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| EVALUATION SHEET FOR UNIVERSITY **PROFESSOR APPLICATIONS** | | | | |
| Engineering and Technology | | | | |
| **MAB code: E**…… | | **Name** and institution of Applicant | | |
| Evaluation criteria | | | | |
| 1. **Higher education activities** (maximum score) | | | 100 | |
| 1a.1. **Teaching experience** | | | Maximum score | Score obtained |
| ***Minimum requirement\* (10 points):*** The Applicant is required to have taught at least 800 contact hours (including at least 100 hours of lectures) at any higher education institution during the ten years preceding the submission of the application. The teaching activity must be certified by the Applicant's direct superior, and the relevant student feedback results for at least the last 5 years must be provided. In the absence of student feedback, the assessment of the Applicant's direct superior is also acceptable.  ***[[1]](#footnote-1)In the case of foreign Applicants***: instead of the Applicant's superior certifying the contact hours taught, other means of proof used in the particular country are also admissible. For example, a certificate from the dean's office, or an itemised list of the courses which yielded the contact hours stating the course titles, the name of the institution/faculty/subject, the level of education (bachelor, master, doctoral), and the date.  With respect to student feedback on teaching activity, the information resulting from the processes of the given country must be taken into account. | | | 10 |  |
| *Points for teaching activities:*: 20 points are given for 1000 contact hours, 30 points for 1200 contact hours, 40 points for 1400 contact hours, and 50 points for 1600 contact hours.  With respect to teaching activities (1a.1), the minimum requirement is 800 contact hours (including 100 hours of lectures), for which the Applicant is given 10 points. For 1600 contact hours (including 200 hours of lectures), a maximum of 50 points may be given. Between the maximum and the minimum, the score is determined proportionally and must be rounded to the nearest whole number.  A maximum of 25 (10+15) points may be given for contact hours where the Applicant did not attach student feedback or where student feedback result was below 3.50. In the absence of student feedback, the assessment of the Applicant's direct superior is also acceptable. | | | 40 |  |
| 1a.2. **Leading the academic and scientific work of students**  ***Minimum requirement\* (5 points):*** The Applicant is required to have supervised at least ten theses, or TDK theses.  ***In the case of foreign Applicants:*** student talent development activity (instead of TDK supervision). | | | 5 |  |
| *Additional points may be given for:* Ten more examples of supervising activities. | | | 5 |  |
| Total (1a.1.+1a.2.) | | | 60 |  |
| Written evaluation of performance, supported by specifics: | | | | |
| 1a.3. **Lectures, practice sessions and seminars delivered in a foreign language at graduate and/or postgraduate level or at any level of learning in the Bologna system.** | | | Maximum score | Score obtained |
| ***Minimum requirement\* (5 points):*** The Applicant is required to have delivered at least 80 contact hours (including guest teaching assignments at foreign higher education institutions) up to the date of submission of the application, as certified by the Applicant's direct superior.  ***In the case of foreign Applicants****:* in the case of non-native English speakers, the "foreign language" criterion may be replaced by a language relevant to international scientific communication (which is foreign to the Applicant). In the case of native English-speaking Applicants, since the language of international scientific communication is English today, giving lectures, practice sessions, or seminars in another language is not a requirement. Teaching activities as an invited or visiting lecturer conducted at a university outside the Applicant's country may be accepted, but 80 hours is not a minimum requirement. | | | 5 |  |
| *Additional points may be given for:* The delivery of an additional 80 contact hours. | | | 5 |  |
| Total (1a.3.) | | | 10 |  |
| Written evaluation of performance, supported by specifics: | | | | |
| 1b. **Activities and achievements in education development** | | | Maximum score | Score obtained |
| 1b.1. ***Minimum requirement\* (10 points):*** The Applicant is course director of at least one compulsory (type "A") course or at least two optional (type B or C) courses at the time of submission of the application, confirmed by electronic data (faculty website, departmental website).   |  | | --- | | ***For foreign Applicants****:* overall responsibility for courses may be substituted for activities leading and/or managing programmes, courses or projects. (However, participation in research/development/innovation projects should be accounted for and evaluated under item 2b.) | | | | 10 |  |
| *Additional points can be given:* another 5 points for acting as course director for one subject, and 5 points for meaningful participation in the development of two more subjects (two additional subjects 5 points). | | | 10 |  |
| 1b.2. ***Minimum requirement\* (5 points):*** The Applicant must be the editor, first author, sole author or co-author of at least one coursebook or textbook, teaching aid or digital teaching material of 100 or more pages. If co-author, the Applicant must have contributed at least 50% of the total work. | | | 5 |  |
| *Additional points may be given for:* Authorship of one additional coursebook, textbook or teaching aid. | | | 5 |  |
| Total (1b.1.+1b.2.) | | | 30 |  |
| Written evaluation of performance, supported by specifics: | | | | |
| I. | Higher education activities | | 100 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1. **Scientific activities** (maximum score) | | | | 100 | |
| 2a.1. **Outstanding scientific or research work** (up to the submission of the application) | | | | Maximum score | Score obtained |
