

**NATIONAL RESEARCH UNIVERSITY — HIGHER SCHOOL OF ECONOMICS**

**Faculty of Computer Science**

**APPLICATION PORTFOLIO**

**Master in System and Software Engineering**  
**Area of specialization – 09.04.04 «Software Engineering»**

**Academic Supervisor**  
**Sergey A. Shershakov, Ph.D.**

**2022**

Applicants are selected on the basis of submitted portfolio, which contains obligatory and optional components (stack of documents). The Admission Committee may invite the applicant for an interview (the latter is organized remotely), if necessary.

#### **OBLIGATORY (must-have) stack of documents:**

- Properly filled in application form.
- Bachelor's (Specialist's or Master's) diploma supplemented by official transcripts that reflect the attained results of previous years of studies (if an applicant has not yet received his/her Bachelor's (Specialist's or Master's) diploma, he / she should include an official copy of most recent valid academic transcript).

An applicant must possess a degree in one of the following fields of study – namely, they are Computer Science, Computer / Software Engineering, Applied Mathematics and Informatics, Information Security, Electronics, Radio-Engineering or, at least, to pass successfully (in the previous years of education) courses in Algorithms and Data Structures, Programming I and II (both Basic and Advanced levels), Databases and Advanced Mathematics (Calculus, Linear Algebra, Probability Theory and Mathematical Statistics) as evidenced in diploma (transcripts) or certificates provided.

When assessing the applications, the Admission Committee takes into consideration the number of credits, final grades obtained in corresponding courses and applicant's university ranking.

- Letter of Motivation in Russian or in English (~500 words, not more than two pages of A4 format (printed text), Times New Roman, Liberation Serif or similar font type, the font's size is 12 or 14 points, single spacing, full justification of the text (alignment on the width of the page), the upper part of the first page provides the contact information of the applicant, his (her) full name, phone number and e-mail address(-es)). The letter should clearly explain the reasons for applying to the programme in the context of applicant's long-term career goals and background. The quality of written Russian or English style and language proficiency is taken into account.
- A document confirming **Russian language** proficiency. This can be a diploma attesting the completion of a previous education level which indicates instruction in the Russian language, or a certificate on passing qualifying exams, etc.
- Exam results confirming **English language** proficiency (certificates issued not earlier than 2020 are considered), namely (one of), *IELTS Academic* (grade 6.0 or higher / level of Competent User or higher), *TOEFL iBT* (grade 80 or higher), *TOEFL PBT* (grade 520 or higher), *C1 Advanced* (formely known as CAE, Cambridge English: Advanced; grade 140 or higher / General and Higher Education), *C2 Proficiency* (formely known as CPE, Cambridge English: Proficiency; grades 180 or higher + conditionally accepted range of 162-179 grades / points gained), *BEC Higher* (grade 160 or higher; B2, C1 levels).
- At least, 1 (one) letter of recommendation (in Russian or in English) from the academic teaching staff of applicant's university, or the supervisor(s) of an applicant's term paper, thesis or project, or applicant's employer. The names of applicant's referees must be indicated clearly (see also HSE [recommendation guidelines](#)).

- CV in Russian or in English (with photo), which contains personal information, education (school and educational institutions in reverse chronological order), additional education / professional achievements (courses, training seminars, conferences, schools, etc.), work experience and / or information concerning internships, freelance activities, participation in projects (with a brief mandatory description of those projects, the role of the applicant in them, skills gained in relation to mastered tools and technologies), the ‘quality’ of the applicant (those specific features that are the most significant in the view of the applicant). CV is considered as a very important part of the portfolio.

#### OPTIONAL stack of documents:

- List of articles published in scientific and professional journals, conference proceedings, collections of student work, etc., certificate of acceptance for publication, deposited manuscripts indicating the author's name and the title of the publication (title of the proceedings, journal, book, etc. should be clearly indicated).
- Information concerning personal or special purpose scholarships, regional, state or institutional non-government organization’s scholarships, program registration certificates, certificates of authorship, patents, grants, etc.
- Professional development, training, specialized online courses, etc.; we expect to see the list of courses, in which applicant successfully participated, with an indication of diploma / certificates obtained.
- Any additional academic evidence that may help Admission Committee to evaluate the candidate more specifically on a favorable side (e.g. certificates of prior academic achievements, presentations, participation in academic (professional) olympiads, competitions, hackathons, etc. – everything that an applicant considers as significant and representative cases).
- The following valid (authenticated) international certificates automatically give 40 points\* to an applicant (note that the points for several existing certificates are not summed up):
  - IEEE Computer Society ASD (*Associate Software Developer Certification*), <https://www.computer.org/product/education/associate-software-developer-certification>
  - *Imagine Cup* International Final Competition awardee Certificate (<https://imaginecup.microsoft.com/en-us>)
  - ICPC (*International Collegiate Programming Contest*) Final Competition participant or awardee Certificate, [icpc.global](http://icpc.global)
  - GMC (*Global Management Challenge*) Final Competition participant or awardee Certificate.

\*) rows 2nd to 4th of the table (Criteria for Portfolio Assessment) shown below.

For each criterion the result (points gained) is an arithmetic mean of the Admission Committee member evaluations specified. All decisions regarding applications are considered as final ones, and Admission Committee does not provide any comments on the evaluation process and details of results attained.

Applicants’ portfolios, which do not contain all obligatory documents (see ‘Obligatory stack of documents’ chapter above), are not considered by the Admission Committee.

## Criteria for Portfolio Assessment

| Component   | Range of points |
|---|-----------------|
| Diploma, Transcript of academic records   | 0–20            |
| CV and professional development, training (professional certification), specialized online courses; articles in scientific and professional journals, conference proceedings, collections of student work; participation in scientific and educational programs (schools, centers of on-the-job training and retraining of specialists) | 0–20            |
| Personal achievements: awards, diplomas, scientific (research) and project experience (with indication of project scope), program registration certificates, certificates of authorship, patents, grants, etc.  | 0–20            |
| Letter of Motivation  | 0–5             |
| Letter(s) of Recommendation   | 0–5             |
| English language proficiency certificate  | 0–10            |
| Interview   | 0–20            |

## Document Submission Procedure

*All* portfolio documents must be uploaded to the official application system for foreign applicants *at one time*. Documents uploaded at subsequent instances or sent by other ways, such as e-mail, will not be accepted for consideration. Any incomplete portfolio formed by the initially uploaded set of documents will not be considered by the Admission Committee at all.

Date 14.10.2022

Academic Supervisor