

Result 3.4

Implementation and evaluation course "Business Administration & Sustainable Management" and qualified students



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1. Project Summary and Introduction

The word region is defined as “an area, especially part of a country or the world having definable characteristics but not always fixed boundaries”¹. The Baltic Sea region (BSR) is particularly unique. While the Baltic Sea is the pivotal point defining much of the region’s characteristics and challenges, the countries are also extremely different. Geographically, they are divided between Northern, Western and Central/Eastern Europe, historically, they have been shaped by the East-West divide after the second world war. Nevertheless, given their proximity to the Baltic Sea, they have much in common.

The EU has acknowledged this by issuing the very first macro-regional strategy, the EU Baltic Sea Region Strategy in 2009. As most countries boarding the Baltic Sea were by then EU member states, it can well be considered the EU’s inland sea. The Baltic Sea Region must address current challenges, such as saving the seas, i.e. ensuring clear water, rich and healthy wildlife and clean and safe shipping. At the same time, there are opportunities for a prosperous region through co-operation measures to increase innovation, to deepen the internal market by improving transport systems, to connect energy markets and to jointly fight cross-border crime. This clearly distinguishes the Baltic Sea Region from other parts of the world.

Therefore, “BSR integration is best understood as the way that European integration has been translated into this region, further deepening and leveraging access to the rest of Europe and the markets that the EU provides”²

Over the past 25 years, this region has become a densely integrated, e.g. in the areas of trade, investment, labor mobility, transport and energy infrastructure as well as research collaboration. Furthermore, it demonstrates a broad landscape of robust cross-border organizations and collaborative efforts. Nevertheless, “companies do not look at the Baltic Sea Region as one integrated market in terms of their strategies. For most of them, the region remains a group of individually small markets within the EU, each with its different dynamics, rivals, and often even regulatory rules”³.

Keeping this in mind, the lack of comprehensive regional data collection is surprising. Therefore, as part of the Erasmus+ funded project “Promoting permeability through dual bachelor's programs with integrated initial and further vocational training” (BA&VET), an analysis of the region’s demography, economy, and labour as well as education market has been conducted. The majority of the data is taken from the Eurostat database of the European Union. When needed additional sources, such as the OECD database have been consulted as well.

¹ Oxford Dictionary

² Skilling, David (2018). *The Baltic Sea Economies: Progress and Priorities*. Copenhagen: Baltic Development Forum, p.10.

³ Ibid., p.11

Project summary

Objectives: What do you want to achieve by implementing the project?

- Increasing permeability between vocational and higher education
- Recruiting universities for tasks of further education in climate and environmental protection
- Providing excellently qualified entrepreneurs, managers and skilled workers and reducing the shortage of skilled workers to meet the challenges in climate and environmental protection
- Strengthening the productivity of SMEs through innovation support and R&D projects
- Promoting cooperation between SMEs and colleges/universities

Implementation: What activities are you going to implement?

- Analyses economy, education and labour markets and qualification needs
- Creation of solution models for 4 project countries
- Development and implementation of Train the Trainer program
- Development and implementation of 2 dual three-stage Bachelor's degree programs and 2 further trainings in climate and environmental protection
- Implementation of R&D projects in SMEs
- Quality assurance for training measures and project implementation
- Dissemination, transfer of results and implementation consultation

Results: What project results and other outcomes do you expect your project to have?

- Result report of the analyses of the economy, education and labour markets and qualification needs
- Solution models for four project countries
- Complete train-the-trainer program
- Module manuals with all documentation for two dual three-stage Bachelor's programs in climate and environmental protection
- Two further education programs in climate and environmental protection
- R&D projects implemented in SMEs
- Quality manual and results reports
- Manual, result videos and broad regional transfer of results

Objectives, results and target groups

The main objectives of the project are as follows:

- a) Increasing the permeability between vocational education and training and higher education and thus promoting the attractiveness of vocational education and training

- b) Strengthening the recruitment of colleges/universities for the important tasks of continuing education in climate and environmental protection
- c) Providing highly qualified entrepreneurs, managers and skilled workers who, in addition to good theoretical knowledge, also have practical competences, skills and professional experience in climate and environmental protection and reducing the shortage of skilled workers to cope with the very large tasks in the energy, climate and environmental sector.
- d) Attracting entrepreneurs and executives who have all the skills to successfully run a company and perform high-quality tasks in climate and environmental protection
- e) Strengthening the productivity and competitiveness of enterprises through knowledge and technology transfer, promotion of innovation and implementation of manageable R&D projects
- f) Promoting cooperation between SMEs and colleges/universities, strengthening colleges/universities to implement dual courses of study on climate and environmental protection, and promoting entrepreneurship in higher education.