| Internationally recognised, outstanding scientific achievements.  ***Minimum requirement\* (10 points):*** The Applicant must be the author (sole, first, last or corresponding) of at least two foreign language articles published in Q1 or Q2 journals, or be the sole, first or lead (corresponding or final) author of an article published in an international journal ranked category A or B by the Hungarian Academy of Sciences in a relevant field. Q1/Q2 publications can only be replaced by monographs in the case of two disciplines (architectural sciences, military engineering).   |  | | --- | | ***For foreign Applicants:*** Publication in another language is not a requirement for native English speakers. In the case of non-native English speaking Applicants, publication in a (foreign) language relevant to international scientific communication is required. |   Scientific performance (2a.1.) shall be evaluated on the basis of the special discipline requirements detailed in the Appendix. | | | | 10 |  |
| *Special criteria for points to be awarded:* 80% 20 points; 100% 30 points; 120% 40 points; 140% 50 points.  The scientific performance is evaluated on the basis of the doctoral requirements of the Hungarian Academy of Sciences. In the specialty categories (A, B, Architect), the Applicant will be awarded points when meeting the minimum requirements set out in the Appendix (25% of the available rounded score), and in the case of 140%, the maximum score that can be given for the given question. Between the maximum and the minimum, the score is determined proportionally and must be rounded to the nearest whole number.  Applicants who obtained the title Doctor of the Hungarian Academy of Sciences no more than 10 years before submission of the application are considered to have met the criteria for outstanding scientific or research work (2a.1) are to be given the maximum number of points (10+40). | | | | 40 |  |
| Total (2a.1.) | | | | 50 |  |
| Written evaluation of performance, supported by scientometric data or specific references to recognition, awards or other data: | | | | | |
| 2a.2. **Supervising the scientific work of young academics, participation in doctoral training as a thesis supervisor** | | | | Maximum score | Score obtained |
| ***Minimum requirement\* (5 points):*** The Applicant has been a thesis supervisor to at least one doctoral student who has obtained his/her doctoral degree (as confirmed by the doktori.hu website). Where there is no PhD training, the assessment must take into account the Applicant's achievements in the education of the next generation of scholars, but the requirement regarding the number of PhD students who obtained a doctoral degree under the supervision of the Applicant is not applicable. | | | | 5 |  |
| *Additional points may be given for:* Additional PhD students obtained his/her doctoral degree and/or postdoctoral fellows supervised by the Applicant (5 points each).  In addition to the points given for a student who has obtained his/her doctoral degree, 3 additional points may be given for each currently supervised doctoral student and doctoral candidate, registered by the doctoral school, who are recorded by name in the database of the National Doctoral Council (or on the certificate from the foreign university for students who have studied abroad), including the expected year of obtaining their pre-degree certificate and degree. | | | | 15 |  |
| 2a.3. ***Minimum requirement\* (5 points):*** Substantial influence on the work of young academics, creation of an intellectual hub, which is publicly recognised by the professional community (e.g. head or founder of a research team).   |  | | --- | | ***For foreign Applicants:*** creation of an intellectual hub can be substituted by other student talent development activities, as well as prizes and awards (which, however, cannot be the same as those related to teaching activities listed under item 1a.2, e.g. activities substituted for activities related to TDK). | | | | | 5 |  |
| 2a.3. ***Minimum requirement\* (5 points):*** Activity in the professional public sphere (e.g. as head or member of a professional committee at a university, as external member of a committee at another university, as member of a non-university professional body, as member of a university senate or faculty council, or as head or member of a professional committee at a university). | | | | 5 |  |
| Total (2a.2.+2a.3.+ 2a.4.) | | | | 30 |  |
| Written evaluation of performance, supported by specifics: | | | | | |
| 2b.1. **Experience and achievements in research management** | | | | Maximum score | Score obtained |
| ***Minimum requirement\* (5 points):*** Up to the date of submission of the university professor application, role as project manager of at least one research/development/innovation project that won support in a national or international competitive procedure, or substantial participation in the implementation of at least three such projects, or roles as project manager of three institutional projects. | | | | 5 |  |
| *Additional points can be given:* More similar achievements for proportionally more points. | | | | 5 |  |
| Total (2b.1.) | | | | 10 |  |
| Written evaluation of performance, supported by specifics: | | | | | |
| 2b.2. **Recognition in Hungary and abroad** | | | | Maximum score | Score obtained |
| ***Minimum requirement\* (5 points):*** Head of domestic or international scientific organisation (5 points), member of board (3 points), conference chair or conference organiser (3 points), co-chair, section organiser, section chair, invited plenary speaker at conferences (1 point each). | | | | 5 |  |
| Additional points may be awarded for the positions listed: | | | | 5 |  |
| Total (2b.2.) | | | | 10 |  |
| Written evaluation of performance, supported by specifics: | | | | | |
| II. | Science | | | 100 |  |
|  | | | | | |
| Maximum score: 200 points | | Final score (I+II): | |  | |
| The minimum score necessary for supporting the Applicant's appointment: 160  \* If the Applicant did not meet the minimum requirement for an item (any requirement, if there are more than one), then a score of 0 must be given for that item (e.g. 1b.1.). This means that no additional points may be given for the item in question.  (to be underlined:) | | | | | |
| The Applicant achieved the minimum score | | | The application merits endorsement | | |
| The Applicant did not achieve the minimum score | | | Not supported | | |

