



# ASIIN Certification Report

## Modules

*Gamification for Business and Organizations<sup>1</sup>*

*Gamification for Organisations<sup>2</sup>*

*Play-based Intrapreneurship<sup>3</sup>*

Provided by

**Leipzig Graduate School of Management (HHL)<sup>1</sup>, Hochschule für Medien, Kommunikation und Wirtschaft (HMKW) Berlin<sup>2</sup>, Design School Kolding (DSK, Denmark)<sup>3</sup>**

---

## Table of Content

<b>A About the Certification Process .....</b>	<b>3</b>
<b>B Characteristics of the Modules .....</b>	<b>4</b>
<b>C Peer Report for the ASIIN Certificate .....</b>	<b>6</b>
1. Formal Information .....	6
2. Learning Outcomes, Content and Implementation .....	7
3. System, Policy and Forms of Examinations.....	18
4. Teaching Methodology and Support.....	20
5. Personal, Material and Financial Resources .....	21
6. Quality Management: Processes, Instruments and Findings .....	22
7. Documentation & Transparency .....	24
<b>D Additional Documents .....</b>	<b>27</b>
<b>E Comment of the HEIs (15.12.2021).....</b>	<b>28</b>
<b>F Summary: Peer recommendations (17.12.2021) .....</b>	<b>29</b>
<b>G Decision of the Certification Commission (30.12.2021) .....</b>	<b>31</b>

## A About the Certification Process

Title of the Module	Previous certification
Gamification for Business and Organizations (HHL, Germany)	–
Gamification for Organisations (HMKW, Germany)	–
Play-based Intrapreneurship (DSK, Denmark)	–
<p><b>Erasmus+ Project: GAMIFY</b></p> <p><b>Submission of the final version of the self-assessment report: 12.10.2021</b></p> <p><b>Date of the online visit: 02.11.2021</b></p>	
<p><b>Peer panel:</b></p> <p>Dipl.-Ing. Rupert Schmitt, BMW Group;          Prof. Dr. Sofia Schoebel, Osnabrück University of Applied Sciences;          Alexander Stephan, Student at Technical University Ilmenau.</p>	
<p><b>Representative of the ASIIN headquarter:</b> Dr. Siegfried Hermes</p>	
<p><b>Responsible decision-making committee:</b> ASIIN Certification Commission</p>	
<p><b>Criteria used:</b></p> <p>Standards for the Certification of (Further) Education and Training for courses and modules related to Computer Sciences, Technology, Natural Sciences and Business Economics as of 26.06.2020.</p> <p>Standards and Guidelines for Quality Assurance in the European Higher Education Area as of 15 May 2015.</p>	

## B Characteristics of the Modules

a) Name of the module	c) Corresponding level of the European Qualifications Framework	d) Mode of Study	e) Duration & Credit Points	f) First time of offer & Intake rhythm	g) Number of students per intake	h) Fees
Gamification for Business and Organizations	7	Full time	4 ECTS	spring term annually (new module)	15	n/a
Gamification for Organizations	7	Full time	6 ECTS	summer term 2022 annually	20	n/a
Play-based Intrapreneurship	7	Full time	15 ECTS	winter term 2020 continuously	20 – 25	n/a

For the Module Gamification for Business and Organizations, the self-assessment report states the following **intended learning outcomes**:

- “Know-how of underlying theories, recent trends and future outlook (including current literature); overall understanding of the potential Gamification holds within organizations
- Gain knowledge about play as a method for creativity and innovation activities; overall understanding of the potential Gamification holds within organizations
- Ability to map out challenges and possible solutions in a business environment; hands-on experience of various games and formats; overall understanding of the potential Gamification holds within organizations
- Understanding of obstacles that may appear when implementing Gamification formats in organizations; advanced skills to successfully bypass obstacles occurring when implementing Gamification formats in organizations; overall understanding of the potential Gamification holds within organizations
- Understanding of Gamification formats in remote settings; overall understanding of the potential Gamification holds within organizations
- Raising awareness and understanding of possible negative aspects of gamification; overall understanding of the potential Gamification holds within organizations”.

For the Module Gamification for Organisations, the self-assessment report states the following **intended learning outcomes**:

- “Know and critically assess current research on gamification and games for business purposes
- Advanced know-how to identify and frame design challenges for gamification
- Understand in depth how and why games work or do not work as intended; first-hand experience of different games and formats
- Advanced skills to collaboratively sketch and iteratively develop alternative game formats to address business challenges
- Awareness and a critical view on ongoing developments and future potentials of games to address values-based and societal challenges”.

For the Course Play-based Intrapreneurship, the self-assessment report states the following **intended learning outcomes**:

- “The students get familiar with and take first steps towards using play and games as part of their effort to push for more radical thinking and innovation in collaboration with companies and organizations.
- The session and the games create awareness and learning related to how to overcome typical barriers for innovation in established companies and organizations
- The students reflect on their collaborations etc. and the random wheel of categories push for 360-degree perspectives on the organizational constraints they are dealing with.”

---

# C Peer Report for the ASIIN Certificate

## 1. Formal Information

### Evidence:

- Relevant chapter of the SAR
- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)

### Preliminary assessment and analysis of the peers:

The core module-related information can be derived from the SAR as well as the related module description.<sup>1</sup> Thus, the name of the modules under review, their intended level (Master), their respective ECTS number and their presumptive student intake is indicated. Still it is unclear for the peers whether these modules are offered in full-time mode only or could be completed alternatively in part-time mode or extra-occupational as well. In addition, the intake rhythm at HHL (summer or winter term) could not be inferred from the information provided. The institutions are solicited to supplement the missing information (see table sec. B).

In the case of HHL, the Gamification module is indicated as part of a so-called “Open Module”, but apparently functions as an independent and self-contained module in the technical sense of the Bologna wording in combination with other learning units (“courses”) within the framework of an elective course catalogue. Such peculiarities need to be addressed more clearly in the study related documents, especially in the module / course description as well as in related study plans (see below sec. 2.3, 7).