In pursuit of these objectives, the following results will be achieved:

1. Analysis results on the economy, demography, education and labour markets as well as qualification needs in climate and environmental protection
2. Curriculum, Teaching materials, implementation report and evaluation concept and report for teacher training
3. Module handbooks with integrated continuing education, teaching materials, examination regulations, implementation reports as well as evaluation concept and reports for a three-stage dual Bachelor's degree program
 - "Business Administration & Sustainable Management of SMEs"
 - "Management of renewable building energy technology"
4. Concept for promoting innovation by SMEs and evaluation concept and report
5. Concept for innovation promotion of SMEs and R&D projects carried out for SMEs
6. Concepts and report for the evaluation and quality assurance of qualifications and R&D subsidies as well as project implementation, transfer of results, implementations and implementation consultations

The primary target groups of the project are:

- a) School leavers who wish to combine vocational education and training with a bachelor's degree and thus receive excellent employment and professional career opportunities.
- b) Students who are qualified in higher education and university and at the same time in a company and who are highly welcome in SMEs as managers and professionals or as independent entrepreneurs.

- c) Owners, managers and specialists of SMEs who are qualified in continuing vocational training, acquire tailor-made competences and skills for high-quality activities in climate and environmental protection and achieve a recognized continuing vocational qualification.
- d) SMEs that attract suitably qualified young entrepreneurs, managers and specialists, receive innovation funding and carry out R&D projects together with colleges/universities.

The project addresses the following secondary target groups (beneficiaries):

- a) Colleges and universities which, in order to expand their educational opportunities in climate and environmental protection, receive all the documents and materials for two new dual bachelor's degree programs in order to meet the labour market needs and the conditions of SMEs in particular.
- b) Chambers and other vocational training institutions which attract strong young people to vocational training, receive curricula for continuing vocational training modules for the qualification of SMEs and their staff, and cooperate intensively with colleges/universities in teaching and innovation promotion.
- c) Teachers, advisers and lecturers from chambers, other VET providers and colleges/universities who are qualified in Train the Trainer programs to provide high-quality further training, to carry out dual study courses in cooperation with companies as well as innovation promotion and R&D projects for SMEs at a high-quality level.

[Testing and evaluation of the study program](#)

A trial Bachelor's degree course in "Business Administration & Sustainable Management of SMEs" was developed, in which initial vocational training and further vocational training are integrated, and which combines theory (learning at the university) with practice (learning in the company). First of all, the qualification requirements had to be analyzed and a concept developed, discussed and agreed. Building on this, the entire work of developing the curriculum and module handbook was carried out, discussed and agreed. After this time-consuming work, there was no time for accreditation and complete implementation during the three-year project period. However, the most important main modules were trialed, and the following objectives were pursued:

- Testing the degree program in live operation at the university and quality assurance.
- Initial qualification of students at the university and in companies.

An evaluation concept was developed for the tests, and the degree program was finalized on the basis of the evaluation results. Finally, accreditations and implementations were prepared after the end of the project period.



The results of this work are presented in Result 3.4 Implementation and evaluation course "Business Administration & Sustainable Management" and qualified students.

2. Report on the implementation of main modules of the trial study programme⁴

2.1 Introduction

This report presents the outcomes of the implementation and evaluation of selected content from the newly developed three-stages dual study programme Business Administration & Sustainable Management of SMEs, carried out at the Faculty of Management and Economics of Gdańsk University of Technology (GdanskTech) during the 2024/2025 academic year. The pilot was undertaken as part of Activity WP3A4 within the European BE&VET (Business Education & Vocational Education and Training) project, which focuses on enhancing the relevance of business education by incorporating sustainability and dual learning models.

