

# **An Overview of the Third Mission Activities of a Higher Education Institution in Szekesfehervar**

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*Abstract: The subject of the study provides an overview of the third mission activities of a higher education institute (HEI) operating in Szekesfehervar. The study presents the results of the latest literature about the third mission of HEIs. Our most important task was creating an insight into the development of the examined topic through a review of the literature produced between 2021 and 2025 and to identify recognisable trends. In our short study we touched on the challenges facing the higher education. We proposed suggestions for the HEIs on the opportunities for developing their third mission activities. With this development, they can contribute not only to overcoming their own challenges, but also to the sustainable development of the city providing them with a home.*

*Keywords: third mission, higher education institute, regional services, sustainable cities*

## **1 Introduction**

With the According to the Research, Development and Innovation Strategy of Hungary (2021-2030), accepted in 2021, the higher education institutions (HEIs) need to pay special attention to develop their third mission activities in which the strategy aiming to realise the SDGs were highlighted along with any other areas

(social responsibility, popularization of science, knowledge sharing, closer ties with the economy) [1]. With its Sustainable Development Goals framework, the UN wish to shift the development trajectory of the world to a sustainable direction for the future prosperity of the people, peace and protection of our planet [2].

The EU has integrated the SDGs and determined a roadmap for implementation until 2030. The cities of the member states of EU have defined their strategic objectives and planned specific interventions in their sustainable urban development strategies, for which the EU has also provided an methodological handbook (Busti, 2020) [3]. In its document titled „Universities without Walls – Vision 2030”, the European Universities Alliances (EUA) envisions a future in which open, inclusive, flexible universities promote sustainability through collaborations, social engagement and innovation (EUA, 2021) [4]. The European Commission (EC) accepted the document titled The European Strategy for Universities in 2022 to support the adaptation of HEIs to digital and green transitions, strengthening the European identity as well as developing the transnational collaboration. The EC intends to support the universities as the key actors of change, and to prepare them to contribute to resilience and recovery of Europe [5]. Vorley and the co-authors examine the third mission of higher education as the responsibility through case studies how they move away from their traditional roles to engage with different stakeholders (entrepreneurs, charities, communities etc.) to design new solutions [6]. By developing their third mission activities, the HEIs can not only contribute to tackling their own challenges, but also to the sustainable development of the cities providing homes to them. The authors interpret the third mission of HEIs as a continuously evolving and overarching beyond the boundaries of science, complex phenomenon, which encompasses social and economic missions, contributing to the development of communities and the region [7]. Due to their geographical location, the higher education institutions (HEIs) have special characteristics, capacities and networks which influence the kind of third mission activities they can undertake and carry out in their immediate environment also utilizing their popularity. Stoeber and co-authors conducted research among the European universities (N=309) in 2025, which shed light on the fact that 84% of participants already have sustainability and environment friendly strategy and 11% of them are currently working on it. Furthermore 74% of the institutions indicated that these areas are high strategic importance in their mission [8].

With this study we aim to get to know the third mission activities of HEIs operating in Szekesfehervar (HU) and to formulate suggestions along these trends.

## **2 Method**

The goal was to prepare a descriptive, summary study providing an overview of the third mission activities of a higher education institution operating in Szekesfehervar. We used the Scopus database to review literature between 2021 and

2025 applying the following keywords (higher education, third mission, sustainability, regional competitiveness) as a result, we identified 21 studies that could contribute to objectives of this study. Through the literature review, we gained insight into third mission activities and outlined the trends in this field. In the following section, we provided a very short introduction to the higher education institution under study and then gathered information about its third mission activities based on news and reports found on its website. Following this overview, we examined the faculty's third mission activities in comparison with the third-mission objectives formulated by the university. After this assessment, we identified opportunities for future development for the institution of higher education.