If there were alternative modes of delivering the modules besides the full-time mode leading to a duplication of delivered courses per term, the institutions should indicate whether this affects the available personal resource basis.

---

<sup>1</sup> The term „module“ will exclusively be used for the teaching/learning units under consideration here, even if the providers refer to the term interchangeably with the term “course”. Regarding the Bologna referencing of the terminology, this is detailed in the relevant section 2.3 of the report.

**Final assessment of the peers after the comment of the Providers regarding criterion 1:**

With the amendments and clarifications of the HEIs, the criterion is considered *fulfilled*. Missing formal information has been provided as requested by all module providers and been regarded in the “Characteristics” section B.

*HHL – Module character*

The peers particularly thank HHL for its clarification on the status of the *Gamification for Business and Organizations* course. From the study plans of the referenced Master programmes, they understand that the Gamification course must be regarded as a self-contained *module* rather than a module *component*. In their opinion however, HHL communicates this mistakably, at least in the respective module description. The peers therefore strongly advice the module coordinators to clearly and consistently present the *module structure* of the course in all study-related documents, in particular in the respective module description (see below sec. F, A 3.).

## 2. Learning Outcomes, Content and Implementation

### 2.1 / 2.2 Learning outcomes and contents of the module

**Evidence:**

- Relevant chapters of the SAR
- Comprehensive information about the GAMIFY project available on the internet: <https://www.gamify.site/activities> (Access: 28.11.2021)
- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)
- Appendix 02.01 (Study regulations, HHL)
- Appendix 03.04 (Master Basic Study and Examination Regulation, HMKW)
- Appendix 04.03 (Curriculum for the Master’s programme in Design, including study and exam provisions, DSK)
- Audit discussions

**Preliminary assessment and analysis of the peers:**

The peer group receives the impression that the Gamification modules under review adequately build on the increasing relevance of gamification and games in core processes of businesses and organizations. Thus, the providers convincingly demonstrate how gamification could be engaged in learner settings to effectively target companies’ needs for devel-

oping new products and services, exploring new business models, and continuously reviewing and improving internal work processes (cf. SAR, p. 10). The concept of the Gamification modules responds to this observation introducing gamification as a potentially powerful means of tackling the innovation needs of businesses and organizations. The modules could render considerable added value to the competence portfolio of the students, irrespective of whether they are a mandatory part of a specialised programme or an elective part in one or more degree programmes (be they business-related or cross-disciplinary).

The expert group acknowledges that HHL's and HMKW's Gamification modules assemble a knowledge and competence basis ranging from the theoretical background of related disciplines like design thinking, serious games etc. to framing of appropriate challenges for gamification to best practices demonstrating the business value of Gamification to implementing Gamification formats in organizations, and to possible gamification fails. The peers positively note that both institutions manage to translate practical/business problems in theoretical questions and transform adequate theoretical knowledge via Gamification elements and formats into business world solutions.

In case of the DSK module "Play-based Intrapreneurship", the expert group estimates an even closer theory-/practice approach. Business companies or organizations are directly involved in the teaching/learning process. In the module, students spend a considerable amount of time in pre-selected companies or organizations, using the acquired knowledge about the cultural, institutional or organizational settings of the respective company / organization to explore possible benefits of introducing elements of gaming into the processes of that company / organization. This inherently and profoundly design-oriented approach to gamification impresses the expert team particularly.

Hence, it can fairly be stated that all Gamification modules under review – despite of their structural differences (see below sec. 2.3 and 2.6) – are based on a sound concept of introducing students to the potential of gamification in business or organizational settings. Consequently, the defined learning objectives of the modules could be expected to convey this notion.

Yet, any check of these learning outcomes suggests that they are formulated highly generic and comprehensive, sometimes even mixing learning outcomes and knowledge and/or skills input. This is obvious when looking at formulations such as

- "Know-how of underlying theories, recent trends and future outlook (including current literature)" and "Ability to map out challenges and possible solutions in a business environment; hands-on experience of various games and formats" (HHL), or

- “Advanced know-how to identify and frame design challenges for gamification” and “Advanced skills to collaboratively sketch and iteratively develop alternative game formats to address business challenges” (HMKW), or
- “get familiar with and take first steps towards using play and games as part of their effort to push for more radical thinking and innovation in collaboration with companies and organizations” (DSK).

Most of them reflect a highly comprehensive understanding of the knowledge, skills and competencies students are supposed to acquire in the module. Consequently, it is hardly possible for anyone not directly involved in the gamification discourse to get a clear notion of what students/graduates know or are able to do after passing the module successfully. It would be just as difficult for students to tell after the module whether and to what degree they achieved the intended learning outcomes. Both should be primary goals for defining learning objectives of a module – as opposed to the learning objectives of a study programme, whose wording is inherently broader and more general. From a didactic perspective, offering specific verbs such as “applying”, “evaluating”, “describing”, “defining” etc. can be of assistance to highlight the key issues of the leading goals.

Since the present procedure is about the certification of the mentioned Gamification modules / courses, the modules must be considered as stand-alone offerings. For the same reason they are not evaluated as components of reference Master degree programmes, although they are explicitly designed with the purpose of using them in the respective Master programmes’ context.

In addition, the defined learning objectives do barely indicate the Master’s qualification level they are aiming at. Taking into account the described contents of the modules and the games and Gamification papers produced in the framework of the GAMiFY project, from which the Gamification modules have emanated too, the experts do not doubt the Master level of the outcomes. As already indicated, they positively note the modules’ contribution to a professionalized educational reflection of the Gamification potential in business or organization development. Notwithstanding, they see a deficient phrasing of the intended learning outcomes and therefore strongly suggest a more vivid, concrete and precise formulation adequately reflecting the Master level of the Gamification modules.<sup>2</sup>

Otherwise, the peers appreciate that the Gamification modules take into consideration the ethical/critical dimension of methodically applying Gamification in heterogeneous non-

---

<sup>2</sup> As indicated above, using tools like Bloom’s taxonomy for learning, teaching and assessing to formulating adequate levels of learning outcomes might be helpful for this purpose; see for instance: <https://www.celt.iastate.edu/wp-content/uploads/2015/09/RevisedBloomsHandout-1.pdf> (Access: 30.11.2021)

game settings. This is reflected in the unit specifications of HHL and HMKW on both levels, the learning outcomes as well as the content description. It is more indirectly addressed in the DSK module description, obviously due to its embeddedness into the HEI/company (organization) cooperation. The expert team, however, principally lauds that downsides and critical aspects of gamification are considered here too, since this raises the students' critical awareness of gamified applications.

