and quality provision measures are proscribed by the Code on provision and improvement of quality at GAF. |
| **Record:**  **Table 11.1.** The list of quality control committee members at the study program:  **Appendix** **11.1.** Report of self-evaluation of the study program of doctoral studies. – |