### **3 Literature Review**

#### **3.1 On the Third Mission Activities of HEIs Related to Entrepreneurial University Model**

In relation to the third mission activities of HEIs, it is necessary to mention the promotion of the culture which can be executed as an „entrepreneurial university”. Compagnucci and co-author highlighted in a systematic literature review on the topic of the third mission that establishing an entrepreneurial culture has a crucial role in transforming higher education institution into an entrepreneurial university which should spread among academic staff. They found that the entrepreneurial initiatives within the university should be communicated through organisational units, because lacking this and the fact that most employees haven't got any business experience, they will not understand the essence of the entrepreneurial life and may even consider it dangerous for implementation of the traditional missions. The study also touched on the summary of the role of the knowledge transfer offices, which support the spread of entrepreneurial education and culture within the community of the university [7]. In their study, Lopes and his co-authors pointed out that, in accordance with its third mission, the university contributes to the development of students' entrepreneurial mindset and ambitions. They highlighted the connection between creativity and business success, which can manifest in the harnessing of ideas and opportunities and the optimal use of resources, which can contribute to the creation of efficient and innovative processes. Based on their results, the researchers found that related to intention of students to become entrepreneurs is influenced by several factors, such as behavioural variables (entrepreneurial attitude and perceived behaviour) and young people's perceptions of entrepreneurship (business success, business skills) [9]. The conceptual framework presented by Cunningham and co-authors can help higher education institutions transition to the third mission by adjusting their internal organizational structure to the needs of the entrepreneurial process. The authors consider the shaping of both structural and cultural elements to be a significant tool for

supporting the different phases of the entrepreneurial journey: the initial (ideas/motivation), the formation (team/plan), the launch (start-up), and the growth stages [10]. Another important aspect highlighted by Civera and co-authors is the importance of the diverse makeup of university spin-off teams; by including members with different professional backgrounds, ways of thinking, and even those with industry or business experience, such teams can contribute most effectively to growth, beyond simply achieving success. This type of knowledge integration can improve problem-solving, creativity, and strategic decision-making [11].

### **3.2 A Paradigm Shift Related to the Third Mission: A Shift Toward the SDGs?**

The authors considered the third mission to be a paradigm shift, in which universities contribute to solving social problems, supporting economic development, and fostering cultural and intellectual growth [12]. We consider the third mission to be a driving force for regional development; however, there are contradictions related to the methodology for measuring results. Haj Taieb pointed this out after reviewing studies that analysed the methodologies for measuring the third mission of European universities, based on which he identified some contradictions. The first of these is that the results of the third mission have a wide range, which means there is currently no standardized measurement method. The second is linked to a quality assessment criterion that does not take into account differences between institutions' geographical conditions and their management [13]. The authors draw attention to a new perspective on measuring results in Germany; in connection with the EXIT program of the government, they have identified a shift that is clearly visible in the third mission. The authors highlight that there has been a shift away from success measured purely by economic performance toward spin-offs and startups that serve sustainability goals, through which social and ecological values can be created (Lehmann et al., 2024) [14]. Attention is turning to impact entrepreneurship, as modern challenges require modern solutions - a contribution to which can be made by the concept of the "impact university".

Fia and colleagues conducted a systematic literature review on the 2030 roadmap of higher education institutions. They found that institutions link the Sustainable Development Goals (SDGs) to four main activities: research, education, operational management (e.g., campus environmental management, reducing energy consumption), and the third mission - community engagement. They highlighted that there is a visible shift from previously fragmented sustainability efforts toward holistic, comprehensive strategies [15]. In addition, during the third mission, universities will build partnerships with local communities to apply their knowledge to solving real-world challenges related to sustainability. In rethinking the role of universities, the authors concluded that these institutions can proactively foster regional sustainability transitions through location-based innovation activities. Committed universities are required that can address local, complex environmental and social challenges by driving systemic change, leveraging living lab structures, and fostering collaborations as we move toward sustainability [16]. Van Mensel and

co-authors pointed out that while universities are expected to have a social impact, there are no clear guidelines or practical mechanisms for achieving this. Therefore, universities may interpret and implement the social aspect of the third mission in different ways. The authors emphasise that, due to today's social and environmental problems, engagement with society will gain importance in third mission activities, rather than economic aspects. They conducted a systematic literature review to support higher education institutions in this transition with a guiding framework [17].