As the peers observe, the DSK and HMKW Gamification modules fully or to a certain degree rely on the existence of business partners or partner organizations and the availability of an array of processes / areas suitable for the introduction of Gamification elements. If those partners are engaged in each module cycle, a kind of saturation could occur in the form that gamification concepts already exist for certain problems. The next cycle then might raise the question whether and how gamification is relevant again or at all. A possible solution then might be moving the course carefully in the direction of "Innovative methods in the field of persuasive system design", thus removing thematic restrictions, if necessary. Alternatively, as far as not already required in the existing module concept, the individual learning components could be preceded by a thorough problem analysis of both internal and external processes of the partner companies or institutions. This would result in more and broader possible applications. The peers advise particularly DSK, but also HMKW to consider these suggestions (see also sec. 2.3 and 2.6).

The expert team positively notes that feedback from the business / industry side has been paid attention to in the course of developing the Gamification modules, although companies/organizations apparently did not actively participate in the design process. Thus, the peers learn of the potential employers' recognition of the value of Gamification competences for business processes and their outspoken support for cross-disciplinary and transversal Gamification training opportunities below the level of specialised degree programmes. In the SAR, the universities highlight their commitment to use the feedback of external stakeholders like business partners for the quality development of the Gamification modules. There are no indications to doubt this commitment, although evidence of structured processes for the inclusion of those stakeholders in the regular quality assurance framework is scarce (see for this also below sec. 6). With respect to the volatile demands of the business world, the peers therefore recommend consolidating the HEIs' ties to collaborating business/industry companies and organizations to ensure the meaningful feedback of the latter and use it for the quality development of the Gamification modules.

## 2.3 / 2.4 Structure and workload

### Evidence:

- Relevant chapter of the SAR
- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)
- Information on quality assurance systems, instruments and procedures at HEIs; Appendices 02.14 – 02.17 (HHL), 03.06 (HMKW), 04.04 (DSK)
- Audit discussions

### Preliminary assessment and analysis of the peers:

#### *2.3 Structure*

The peers note that the Gamification modules under consideration generally suit the modularisation concept as introduced in the ECTS users' guide<sup>3</sup>. They form self-contained teaching and learning units through plausibly assembling Gamification-related subject areas. However, especially in the case the HHL module, but also about the DSK module, this could be communicated more transparently. The module descriptions as a primary source for student information should clearly indicate the module status of the respective teaching/learning unit.

Speaking of a module within a module or a course within a module – as does the HHL description – is apparently distracting and not conclusive in this respect. Referring to the SAR, the expert group assumes that in fact the Gamification module of HHL can be combined with other related learning components out of a catalogue of elective modules or a “module block”, which together constitute a so-called open module. In this case, it could be treated as a stand-alone module with specified learning objectives, contents, exam forms, credit volume etc. Otherwise, it would rather constitute a part of a superordinate module (in fact a “course”). Learning outcomes, contents, credits, exams etc. would then have to be assessed in the framework of the complete reference module of which the Gamification course were only one component. As already mentioned, the peers consider the HHL Gamification learning unit a “module”. A clear communication of this in all study related-documents, in particular in the module description, is therefore deemed indispensable. Using

---

<sup>3</sup> Cf. ECTS Users' Guide, p. 25; available on the internet: [https://ec.europa.eu/assets/eac/education/ects/users-guide/docs/ects-users-guide\\_en.pdf](https://ec.europa.eu/assets/eac/education/ects/users-guide/docs/ects-users-guide_en.pdf) (Access: 30.11.2021)

different names for the elective catalogue or module block (“Open Module”) and the Gamification module itself – apparently both denominated “Gamification for Business and Organizations at present – would be an important aspect of the transparency called for.

The peers see that DSK has enlarged an already existing module “Play-based Intrapreneurship” through a somewhat extended gamification unit (3 ECTS). Nevertheless, the entire module (15 ECTS) remains under review, which is thus not restricted to the gamification supplement. As the peers understand, the defined learning outcomes, contents, examinations of the module etc. have been adjusted accordingly.

It is worth to note here that the HHL Gamification module is largely conducted in a block-teaching/learning structure, focussing on theoretical parts in the early stages respectively at the beginning of each teaching block to steadily evolve into a student-owned learning process afterwards. This is an important organizational information for students and needs to be adequately addressed in the module description. HHL should take care of this when revising the module description.

The organizational structure of the DSK module is significantly different from the HHL and HMKW Gamification modules. It is based – as already noted – on the intensive collaboration of the DSK and exemplary business companies or organizations, where during four days per week students are required to put into practice the theoretical knowledge acquired in the blocked lectures and sessions one day per week. The peers strongly advice outlining these structural characteristic more transparently in the module description. In its present state, it is barely possible to discern the module from any other module studied in linear mode across the semester.

The HMKW Gamification module is in the eyes of the peers standing somewhere in between. It apparently follows a linear semester frequency with a fixed amount of lecture/seminar hours at the university and some form of collaboration with business partners during the practical parts of the teaching units. This is the peers’ impression from the module description, the SAR and the module coordinator’s explanatory comments during the audit discussions. Still, the actual or planned scope of the cooperation between HEI and companies/institutions in delivering the module remains unclear and the expert team invites HMKW module coordinators to provide additional information on this issue in the context of the present procedure.

In summary, the peers consider the different structural approaches of the Gamification modules all in their own right, if the Higher Education providers adequately observe accompanying organizational or time restrictions on the part of the students (see also the analysis below concerning the workload issue).