The primary aim of this report is to provide a detailed and structured account of the testing phase. Although the original Project's intention was to pilot the newly developed study programme in its entirety, legal and institutional constraints specific to the Polish higher education system did not allow for the formal implementation of an external curriculum at GdanskTech. As a result, the testing was conducted by integrating selected content and methodological components of the programme into existing accredited courses.

The scope of this report includes the process of selecting and mapping courses at GdanskTech to the content and learning outcomes of the BE&VET modules, the delivery and evaluation of these courses, and an analysis of student participation, demographic structure, and gender distribution. It also encompasses teacher's qualifications, the institutional implementation context, feedback procedures, and national academic performance metrics.

The document provides a comprehensive overview of the pilot process, including the rationale for course selection, teaching formats applied, and characteristics of participating students. It also discusses support mechanisms for learners, organisation of the academic calendar, and institutional positioning. The report addresses the quality assurance system and student evaluation procedures while reflecting on contextual factors influencing the feasibility of adopting externally developed curricula. The concluding sections synthesise the main observations, constraints, and actionable recommendations.

The successful realisation of the pilot at GdanskTech was enabled by the collaborative effort of an interdisciplinary academic and project coordination team. All contributors involved in the implementation phase demonstrated strong subject-specific expertise and a shared commitment to embedding sustainability-oriented content within business education. Their joint efforts ensured academic integrity, alignment with

⁴ Prepared by Marzena Grzesiak, Aniela Mikulska, Magdalena Olczyk and Anita Richert-Kaźmierska, Gdańsk University of Technology, 2025

institutional guidelines, and compliance with Polish higher education regulations. This engagement reflects the Faculty's commitment to maintaining high standards of teaching while contributing to broader European efforts in advancing sustainable management education.

2.2 Admission and Organisation of the Implementation Process

2.21 Implementation Process' Context

The pilot implementation and testing of the newly developed three-stages dual study program *Business Administration & Sustainable Management of SMEs* were undertaken at the Faculty of Management and Economics, Gdansk University of Technology (GdanskTech), during the academic year 2024/2025. This activity was carried out within the framework of an international project aimed at modernizing higher education curricula and promoting sustainability-oriented business education across Europe, as part of WP3 A4 Activity.

The primary objective of this task was to verify the compatibility and practical applicability of the newly designed curriculum through its partial implementation under local academic conditions. In the case of Poland, the realization of this task required the adaptation of existing courses within the institutional and legal framework of the public higher education system. Thus, a mapping-based testing approach was adopted, in which corresponding courses offered at GdankTech were matched to the program modules based on content and methodology.

2.22 Methodology of Courses Selection

The selection of testable courses was preceded by an in-depth analysis of the current course syllabi used in the academic programs offered at the Faculty of Management and Economics. The evaluation focused on thematic compatibility and methodological alignment. Only those courses that met a minimum threshold of 45% content congruence with the original program modules were considered eligible.

Where the scope of a module was broad or interdisciplinary, two or even three local courses were selected to jointly reflect the intended learning outcomes. For example, the module "Basics of Environmental Economics" was reflected in three separate courses: *Economic Policy* (Polish), *Environmental Management Systems* (Polish), and *Modelling the Labour Market* (English). Courses conducted in both Polish and English were included to ensure diversity and accommodate internationalization.

Finally, 15 courses were chosen to be tested: 4 – during the winter semester and 11 – during the summer one.

2.23 Mapping of Programme Modules and Tested Courses

A detailed mapping of the original program modules and the corresponding courses tested at GUT is provided in Table 1. The table illustrates the multi-dimensional alignment between the project-developed curriculum and the faculty's academic offerings, ensuring that both core competencies and sustainability-focused content were appropriately covered.