### **3.3 Are Universities Adopting the SDGs due to External Pressure or Out of Their Voluntary Commitment?**

In the area of third mission activities, there is a clear shift toward the SDGs and social responsibility. However, this leads to the question: is this shift driven mainly by external pressure, or does it come from voluntary commitment? The authors consider higher education institutions to be key players in sustainable development, facing pressure from both within and without to continue moving in this direction. The authors emphasise that, in relation to their third mission, these institutions should focus on sustainable development in the context of society. Furthermore, they urged universities to reflect on the unique opportunities of their own organisations (capacity + context) and to consider what obstacles they might face in achieving the SDGs, as well as what might help them in carrying out their mission [18]. The authors examined the role of European universities in achieving the SDGs based on a sample from 22 countries. Following their research, the authors made a positive statement in their study on the results, as the number of institutions not addressing the Sustainable Development Goals is small, and more than 30% of respondents indicated that they address the Sustainable Development Goals to a large or very large extent. The authors also pointed out that institutions address certain SDGs (e.g., SDGs 1, 2, 14, 15, and 16) less frequently [19]. Within the institution, staff, students, and faculty should be encouraged to commit to the third mission and the SDGs as promoters of change. In analysing the potential for universities to become drivers of the sustainability transition, the authors concluded that universities must shift away from their traditional role of knowledge transfer toward developing viable solutions with the involvement of stakeholders. The authors emphasised that, as part of the strategy to carry out this mission, efforts could focus on integrating sustainability into the curriculum, applying the living lab principle to campus operations, and encouraging transdisciplinary research [20]. In addition to all this, it is important not to forget the international rankings of higher education institutions (THE, GreenMetric), which help to raise the visibility and enhance the positioning of these institutions on the global stage; this topic is included among the evaluation criteria for such rankings. The authors presented and compared the content of the sustainability plans of two Italian universities, which helps clarify the practices they aim to implement to achieve environmental sustainability. The study used a case study approach and analysed the possibility of its introduction at a Russian university [21].

### **3.4 On the Cities of the Future**

We hope that the data-driven cities of the future will be intelligent and sustainable enough to cope with the accelerated urbanisation process, to find solutions not only to rising energy demands and population growth but also to environmental pressures and the impacts of climate change. In their research, the authors identified the environmental, economic, social, and technological challenges and opportunities related to sustainable smart cities that can facilitate planning processes and decision-making [22]. As early as 2017, Ringenson and his colleagues drew attention to the fact that smart, sustainable cities can face numerous limitations, which they recommended mitigating. They emphasised that the development of digital infrastructure could be a suitable means of addressing cities' sustainability challenges, but that this must be implemented in tandem with the creation of an analog backup. After all, the new system could directly lead to future vulnerabilities, which could weaken our cities contrary to our intentions [23]. The EU's Green Deal, adopted in 2019, set out at the strategic level the goal of making our continent cleaner, healthier, and climate-neutral by 2050 [24]. The authors examined the role of cities (where 75% of Europe's population lives) and universities in the implementation of the EU's Green Deal. The authors emphasised that, through their role as network builders, universities can establish partnerships both locally and globally, thereby expanding their existing knowledge, experience, and best practices. By sharing these, they can contribute to the sustainable development of their environment, city, and region, and to the creation of a fairer and more peaceful world [25]. In their study, the authors point out that higher education institutions can provide impulses for sustainable development in a certain region through unique research projects carried out in collaboration with regional partners. By participating in development projects focused on specific neighbourhoods, they can demonstrate their commitment; the authors emphasize that they can often contribute to regional sustainability through small impulses of change as a secondary product of their research [26].

## **4 A Higher Education Institution in Szekesfehervar (HU)**

Since its founding in 2014, Alba Regia Faculty, Obuda University has continued the tradition of its predecessor institutions (1962: Higher Surveying Technical School (FFT) – known for “Geo” and its surveying program; 1970: the Kandó Kálmán College's branch campus with its electrical engineering program) – has aimed to serve the region's development through its educational and research activities. Over the years, however, a third element has emerged alongside the two mentioned above, which the institution carries out as its “third mission.” In this way, it contributes to the development of the region by applying its knowledge as a kind of social mission.

#### 4.1 On the Third Mission Activities of Alba Regia Faculty, Obuda University [27]

The Alba Regia Faculty regularly organises **public science promotion and educational programmes** that are also open to the citizens of the city. The *Géza Garai Open University lecture series*, launched in 2013, makes scientific topics understandable and accessible to people who are not familiar with the academic world. Another type of science popularisation programme is *Researchers' Night*, where the university opens its doors wide so that interested visitors can learn about and see research results in a fun way, try out state-of-the-art laboratory equipment and robots, and become familiar with various scientific fields. *Girls' Day* stands out among the programs because, as a career-oriented event, it aims to support the growing number of women by presenting the career paths of women working in engineering and the natural sciences.