While DSK has incorporated its expanded *Play-based Intrapreneurship* module as an obligatory element in its Design-for-play Master programme, the peers favourably note that HMKW opens up the course for its other Master programmes as well. They suggest to HHL programme management, which apparently reserves the Gamification module to one specific Master programme, to open the module for participants of other Master programmes as well.

The peers note that the universities as of now do not offer the Gamification modules as independent short-term learning units in the further qualification portfolio of their institutions. The modules are designed for or actually included in already existing Master degree programmes. Since there might be a potential demand for micro-credentials in the Gamification area, the peers welcome indications of the HEIs to consider this opportunity for the future development of the modules.

#### *2.4 Workload*

Since the modules are or shall be included into Master programmes of the Higher Education providers, the ECTS scheme of these programmes has been adopted for the modules as well. The allocated ECTS numbers appear to be reasonable – a finding, which students in the audit generally confirm.

However, with respect to the different structure and size and the demanding concept of the Gamification modules, the peers expect a process of monitoring the actual workload of students in order to adapt the credit distribution in case of significant discrepancies. In their opinion, this is particularly relevant for the DSK module, which amounts to half of an average 30 ECTS workload per semester. However, from the available information about the respective quality assurance instruments of the providers, the peers could hardly see whether the HEIs do actually practice a continuous monitoring of the student workload in the modules. There is only an indication that HHL pursues this monitoring, yet without further evidence. The peers assume that checks of the student workload are already put in place at all institutions and applicable for the Gamification modules too. If so, the universities should provide evidence for this assumption in the course of the present procedure (i. e. provision of evaluation questionnaires or templates of special workload surveys).

Nevertheless, the relevant information in the respective module description is quite heterogeneous and almost missing for the available description of the “Play-Based Intrapreneurship” module of DSK. The allocated ECTS amount (15 ECTS) is mentioned without any hint of the distribution of the student working hours between theoretical, practical and self-study periods. Although relevant for each Gamification module, this information would be especially helpful for the DSK module because of its intricate combination of theoretical

and practical parts and the requirement for students to spend those practical study periods out of the HEI in companies or organizations.

## 2.5 Admission requirements

### Evidence:

- Relevant chapter of the SAR
- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)
- Relevant admission requirements for respective Master programmes: Appendices 02.01 (Study regulations for the full-time Master Program in General Management (MBA), HHL), 03.04 (Master Basic Study and Examination Regulation, HMKW), 04.03 (Curriculum for the Master's programme in Design, including study and exam provisions, DSK)
- Audit discussions

### Preliminary assessment and analysis of the peers:

Since the Gamification modules have been developed under the premise that they shall be elective (HHL, HMKW) or mandatory (DSK) parts of the curriculum of regular or professional Master programmes, the admission requirements of the Master programmes are relating to the Gamification modules too. Hence, the peers agree that basic general and subject-related knowledge, skills and competences are already required from applicants for entry into the Master programmes and principally facilitate the achievement of both the programme learning objectives as well as the module learning objectives.

The auditors nevertheless point out that in case the providers should opt for separately offering the modules as micro-credentials in the future, they would be expected to separately define and communicate the prerequisite knowledge for the Gamification modules.

## 2.6 Prospects of the labour market and practical orientation

### Evidence:

- Respective chapter of the SAR
- Audit discussions

### **Preliminary assessment and analysis of the peers:**

The providers of the Gamification modules have made a convincing case for the relevance of gamification in motivation, trust building and innovation strategies of all sorts of business enterprises in the private and public sector. Hence, the expert team agrees with the predicted demand and usefulness of the Gamification modules for processes and performance results of companies and organizations across branches and sectors. It is therefore reasonable to include these modules as elective or mandatory parts in related degree programmes in order to equip students from different disciplines with transversal skills to encourage motivation, trust building and innovation policies in potential management positions. For the same reason, a significant demand for an interdisciplinary further qualification could be inferred and the separate offering of these modules as micro-credentials be advocated.

Concerning this, the expert team highly appreciates the clear and strong link between theory and practice in the Gamification modules under review. The interconnection between the theoretical and practical dimensions of Gamification has been materialized twofold in the modules: 1) in a consequent practice-oriented teaching and learning method and 2) in ascending order from HHL to DSK: through cooperation and collaboration with business companies and organizations from the private and public sector.

With respect to the continuous practice-orientation of the modules, the HEIs refer to proven and innovative teaching and learning strategies, which in manifold ways aim to actively engage students in the learning process and thereby to sustainably translate theory into practice. The latter is particularly visible and obviously a constituent factor in case of the DSK Gamification module. To a lesser but still tangible degree, such cooperation seems also to be an underlying component of the “Gamification for Organisations” module of HMKW. In order to get a full picture of the role of external partners for the HMKW module, more information is needed (see above sec. 2.3). In the discussion with business/industry representatives, the peers find that there is an ongoing exchange between the HEIs and the companies, although in a more informal manner.

Again, as indicated earlier, the DSK module is structurally unique in this respect. It not only outsizes the Gamification modules of HHL and HMKW by far, but is the only one to directly include professional partner organizations in delivering the module. Students spend most of the time of the module in these partner organizations, rendering the module essentially an “internship” with specified learning objectives. In fact, the implementation of the DSK Gamification module depends on the availability of adequate partner organizations in a sufficient number. In the audit discussion, the expert team learns that contacts to external

partner organizations largely build on personal ties between HEI personnel and staff members of the external institutions. In addition, the relationship between HEIs and partner institutions are obviously not subject to formal agreements nor documented as binding obligations and responsibilities of the partners in the provision of the module. In the light of the abiding importance of the partner institutions, the peers see the necessity to more rigorously formalize the cooperation framework with companies or organizations for delivering the module. Thereby, DSK shall also state the mutual responsibilities, rights and obligations of the partners and clearly define the intended learning outcomes at both places of learning.

Additionally, as mentioned above, the DSK *Play-based Intrapreneurship* module in the medium and long run directly depends on a sufficient number of appropriate partner institutions or companies. In order to mitigate the risk of lacking suitable cooperation partners to be able to provide the module, the audit team considers it necessary that DSK designs a process for establishing a reliable partnership network.