Appendix

Representative values for the discipline-specific publication indicators

The minimum requirements consist of three parts. Applicants must achieve

1. the minimum value of **Q** for the publication and creative activity (**Qmin**.),
2. the minimum value of **I**(Imin.) measured on the basis of the Applicants' citations, characterising their impact,
3. and the itemized publication requirements must be met.

**Q** and **I** values are primarily quantitative, while itemized expectations contain qualitative elements as well. When verifying that the minimum requirements are met, only publications and citations that have been registered in the MTMT by the deadline before the procedure was launched and have been checked and approved in the MTMT will be taken into account.

Minimum Q-score for publishing and creative activity (Qmin)

The **Qmin thresholds according to** 3 scientific disciplines categoriesare asfollows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Higher | B | Architecture |
| Qmin | **8** points | **11** points | **6** points |

Category **Arch** applies to architecture, while categories **A** and **B** apply to the other disciplines in the section. The classification of the committees into categories **A**, **B**, and **Arch** is as follows:

|  |  |
| --- | --- |
| Scientific Committee on Materials Science and Technology | B |
| Scientific Committee on Hydrodynamics and Thermal Energy Engineering | **A** |
| Scientific Committee on Automation and Computer Science | **B** |
| Scientific Committee on Electronic Devices and Technologies | Higher |
| Scientific Committee on Electrotechnics | **A** |
| Scientific Committee on Energetics | **A** |
| Scientific Committee on Architecture\* | **Arch** or **A** |
| Scientific Committee on Mechanical Structures | **A** |
| Scientific Committee on Information Science | B |
| Scientific Committee on Transport Engineering | **A** |
| Scientific Committee on Metallurgy | **A** |
| Scientific Committee on Fibre Technology | **B** |
| Scientific Committee on Solid Bodies Mechanics | **A** |
| Scientific Committee on Telecommunication Systems | **A** |
| Scientific Committee on Water Management | **A** |

Minimum I-value of citations (Imin)

The **Imin** threshold for categories **A**, **B** and Arch is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Higher | B | Architecture |
| Imin | **60** citations | **134** citations | **20** citations |

The scores correspond to the number of independent citations in the strict sense.

Itemised publication requirements for categories A and B

The following are the itemised publication requirements for the above **Q** and **I** values.

|  |  |
| --- | --- |
|  | Itemised publication requirements in categories A and B |
| 1. | The Applicant shall exceed at least one of the above measures (article, book, work, quotation) significantly (by at least 50%) higher than the value given above. |
| 2. | Hungarian citizens should also have scientific publications in Hungarian. |
| 3. | The number of single IF articles should be at least 2. (This requirement can be substituted for PhD/DLA students who have successfully defended their thesis.)\* |
| 3. | The number of IF articles (not to be divided by the number of authors) must be at least 0.5 Qmin. |
| 1 | The sum of the relative IF numbers shall be at least 0.25 Q |
| 6. | The number of citations in the WoS must be at least 0.5 Imin. |
| 7. | The Hirsch index, calculated from independent citations in the MTMT, must be at least 5 (cat. A), 7 (cat. B). |

\* *A PhD/DLA doctoral student substitutes for a single article. The official number of graduated doctoral students can be found in the doktori.hu database*.

|  |  |
| --- | --- |
|  | Itemized Publication Expectations in the Architecture Category |
| 1. | The Applicant shall exceed at least one of the above measures (article, book, work, quotation) significantly (by at least 50%) higher than the value given above. |
| 2. | Hungarian citizens should also have scientific publications in Hungarian. |
| 3. | The number of single IF articles should be at least 2. (This requirement can be substituted for PhD/DLA students who have successfully defended their thesis.)\* ) |
| 3. | The number of foreign journal articles (not to be divided by the number of authors) should be at least 0.4 Qmin. |
| 1 | The number of references\*\* by foreign authors should be at least 0.2 Imin. |

\* *A PhD/DLA doctoral student substitutes for a single article. The official number of graduated doctoral students can be found in the doktori.hu database*.