Sharing the latest research findings at professional events and conferences encourages scientific debate, fosters mutual trust, and promotes dialogue. The 30th event of the *GISopen conference* was held in 2026; its significance goes beyond that of traditional academic conferences, as it also includes certain cultural elements related to the preservation of the Selmec student traditions, which have been added to UNESCO's National List of Cultural Heritage. The program serves as a professional forum for surveyors and geoinformatics specialists. The 21st AIS (*21st International Symposium on Applied Informatics and Related Areas*) conference will be held in 2026; the presence of international participants will create a vibrant cultural atmosphere on the university campus throughout the event. In addition to the conferences, the organisers are also holding *workshops* (e.g., Robotics) and networking events (1. Security Technology, 2. Connectivity, Digitalisation, and Industrial Solutions), which are expected to stimulate lively professional dialogue in the city. As part of their commitment to social responsibility, they organised a *series of lectures* (e.g., cybersecurity lectures for students in primary and secondary schools) to raise awareness of an issue that affects all segments of society and to help increase cybersecurity awareness.

**The university reaches out to the youth of Szekesfehervar in various ways as part of its commitment to social responsibility, as the faculty is dedicated to organise competitions on a variety of topics.** The 5th "*Junior Engineers Camp – HARMAN Hackathon*", an idea and prototype development competition to be held in the fall of 2026, is a joint initiative of the Municipality of Szekesfehervar, Harman Becker Ltd. and the Alba Regia Faculty of Obuda University, will contribute to improving the cultural level of innovation among two target groups (secondary school students and university students), developing participants' soft and hard skills, and promoting the startup spirit.

By organising the 9th *Antal Bejczy Memorial Technical Innovation Tournament* for Secondary Schools, the organisers aim to raise awareness of robotics among participating students and their families, as well as to identify talented secondary school students who are interested in building and programming robots. Secondary school students interested in the field apply to participate in the *Geoinformatics*

*Competition*, now in its 12th year and held in association with GIS Day. Each year, through their school projects, they bring fresh perspectives that draw attention to new areas of geoinformatics applications. A competition related to the Sustainable Development Goals (SDGs), titled the “*SDG Competition*”, will be held for the first time in 2026 for primary and secondary school students, with the aim of both promoting interest in the topic and fostering knowledge sharing. According to the plans, in the competition finals, students will develop innovative ideas aligned with the SDGs that can contribute to the sustainable development of their own communities. As we enter the era of artificial intelligence, any university competition that promotes innovation among young people and improves their digital literacy can contribute to the development of the regional economy. Among the student events is the preservation of the *Selmec student traditions* (which date back to the late 18th century), which have been included in UNESCO’s National List of Cultural Heritage. In the city, this tradition highlights the presence of the university’s student community, which contributes to the enrichment of the town’s cultural life.

**The faculty plays a key role in ensuring a continuous supply of new skilled workers for the city.** In 2015, by laying the basis for the *dual training system*, and in the following years through the establishment of the Dual Training Office, a university department, and through a commitment to open dialogue and the success of dual students, the university faculty has fostered a relationship of trust in which corporate partners treat this training model as an integral part of their HR policies and rely on it to ensure a supply of skilled professionals. By launching awareness-raising, knowledge-sharing, and mentoring programs focused on dual education, the faculty has provided a labour market service to their corporate partners in recent years, a service that has manifested itself in the achievements of the mutually trained students and in the form of positive feedback from employers. In 2026, the 10th Dual Education Information Day and Job Fair was held, where local companies could meet directly with secondary school students applying to the faculty; this event supports the corporate recruitment process for dual education programs. The popularity of dual training remains high in the city, which, as the country’s third-largest economic powerhouse, has a significant industrial sector that relies heavily on engineers, business professionals graduating from the faculty.