**Final assessment of the peers after the comment of the Provider regarding criterion 2:**

Overall, the peers consider the requirements of the above criterion *not yet completely fulfilled*. With consideration of the comments and additional information provided by the HEIs, some issues remain to be addressed (learning outcomes, cooperation with companies and institutions, module structure).

*All HEIs – Learning outcomes*

As noted above, the peer group finds that the intended learning outcomes of the modules should be specified in order to more evidently reflect the Master level aimed for. The peers welcome the intention expressed by the HEIs to further elaborate the formulation of the learning outcomes of the modules. Still from their perspective, this should be done in the short rather than in the medium or long term. Hence, the peers frame this as a requirement (see below section E, A 1.).

*HMWK and DSK – Cooperation with companies / organizations*

The peer team appreciates HMKW's clarification that the offering of its Gamification module does not depend on direct HEI/company cooperation. At the same time however, the module coordinators describe this as just a "fall-back option", which, in turn, is saying that the regular way of offering the module shall be in cooperation with a partner enterprise/organization. As could be expected then, the module coordinators point out to be generally "quite confident that direct cooperation can be established" and, in this regard, repeatedly quote their "track record of experience with a pool of different companies in this domain".

The peers do not doubt that in principal thereby taking note of a series of notable companies mentioned by the HEI. Yet HMKW does not give any hints to the scope of this cooperation and whether it has been put into a coherent framework. Similarly, at least some critical student remarks in the collection of evaluation results presented by DSK after the audit attest to the utmost importance of a more structured cooperation between HEI and companies/organizations.<sup>4</sup> As far as the HEIs either regularly (HMKW) or exclusively (DSK) rely on the direct cooperation with companies or other organizations in conducting the Gamification modules, a reliable framework for this cooperation stipulating the intended aims as well as the responsibilities, rights and duties of the partners is considered a necessary fundament. From this, the expert team derives the urgent need to formalize these cooperations, though welcoming the well-established network of partnerships (see below sec. F, A 4.).

Since the *Course Play-based Intrapreneurship* of DSK is bound to this direct collaboration with industry partners or other institutions, the expert team strongly suggests the HEI to develop an effective strategy for identifying, approaching and recruiting appropriate cooperation partners (see below sec. F, A 5.).

### *HHL – Module structure*

As already noted, the experts deem a consistent presentation of the module structure of the *Gamification for Businesses and Organisations* module in the study-related documents, in particular the module description, indispensable (see above final assessment to crit. 1 and below sec. F, A 1.).

### *All HEIs – Feedback from cooperation partners*

In this connection, the peers would see benefit in consolidating ties with external partners from industry, business or other private or public institutions. This could be a primary source for meaningful feedback on the structure, contents and learning objectives of the Gamification modules under review. The peers propose a recommendation to this end (see below sec. F, E 1.).

---

<sup>4</sup> Occasional student comments, for instance, read like this:

- “Make it more clear from the beginning what is our role in the company and expectations, maybe making examples of possible outcome”;
- “The preparation of the course must have been difficult as all collaboration were very different. Perhaps some sort of design of an onboarding activity between students and company could be a way to gain access. Perhaps this onboarding could be designed by each student for the first task”;
- “Having an existing case study or project inside each company previous to the start, give a better idea to the company or organization of what our impact or role might be (without closing out opportunities to find our own challenges, but just so they are not so confused once we come in)”;

all quotations from Course Evaluation PBI 2019.

*HMWK and DSK – Broadening of Gamification concept*

As argued above and due to the HEIs' more or less direct collaboration with partner organizations, the Gamification concept and its potential applications in the eyes of the peers could be emboldened through an extension towards a persuasive system approach. The expert group recommends to both HEIs considering this suggestion (see below sec. F, E 2).

*All HEIs – Workload monitoring*

The peers thank the HHL and HMKW for the evidence provided concerning a regular monitoring of the student workload, which ensures that significant discrepancies where occurring and identified could be addressed appropriately.

From the sample of evaluation sheets and results DSK provided, the peer team could not directly deduce whether the students' workload for the entire module (with its newly integrated Gamify content) is actually monitored. Some of the older textual comments of students in their course evaluation rather lead to the assumption that the workload is not a primary concern in the (principally well-functioning) QA system at DSK. Yet, the additional material provided by DSK also shows that there is a one-to-two page analysis paper of the lecturers on the evaluation results considering the students' feedback and entailing an action plan for potential improvements, if considered necessary. The peers are convinced that this could work as a safeguard to identify significant workload stress of students.

### **3. System, Policy and Forms of Examinations**

**Evidence:**

- Respective chapter of the SAR
- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)
- Examination regulations for the modules; Appendices 02.02 (Examination regulations for the full-time Master Program in General Management (MBA), HHL), 03.04 (Master Basic Study and Examination Regulation, HMKW), 04.03 (Curriculum for the Master's programme in Design, including study and exam provisions, DSK)
- General Information for lecturers concerning exams and gradings; Appendix 03.03 (HMKW)
- Audit discussions

### **Preliminary assessment and analysis of the peers:**

The peers take note that the relevant examination regulations of the universities generally require the examinations to plausibly refer to the intended learning outcomes of the respective modules/courses. Consequently, they allow a wide array of possible examination forms, including written and oral examinations in an examination period at the end of the semester and, additionally or alternatively, term papers, assignments, homework, project works, etc. as continuous assessment forms during the semester. The peer group positively acknowledges this examination approach because of its apparent orientation towards the learner and the learning process. The peers notice that the module descriptions inform about the form and (where applicable) different parts of the examination as well as of relevant grading specifics.

In the eyes of the peers, reflection on case studies and oral presentation of the results in combination with written topical essays (HHL) or project / design works with presentation of the results (HMKW, DSK) either individually or in groups appropriately fit this outcome-oriented approach. It is also positively noted that irrespective of whether assessments are done individually or in groups, the respective examination rules do require an individual grading for each student.

