PHD FELLOWSHIP: SCORING DESCRIPTORS CRITERION “CANDIDATE” (PRESELECTION)

### 1.a. Study results (academic education)

Depending on whether the master studies are already concluded, master or bachelor percentiles (referring to their university study group) are to be provided by the candidates. In addition, detailed course scores should be added. Bachelor percentiles in particular should, if possible, be complemented by intermediate master study results. Students from non-Flemish universities should provide either a percentile score (if available), or at least their rank within their study group (if available). Candidates in any case refer to other evidence of having distinguished themselves during their studies. One may refer to upward trends during course of education, particular situations that may have (positively/negatively) influenced the study trajectory; also to results of additional studies/diplomas, (bachelor or) master thesis score, specific classes successfully attended, or other specific assets. The scoring based on the provided percentiles should therefore be well framed and fine-tuned with all available info and evidence. Also, percentiles referring to small study groups should carefully be dealt with.

<table>
<thead>
<tr>
<th>Score</th>
<th>Descriptors</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Excellent/Outstanding</td>
<td>P95 bachelor with proven top start of master studies.</td>
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<tr>
<td>6</td>
<td>Good/Very good</td>
<td>P85 for relevant master diploma, or even P90 (score 5).</td>
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<tr>
<td>5</td>
<td>Fair/Reasonable</td>
<td>bachelor ≥P90 (confirmed by intermediate master study results).</td>
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<tr>
<td>4</td>
<td>Weak</td>
<td>other evidence that would categorize the candidate as equivalent to this group.</td>
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<tr>
<td>3</td>
<td>Unacceptable</td>
<td>master students: (e.g.) bachelor ≥P80 (and confirmed by intermediate master study results) or equivalent.</td>
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<tr>
<td>2</td>
<td></td>
<td>other evidence that would categorize the candidate as equivalent to this group, e.g. a reasonable upward trend in academic results or other specific assets.</td>
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<tr>
<td>1</td>
<td></td>
<td>Rather good study results, situated well above average and at the subtop in the study group, as evidenced by:</td>
</tr>
<tr>
<td>0</td>
<td>No scoring possibility</td>
<td>The study results do not stand out (may be at the head of the pack within study group, but below average in the applicants population).</td>
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</table>

- □ (e.g.) <P70 for relevant master diploma, and no other evidence of “standing out”;
- □ master students: (e.g.) <P80 for bachelor, and lack of other evidence of distinguishing elements, such as partial master results.
### 1.b. Motivation and substantiation of relevant competences of the candidate

In their “motivation statement”, applicants should substantiate acquired competences (expertise and skills), and present a credible approach to further improve skills and acquire missing competences if any. Relevant competences (expertise and skills) imply the proper scientific background to start the PhD project, as well as e.g. experimental skills, presentation or writing skills, international contacts, commitment/perseverance, that may have been acquired during the candidate’s academic education, master thesis or extracurricular activities (academic or non-academic). Proven scientific seniority (post Master) may also be taken into account as well as scientific recognition (prizes, publications, …), (international) mobility, …

For PhD grants strategic basic research (SB), intersectoral mobility (e.g., internships and/or research stays in an industrial R&D environment) and (development of) entrepreneurial and innovation skills are an asset as well.

#### No scoring possibility

- Expertise and skills apparently not in line with what should be expected from a PhD student strategic basic research. Some crucial competences are missing and likely not to be acquired.

#### One or more of the following items apply:

- Candidate may not fully be motivated or prepared to start a career in research and/or innovation. Evidence of some specific competences is missing. How these competences will be acquired is less well substantiated;

- Candidate has started PhD research but with little evidence of progress made (incl. competences acquired)…

#### One or more of the following items apply:

- Relevant competences and clear motivation likely are present and well substantiated (e.g. Master or Bachelor thesis) or some competences missing but a clear and credible plan is provided on how to acquire the proper skills.

- Candidate has started PhD research with proper intermediate results and reveals ongoing development of new competences for evolving towards a strategic and innovation oriented researcher.

#### Requirements as in “good”, AND

- the candidate has substantiated to have actively acquired all proper competences to successfully conduct PhD research. Clear plan to further enhance these capacities, including intersectoral mobility and entrepreneurial/innovation skills. Reveals clear motivation and drive.
### PHD FELLOWSHIP STRATEGIC BASIC RESEARCH EVALUATION/ score grid with scoring descriptors - PRESELECTION

#### PHD FELLOWSHIP: SCORING DESCRIPTORS CRITERION “PROJECT” (PRESELECTION + INTERVIEW)

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<th>4</th>
<th>5</th>
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<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unacceptable</td>
<td>Weak</td>
<td>Fair/Reasonable</td>
<td>Good/very good</td>
<td>Excellent/outstanding</td>
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#### 2.a Scientific quality, relevance and challenge, originality

A PhD project is scientifically challenging and relies on a proper and focused research question. It should significantly contribute to the current international state-of-the-art. To what extent is the proposal original and will it generate knowledge that goes beyond the state-of-the-art (e.g., novel theories, concepts or approaches, new methods, ...)?