**In the context of developing the social and economic environment, it is important to mention the extensive network of relationships and the strong ties to industry that characterise the higher education institution.** Industry-higher education collaborations take many forms, and the faculty is fundamentally characterised by an open, flexible, and pragmatic attitude. Their research results and collaborations create the opportunity to ensure high-quality and competitive engineering education, contribute to the spread of digital literacy, and support the digital transition for the city. It has become a key player in the process of developing the urban and regional innovation ecosystem. In the smart specialisation strategy, the *Science and Innovation Park* is currently being established at the Alba Regia Faculty, Obuda University in Szekesfehervar, in line with the priority given to

mechatronics in Fejér County. The Science Park supports research, development, and innovation based on deepening industry-university ties through its infrastructure; with its service portfolio, it can contribute to enhancing the competitiveness of economic organisations in the region. The goal for the faculty is to *further develop and strengthen industrial and corporate collaborations*. It currently plays an active role in partnerships with large corporations, which has resulted in the establishment of the *Industrial Departments* (Kyndryl, Harman, Videoton).

The faculty provides training for the *next generation of professionals in several fields within the city and its surrounding region*: computer engineering (at the regional level), mechanical engineering, electrical engineering, and mechatronics engineering (at the regional level), as well as technical management, business administration and management (at the local level). These Bachelor and Master programmes support the region's technological and industrial development through knowledge transfer.

*The faculty offers programs with national impact*, such as sports economics, land surveying engineer, and geoinformatics. These can contribute to meet national economic needs. The curricula include a wide range of sustainability-related topics, from energy management to precision farming.

#### **4.2 On The Obuda University's Third Mission Objectives and the Activities of the Alba Regia Faculty [28]**

A summary of the Obuda University's third-mission goals can be found on the University's website. These are as follows: "1) Strengthening the institution's impact on local economic development. 2) Increasing the institution's activity in addressing social challenges and promoting social innovation. 3) Expanding services that popularize science, disseminate knowledge, and shape public attitudes, and increasing free access to higher education knowledge bases. 4) Creating up-to-date informational content and ensuring widespread access to it. 5) Strengthening the service functions of higher education for both students and the local community. 6) Improving the quality and expanding the scope of Hungarian education beyond the border" [28].

The activities of the Alba Regia Faculty in Szekesfehervar contribute to the fulfilment of the Obuda University's third mission objectives, as outlined in points 1) and 3), and partially contribute to those outlined in point 2). After reviewing the activities of the faculty, it becomes clear that, in addition to the achievements made, the level of social responsibility can be further enhanced by establishing collaborations with actors in the civil society sector. By involving a new community of stakeholders, it would be possible to gain a better understanding of the social problems that the institution of higher education institution could help solve. In this way, the faculty could further strengthen its role as a service provider in the region, which would not only be aimed at local and regional economic development but would also support innovation processes designed to address local and regional social issues.

## Discussions and Conclusions

The Alba Regia Faculty, Obuda University is currently considered one of the Szekesfehervar's leading centres for higher education and innovation, and through its third-mission activities, it contributes to strengthening the local economy by facilitating knowledge transfer, developing collaborations, and providing innovative services through the Science and Innovation Park, while ensuring a supply of skilled professionals for the region. The third mission activities of the faculty are considered classical and demonstrate the institution's commitment to the city that is its home and to society at large. Currently, however, the faculty does not have a mission statement (this exists at the university level) on third mission activities, even though this could help clarify the issue for the university community, raise awareness among the entire community, and further strengthen their commitment.

Based on the literature, the shift toward sustainable development goals observed in the third mission activities should be further strengthened within the faculty, both in education and in research. We recommend further developing the interdisciplinary character of research through mixed research groups, given that the campus also offers programs related to the sports industry, which, when combined with technical education, can open the way for innovations in sports technology.

In connection with the further development of the local innovation ecosystem, we recommend examining what business development skills are needed among students and lecturers. Are hard skills more necessary, or is there a need to develop soft skills in order to change students' willingness to launch startups or lecturers' willingness to establish spin-offs in the city? It would also be beneficial to establish a research group dedicated to addressing local social issues, which could contribute more directly to the sustainable development of the city. The faculty must develop and expand its network of partners in order to identify new stakeholders (civil society organisations) and, in collaboration with them, support innovative processes aimed at solving local and regional social problems.

A limitation of our study is that we undertook to review the third mission activities of a single higher education institution in a single locality. However, in the case of the third mission, the specific characteristics and embeddedness of the higher education institution determine what missions can be carried out by that organisation.

A potential future research direction would be to assess the willingness and activity of the university community regarding third mission activities within the institution, in order to identify directions for developing further missions. It would also be worthwhile to examine the city's other higher education institution on this topic to gain a more comprehensive picture of third mission activities and their impacts in the city.

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