Further, the audit team takes note that the corresponding provisions entail appropriate rules for organization, conduct, admission, retaking, compensation for disadvantages, grading and grading criteria, corrections of examinations etc. Hence, the peers consider the major formal and substantial characteristics of the respective examination rules adequate for the Gamification modules under review. Thereby, the peers highlight the respective "General Information for Lecturers" of HMKW, which they find particularly useful, although perhaps too rigorous in certain instances ("one exam per module" rule, determination of "type of examination" upfront).

The experts again raise the issue of the HHL Gamification module being part of multi-pieced "open module" of the same name (see above sec. 1, 2.3). According to the related HHL "Examination regulations for the full-time Master Program in General Management (MBA)" the share of so-called "open modules" within the elective area of the "advanced track" is 4 ECTS at a maximum. This is consonant with the peers' assumption that the "Gamification for Business and Organisations" course presented by HHL is indeed a self-contained module and not only part of a multi-part module.

However, several specifications in the module description seemingly contradict this view, as stated earlier. Thus, according to the description the grading of the "course" would have to be combined with grading of the other courses of the module to a "weighted average"

grade, which then would make up for the module grading and the accompanying award of credits. The peers assume that in fact the grading of this course is identical to the grading of the module made up of the two exam components as indicated in the description. If so, this would be in line with their understanding of the HHL Gamification course/module. Otherwise, the peer group would be unable to decide whether the assessment forms of the course (much as its learning outcomes and contents) are reasonably aligned to the correspondent exams, learning outcomes and contents of those courses which together constitute the elective open module "Gamification for Business and Organizations". In any case, as already stated, HHL needs to clarify this and unmistakably communicate the issue in the relevant documents, in particular the module description.

**Final assessment of the peers after the comment of the Provider regarding criterion 3:**

The peers consider the requirements of the above criterion *fulfilled satisfactorily*.

## 4. Teaching Methodology and Support

**Evidence:**

- Respective chapter of the SAR
- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)
- General information for lecturers concerning didactics and quality assurance; Appendix 03.06 (HMKW)
- Information on support services of HEIs; Appendices 02.03, 02.04, 02.05 (HHL), 03.08 (HMKW), 04.04 (DSK)
- Audit discussions

**Preliminary assessment and analysis of the peers:**

The peers positively rate the HEIs didactical concept, which is evidently directed towards encouraging students to take an active role in creating the learning process. From the peers' point of view, the adopted teaching and learning methods such as the flipped classroom concept, project-, problem- and research-based learning, practical hands-on exercises, or inclusion of private and public sector organizations in the learning process are convincingly implementing this approach.

The ratio between attendance time (either in presence or remote) reserved for teaching the theoretical fundamentals and self-study time to immerse in the theory or work on projects, case studies, hands-on exercises is particularly fitting the Master level expectations.

The integration of real-life scenarios from the business or public sector further underlines the strong practice-orientation of the Gamification modules under consideration.

It is of no less importance in this respect that students are offered adequate facilities, resources and opportunities for guidance and support by the involved HEIs. For the Gamification modules already at offer, students explicitly confirm this impression and particularly stress the trusting and collaborative relationship to the module coordinators. Students of the DSK Gamification module feel well supervised and guided particularly during the external learning experiences, which is positively noted by the peers.

**Final assessment of the peers after the comment of the Provider regarding criterion 4:**

The peers consider the requirements of the above criterion *fulfilled satisfactorily*.

## 5. Personal, Material and Financial Resources

### 5.1 Staff

**Evidence:**

- Relevant chapter of the SAR
- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)
- Staff CVs; Appendices 02.18 – 02.19 (HHL), 03.01 – 03.02 (HMKW), 04.00 (DSK)
- Audit discussions

**Preliminary assessment and analysis of the peers:**

From the available information, the peers infer that the lecturers/professors responsible for teaching the Gamification modules are experts in their fields. Moreover, those lecturers have evidenced their expertise among other things through research and project papers on Gamification within the GAMIFY project they have been actively involved. Since the present Gamification modules are another major result of this project, it can be assumed that ongoing research findings will be integrated or at least reflected in the modules keeping them in line with the state of science and research on Gamification. This, in turn, will be especially contributing to the Master level aspirations of modules.

### 5.2 Institutional setting, funding and equipment

**Evidence:**

- Relevant chapter in the SAR

- Information about infrastructure, facilities and financial resources of HEIs; Appendices 02.10 – 02.12 (HHL), 03.10 (HMKW), 04.04 (DSK)
- Audit discussions

#### **Preliminary assessment and analysis of the peers:**

The HEIs offering the Gamification modules at hand provided satisfactory evidence of adequate personal, financial and material resources for operating the modules during the upcoming certification period of five years.

Particularly, lecture and student working rooms as well as IT equipment seems to be available in adequate number and size. Since students of the DSK Gamification module are spending most of their time in the partner organizations from business or the public sector, they are to a certain degree dependant on the facilities and physical infrastructure of those institutions. Consequently, this issue has to be one major prerequisite for the eligibility of institutions/enterprises as cooperation partners of DSK. The peers point out this aspect despite of their principle assumption that DSK is aware of it when seeking and committing potential partner organizations.

In addition to the IT infrastructure, access to subject-related research literature, including e-books and electronic periodicals, games and gamified formats for teaching and learning purposes appears to be provided by the HEIs. The peers gain the impression that the institutions are well prepared to deliver the modules remotely should the exceptional conditions of the COVID-19 pandemic continue.

Regarding the resource base of the modules in general, the peers appreciate that rectorates of the involved universities have obviously been supportive in the development and implementation of the modules. They regard this as an ultimate reassurance of a reliable and sustaining implementation of the modules into the programme portfolio of the universities.

#### **Final assessment of the peers after the comment of the Provider regarding criterion 5:**

The peers consider the requirements of the above criterion *fulfilled satisfactorily*.