One or more of the following items apply:

- The project is **out of scope**: it does not comply with the scope of the panel it was submitted to. (preselection only).
- Project lacks an intellectual (PhD-worthy) challenge: an in-depth research question is missing.
- Research question and challenge limited or less relevant, PhD worthiness is on the low side,
- the project is rather a catch-up effort relative to the state-of-the-art.

One or more of the following items apply:

- Research question and challenge limited or less relevant,
- the research **objectives lack** focus. PhD worthiness is on the low side,
- the project is rather a catch-up effort relative to the state-of-the-art.

One or more of the following items apply:

- Scientifically relevant project, rather high quality, and sufficiently challenging as PhD-research. The research is less well focused ;
- the project brings less pronounced added value to international state-of-the-art.

ALL of the following items apply:

- Original and significant contribution to the international state of the art;
- high-quality basic research, with significant scientific challenges (doctoral level).

ALL of the following items apply:

- Highly ambitious and original project of potentially groundbreaking nature and large scientific impact,
- very high level of scientific risks. Clear inventive and challenging ideas, novel concepts and strategies.

#### 2.b Quality of the research methodology and feasibility of the project

To what extent is the proposed research methodology appropriate to achieve the goals laid down in the research project? To what extent is the outlined scientific approach feasible, bearing in mind a personal grant with a duration of four years? Finally the fit in the research team may be of importance (guidance and access to expertise).

One or more of the following items apply:

- Quality of research approach and planning is below par;
- Research activities are too limited for a four-year grant period;
- Project not feasible because of too many planned activities.

One or more of the following items apply:

- Methodology and planning are flawed. Intrinsic feasibility is low, or the objectives are formulated too vaguely to evaluate feasibility.
- Project does not fit to an individual PhD project.
- Ties with/dependence of other researchers, groups or external partners may jeopardize feasibility.

One or more of the following items apply:

- Research methodology reasonably well elaborated, but less well substantiated. Given some adjustments and risk control, project implementation appears to be feasible.

ALL of the following items apply:

- Adequate, substantiated research methodology to achieve targeted results, logical set-up and realistic planning: feasible within the four-year time frame.

Requirements as in “very good”, AND

- thorough identification of the research risks, with alternative research strategies and “fall back” research options.
### PHD FELLOWSHIP SB: SCORING DESCRIPTORS CRITERION “APPLICATION POTENTIAL” (PRESELECTION + INTERVIEW)

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<tbody>
<tr>
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Strategic basic research in the context of a PhD grant stands for challenging and innovative research (at PhD level), which, if successful, may in the longer term lead to innovative applications with economic added value (for specific companies, for a collective of companies, or a sector, or in line with the Flanders 2025 transition areas (socioeconomic benefits)). Societal impact should always be linked to a (indirect) economic benefit. E.g. cost reductions in health care, higher education level, environmental impact... should be positioned in an economic context.

### 3.a Strategic importance of the research approach for the anticipated applications (= relevance)

**Does the research – if successful – contribute to the (on the long term) realization of the anticipated applications? Is the research approach the proper one to this purpose?**

- **One or more of the following items apply:**
  - Strategic dimension is lacking, no orientation towards an economic finality;
  - Apparent mismatch between application potential and project content.

- **One or more of the following items apply:**
  - Strategic dimension is present, but project is not well adapted to the anticipated utilization.
  - Strategic dimension based on an assumption for which there is as yet little concrete evidence.

- **The strategic focus of the project on economically relevant innovations is substantiated in rather broad terms. Research approach is reasonably or partially geared to the anticipated applications.**

- **The strategic focus on economically relevant innovations is clear, and well substantiated in the proposal. Suitable project approach to allow the anticipated utilization.**

- **All of the following items apply:**
  - The strategic focus on economically relevant innovations is clear, and well substantiated in the proposal. Suitable project approach to allow the anticipated utilization.
  - If successful, the project is very likely to effectively contribute to economically relevant innovations within the identified companies and/or sectors, or even new economic activities. These are clearly defined and interpreted.

Requirements as in “very good”,

- **AND** Best possible approach to achieve the intended applications. The latter are clearly the driving force behind the implementation approach.

- **AND** Project fits well in broader strategic basic research goals of the research group.

### 3.b Strategic importance of the potential applications for possible users (= impact)

**Assuming the research approach is effectively geared towards applications: is there a significant impact for industry and economy, for possible (end-) users? Is the impact of the intended applications described in the project application credible and achievable?**

- **One or more of the following items apply:**
  - The anticipated application is not relevant for possible users nor is the proposed impact realistic;
  - The project is too strongly embedded in the strategic R&D horizon of a single company (cf. Baekeland programme at Flanders Innovation & Entrepreneurship - VLAIO).

- **Application potential may be real but of less economic relevance and limited impact for the identified possible users.**

- **The anticipated applications are economically relevant, they have a potential impact on possible users. The proposal exhibits certain flaws or gaps in the identification and/or elaboration of the (potentially present) applications.**

- **If successful, the project is very likely to effectively contribute to economically relevant innovations within the identified companies and/or sectors, or even new economic activities. These are clearly defined and interpreted.**

Requirements as in “very good”,

- **AND** If successful, project could play a key role to disruptive innovations, implying substantial economic added value. Moreover, this goal is realistic.

- **AND (score 7):** A successful project may lead to a substantial economic added value for Flanders.