\*\* *Citations may include national and international awards for works, publications in national and international journals, design plans or buildings exhibited at national and international exhibitions, and reference books on the Applicant's work*.

Method of calculating the Q and I values

Calculation of the Q-value

The Q-score points for scientific is a composite of three areas: scientific articles, books and works. The table below shows the minimum and maximum points required in each category.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Components of the Q-value |  | Higher | B | Architecture |
| Research paper | min | 6 pont | 8 points | 4 points |
| Scientific book | max. | 3 points | 3 points | 5 points |
| Outstanding work | max. | 4 points | 5 points | 6 pont |

The "min" indicates that the Applicant must have at least this many points regarding each of the articles, and the "max." indicates that the Applicant may have more points in each of these two areas, but no more than this many points can be included in the Q score.

Calculation of Q for scientific articles

The number of points is divided by the number of authors.

|  |  |  |
| --- | --- | --- |
| Peer-reviewed journal articles\* | IF | max. (𝐼𝐹, 0.6)\*\* |
| Without IF, published abroad | 0.4 |
| Without IF, published domestically | 0.3 |
| Peer-reviewed conference papers\*\*\* | in a foreign language | 0.2 |
| in Hungarian | 0.1 |

\* *Conference materials published in the regular issues of journals can be considered journal articles. (But the same conference material – or a shorter version of it – cannot be considered a conference article as well.)*

\*\* If the IF of the year in question is not yet known, then the last IF value of the journal.

*\*\*\* Min. 4 pages; has ISBN number*.

Calculation of Q value for a scientific book (book or book section)

The number of points is divided by the number of authors.

|  |  |  |
| --- | --- | --- |
| Book or book section, over 100 pages | in a foreign language | 2 |
| in Hungarian | 1 |
| Book or book section, under 100 pages | in a foreign language | 0.2 per 10 pages |
| in Hungarian | 0.1 per 10 pages |

**Calculation of the value of Q in the case of a engineering**

In categories **A** and **B**, points can only be awarded for outstanding engineering projects. These are characterised by the following

– either report the scientific result of the work in at least one peer-reviewed journal article with at least two major citations, – or the work is accompanied by an implemented patent.

Scoring:

|  |  |
| --- | --- |
| Engineering project | up to 1.0 point at the discretion of the committee |

**Calculation of the Q-value for outstanding works by architects**

In **the Architecture** category, three elements of architectural design can be evaluated: – completed building,

– a project of outstanding merit which has not been implemented for one reason or another, – a project of outstanding merit and recognised as such.

Scores:

|  |  |
| --- | --- |
| Finished building, which has been reviewed in at least 3 domestic or 1 foreign journals or received prestigious (domestic or international) awards | 1.0 point |
| A significant building design that has been reviewed in at least 3 national or 1 foreign journal | 0.5 points |
| 1st, 2nd or 3rd prize in national, confidential and public design competitions | 0.3 points |
| Successful foreign design competition  (awarded, purchased, honourable mention, category of mention) | 0.6 points |

In the case of designs and buildings created by groups, only the work of the lead designer can be assessed. In the case of more than one lead designer, the scores awarded shall be proportional to the number of lead designers. The above assessment applies to urban development and monument reconstruction plans, as well as realised urban development projects and monument reconstructions. A building, design or award cannot be awarded points multiple times in more than one category.

Calculation of the I value

The number of citations is equal to the number of independent citations that can be included. Citations do not need to be divided by the number of authors.

For categories **A** and **B**, only independent citations (author(s) of the citing and cited publications not indentical) published in a scientific book, scientific journal, scientific conference proceedings or thesis (PhD, PhD/DLA, habilitation, doctorate of science or Doctor of the Hungarian Academy of Sciences) are accepted. Only those dissertation citations may be accepted which are in scientific literature and not in works publications under the Applicant's scientific supervision.

In the category of Architecture, citations may include national and international awards for works, publications in national and international journals, design plans or buildings exhibited at national and international exhibitions, and reference books on the Applicant's work.

1. ***Foreign Applicants are:*** a) Applicants who are not Hungarian citizens, and b) Applicants who are Hungarian citizens working abroad on a long-term basis (more than five years). [↑](#footnote-ref-1)