## **6. Quality Management: Processes, Instruments and Findings**

#### **Evidence:**

- Relevant chapter in the SAR

- Information on quality assurance systems, instruments and procedures at HEIs; Appendices 02.14 – 02.17 (HHL), 03.06 (HMKW), 04.04 (DSK)
- Audit discussions

**Preliminary assessment and analysis of the peers:**

The audit group takes note that the quality assurance (QA) systems or instruments of the universities do cover the presented Gamification modules too. Considering the intended integration of the modules into the existing portfolio of Master degree programmes of the HEIs the available information reveals especially the QA system of DSK as a highly advanced and conclusively completed QA approach for degree programmes. It contains the entire QA framework and organization, including a “policy for the knowledge base of the programmes”, a “policy for the organization, standard and content of the programmes” and a “policy for the relevance of the programme”. Hence, DSK has developed a QA system, which at least theoretically addresses all aspects of successfully establishing a culture for the sustainable establishment of degree programmes.

To be fair, it should be admitted that HHL too has undertaken considerable efforts in recent years to further develop its quality assurance system through merging different external QA procedures in the so-called “quality audit”. Yet only few details of these efforts, the “quality audit” and HHL’s overarching QA system have been communicated to the peers along with the SAR, nor could they easily be found on the website of the university. It is of importance though that in the follow-up of this process HHL has committed itself to focus the QA system on (international and national) programme accreditation thus indirectly strengthening the QA of its Gamification module as well.<sup>5</sup>

The information base on quality assurance at HMKW too could be derived only indirectly from the “General Information for Lecturers” paper provided along with the SAR. The peers do not doubt that HMKW is actually practicing the QA for its degree programmes as indicated in this paper. The concrete problem here (as in the case of HHL) appears to be that relevant information on the QA system and its functions is only available on the intranet of the university (TraiNex), which in all events would run against national and European transparency rules (ESG). HMKW and HHL respectively are therefore requested to provide more information about their QA framework for degree programmes along with a note whether and where this information is commonly available.

---

<sup>5</sup> See Joint Declaration, p. 2, available on the internet: <https://www.akkreditierungsrat.de/sites/default/files/downloads/2020/Abschlusserkl%C3%A4rung%20Experimentierklausel%20HHL.pdf> (Access: 30.11.2021).

Irrespective of this, all HEIs have implemented module/course evaluations as a major means of monitoring the success and ensuring the constant quality improvement of the Gamification modules under review. A feedback cycle for these module/course evaluations seems to be established for all of them. Moreover, at least for the DSK module already at offer, the feedback cycle seems to be effectively closed as the students report during the audit discussion.

**Final assessment of the peers after the comment of the Provider regarding criterion 6:**

The expert panel considers the requirements regarding the quality assurance of the programmes and modules *fulfilled comprehensively*.

*HHL and HMKW – QA documents*

The peers are thankful for the HHL's indication that it no longer pursues the "Quality Audit" format nor the efforts to apply for an accreditation of its QM system ("system accreditation" in Germany). Taking note of the "Quality Management Instruments" provided by the university after the audit (file "QM Handbook"), they equally acknowledge that there is a broad net of QA instruments in place to maintain the quality of the programmes/modules and identify potential risks and deficiencies in due time.

The same applies in general to the information about the QA system of HMKW. The peers take note of the HEI's QA concept as well as the subsequent QA provision ("Ordnung zur Sicherung der Qualität in Lehre, Forschung und Verwaltung der HMKW – Hochschule für Medien, Kommunikation und Wirtschaft" as of 23.04.2018). Regrettably, neither these documents nor any comprehensive information about the QA system of the university appears to be publicly available presently. Since no apparent QA-related shortcomings could be identified in the course of the certification procedure though, the expert team feels no need to formally address the issue. Yet with reference to ESG 1.1<sup>6</sup>, they strongly suggest to HMKW (and HHL) to make the major principles and documents of its QA policy available for all stakeholders and the society at large.

## 7. Documentation & Transparency

**Evidence:**

- Relevant chapter in the SAR

---

<sup>6</sup> „Standards and Guidelines for Quality Assurance in the European Higher Education Area“ (ESG) as of May 2015; available on the internet: [https://www.enqa.eu/wp-content/uploads/2015/11/ESG\\_2015.pdf](https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf) (Access: 15.12.2021).

- Module descriptions: Appendices 02.00 (HHL), 03.07 (HMKW), 04.01 (DSK)
- Relevant study and exam regulations; Appendices 02.01 (Study regulations for the full-time Master Program in General Management (MBA), HHL), 03.04 (Master Basic Study and Examination Regulation, HMKW), 04.03 (Curriculum for the Master's programme in Design, including study and exam provisions, DSK)

**Preliminary assessment and analysis of the peers:**

The peers take note that study- and exam-related rules and provisions for the relevant Master programmes are published and accessible. By contrast, the module/course descriptions as a major information source for students seem to be available only in a version elaborated in the GAMIFY project framework. These descriptions must be published and made accessible for the relevant stakeholders. The mode of publication or transparent communication is of course at the discretion of the universities.

Thereby, the module descriptions need to be revised in the instances indicated in the present report. Thus, the learning outcomes have to be formulated more concrete, also indicating the Master level of the intended knowledge, skills and competences (see above sec. 2.1). Additionally, the module structure must be clarified in case of the HHL Gamification modules, while the close cooperation between the university and external partners in case of the DSK Gamification module should also be clearly outlined there (see above sec. 2.3). As this point seemingly also applies to HMKW to a certain extent, the module description should be adapted accordingly. Likewise, more details about the student workload at the different places of learning (university, company/organization) and some references to relevant literature would be expected in the module description of the DSK Gamification module (see above sec. 6).

Considering relevant documents and information about the quality assurance systems and instruments at HHL and HMKW, it would be appreciable if these documents are already accessible or will in the future be in accordance with national and international transparency rules.

**Final assessment of the peers after the comment of the Provider regarding criterion 7:**

The experts consider the transparency criterion *essentially fulfilled* with regard to the study- and exam regulations of those Master programmes the present Gamification modules are supposed to be included.

As already noted at several instances in this report, the module descriptions of the Gamification modules are to be revised in certain aspects and afterwards need to be made accessible to the stakeholders (see below sec. F, A 2.).

In case of HMKW and HHL, the peers strongly suggest publishing the major QA policies and documents of the HEIs (see preliminary and final assessment of crit. 6).

---

## D Additional Documents

Before preparing their final assessment, the panel ask that the following missing or unclear information be provided together with the comment of the provider on the previous chapters of this report:

- D 1. **HHL, HMKW, DSK:** Evidence of regular monitoring of student workload (i. e. evaluation questionnaires, students have to fill at the end of the semester, or templates of special workload surveys) [sec. 2.4]
- D 2. **HHL, HMKW:** Information about/Links to publicly available statutes or documents concerning the quality assurance of the relevant Master degree programmes and, if applicable, the place of publication of these documents [sec. 6]
- D 3. **HMKW:** Information about the extent to which delivering the course depends on direct cooperation with business companies or organizations [sec. 2.3, 2.6]

---

## **E Comment of the HEIs (15.12.2021)**

The HEIs provide short individual comments on the present report as well as several additional documents.

Thus, HHL submits additional information regarding

- the programme structure of the two Master's programmes, of which the Gamification for Business and Organizations module would be part of;
- the Course Evaluation questionnaire;
- the QM Handbook of the University.

HMKW procures additional information with regard to

- the Course Evaluation questionnaire and
- the University's provision concerning the Quality Management.

Finally, DSK provides information concerning

- Course Evaluation PBI 2019 – 2021
- Teacher commentary evaluation PBI 2020.

---

## F Summary: Peer recommendations (17.12.2021)

Taking into account the additional information and the comments given by HHL, HMKW and DSK, the peers summarize their analysis and **final assessment** for the award of the ASIIN certificate as follows:

Module	ASIIN Certificate	Maximum duration of accreditation	Alignment to a Qualification Framework Level
Gamification for Business and Organizations (HHL)	With requirements for one year	30.09.2027	7
Gamification for Organizations (HMKW)	With requirements for one year	30.09.2027	7
Play-based Intrapreneurship (DSK)	With requirements for one year	30.09.2027	7

### Requirements

#### For all HEIs

- A 1. (ASIIN 2.1, 7) The learning outcomes must be formulated more concrete and precise in accordance with the intended Master's level (EQF level 7). The revised learning outcomes need to be included in the module descriptions.
- A 2. (ASIIN 7) The module descriptions must be revised according to the indications in the report (learning outcomes [HHL, HMKW, DSK], contents [DSK], workload (DSK], structure [HHL, HMKW and DSK], literature [DSK]), made publicly available and accessible to the relevant stakeholders, particularly students and lecturers.

#### For HHL

- A 3. (ASIIN 1, 7) It must be communicated unambiguously in all study-related documents, in particular in the module description, that the reviewed Gamification course is per se regarded a "module" instead of being a unit within a multi-pieced overarching module.

#### For HMKW and DSK

- A 4. (ASIIN 2.6) The cooperation with companies or organizations for delivering the module must be formalized. Responsibilities and competences as well as mutual rights

and obligations of the partners need to be stated and the intended learning outcomes at both places of learning clearly defined.

**For DSK**

- A 5. (ASIIN 2.6) A process to establish a reliable partnership network independent of personal ties must be established and implemented. First steps of its implementation shall be evidenced.

**Recommendations**

**For all HEIs**

- E 1. (ASIIN 2.1, 6) It is recommended to consolidate ties with collaborating companies and organizations in order to receive their feedback reliably and use it for quality assurance purposes.

**For HMKW and DSK**

- E 2. (ASIIN 2.1, 2.6) It is recommended to methodologically broaden the gamification concept of the module in the direction of a persuasive system design approach.

---

## **G Decision of the Certification Commission (30.12.2021)**

*Assessment and analysis for the award of the ASIIN Certificate:*

The Certification Commission discusses the procedure. Considering an effective and realistic fulfillment of requirement 5 (DSK network of partner organizations from the private or public sector), the Commission decides to modify the wording of the requirement. In addition, it points out that requirement 1 (learning outcomes) is also included in requirement 2 (module descriptions) thus emphasizing the relevance of an adequate formulation of the intended learning outcomes and the correspondence to the substantial module content.

Otherwise, it agrees with the recommended resolution of the peer group.

The Certification Commission decides to award the ASIIN certificate as follows:

<b>Module</b>	<b>ASIIN Certificate</b>	<b>Maximum duration of accreditation</b>	<b>Alignment to a Qualification Framework Level</b>
Gamification for Business and Organizations (HHL)	With requirements for one year	30.09.2027	7
Gamification for Organisations (HMKW)	With requirements for one year	30.09.2027	7
Play-based Intrapreneurship (DSK)	With requirements for one year	30.09.2027	7

### **Requirements**

#### **For all HEIs**

- A 1. (ASIIN 2.1, 7) The learning outcomes must be formulated more concrete and precise in accordance with the intended Master's level (EQF level 7). The revised learning outcomes need to be included in the module descriptions.
- A 2. (ASIIN 7) The module descriptions must be revised according to the indications in the report (learning outcomes [HHL, HMKW, DSK], contents [DSK], workload (DSK), structure [HHL, HMKW and DSK], literature [DSK]), made publicly available and accessible to the relevant stakeholders, particularly students and lecturers.

**For HHL**

- A 3. (ASIIN 1, 7) It must be communicated unambiguously in all study-related documents, in particular in the module description, that the reviewed Gamification course is per se regarded a “module” instead of being a unit within a multi-pieced overarching module.

**For HMKW and DSK**

- A 4. (ASIIN 2.6) The cooperation with companies or organizations for delivering the module must be formalized. Responsibilities and competences as well as mutual rights and obligations of the partners need to be stated and the intended learning outcomes at both places of learning clearly defined.

**For DSK**

- A 5. (ASIIN 2.6) A process to develop a reliable partnership network must be established.

**Recommendations**

**For all HEIs**

- E 1. (ASIIN 2.1, 6) It is recommended to consolidate ties with collaborating companies and organizations in order to receive their feedback reliably and use it for quality assurance purposes.

**For HMKW and DSK**

- E 2. (ASIIN 2.1, 2.6) It is recommended to methodologically broaden the gamification concept of the module in the direction of a persuasive system design approach.