Table 1: Mapping of Dual Study Program Modules and Tested Courses at GUT (2024/2025)

Business Administration & Sustainable Management of SMEs	Tested Courses at the Faculty of Management and Economics, GUT (2024/2025)
First Year	
Basics of Environmental Economics Basics of Business Administration Human Resources Management in SMEs Sustainable Marketing Scientific Work and Research Methodology	Economic Policy – Polish Environmental Management Systems (team project) – Polish Modelling the Labour Market – English Essentials of Marketing – English Methodology of Writing a Diploma Thesis – Polish
Second Year	
External Accounting Sustainable Financing and Investment in SMEs Basics of Commercial and Environmental Law Internal Accounting and Basics of Business Taxation Strategic Sustainability Management Communication and Consulting	Basics of Financial Accounting – Polish Financial Accounting – English Financial Management – Polish Managerial Accounting – English Management Accounting – Polish Sustainability Management – English
Third Year	
Sustainable Supply Chain Management Human Resources Development in SMEs Qualifications of Trainers in SMEs Project Management Cradle to Cradle and Green Innovation in SMEs	Supply Chain Management – English Logistics Management – English Digital Economy – Polish
Fourth Year	
Materials Management Corporate Controlling Organization and Change Management in SMEs Sustainable Entrepreneurship Introduction to Business Computing	Corporate Social Responsibility – Polish

2.24 Implementation Details

The implementation of the selected courses included a variety of teaching formats, such as traditional lectures, interactive tutorials, computer labs, and project-based learning. These varied instructional modes allowed for the development of both theoretical understanding and practical competencies. A total of 666 contact hours were delivered, emphasizing the intensive nature of the programme. The list of tested courses and didactic forms presents Table 2.

Table 2: Summary of Tested Courses with Contact Hours and Didactic Forms

Course	Programme	Lectures (W)	Tutorials (C)	Labs (L)	Projects (P)	Total Hours
Managerial Accounting – English	Management (MSc)	15	30			45
Managerial Accounting – English	Economic Analytics (MSc)	30	30			60
Digital Economy – Polish	Management (BSc)	30		30		60
Financial Management – Polish	Management (BSc)	15	30			45
Management Accounting – Polish	Management (MSc)	15	30			45
Basics of Financial Accounting – Polish	Economics (BSc)	15	15			30
Financial Accounting – English	Management (BSc)	15	30			45
Corporate Social Responsibility – Polish	Economic Analytics (MSc)		15			15
Corporate Social Responsibility – Polish	Management (MSc)		15			15
Logistics Management – English	Management (BSc)	15	15			30
Supply Chain Management – English	Management (BSc)	15	30			45
Essentials of Marketing – English	Management (BSc)	30	15			45
Sustainability Management – English	Management (BSc)	15	15			30
Methodology of Writing a Diploma Thesis – Polish	Management (BSc)	6				6
Modelling the Labour Market – English	Economic Analytics (MSc)	15		30		45
Economic Policy – Polish	Economics (BSc)	15	30			45
Environmental Management Systems – Polish	Management (BSc)	30			30	60

In addition to standard classroom teaching, students engaged in group projects and individual assignments designed to develop skills relevant to sustainable management,

critical thinking, and real-world problem-solving. The comprehensive scope of course delivery is illustrated in Table 2.

2.25 Participants

A total of 623 students from undergraduate (BSc) and postgraduate (MSc) programs took part in the testing. The participant pool included individuals from diverse academic tracks such as Management, Economics, and Economic Analytics. These students engaged actively in the courses and contributed valuable feedback on course design, teaching effectiveness, and content relevance.

A detailed demographic and academic profile of the participants—including gender distribution, degree level, and academic performance—will be provided in a subsequent section of the full project report.

2.26 Academic staff characteristics

The courses included in the testing phase were conducted by highly qualified academic staff and expert practitioners affiliated with the Faculty of Management and Economics. Many of them had international teaching experience, were authors of numerous academic publications, and were involved in applied research related to sustainable management, finance, logistics, and business innovation. Selected profiles are shown in Table 3.

Table 3: Teachers of the Tested Courses

COURSES	TEACHERS	EXPERIENCE SUMMARY
Managerial Accounting – English	Dr Jarosław Ziętarski	Assistant Professor at the Department of Finance, expert in management accounting. Creator of the educational YouTube channel "FAT CAT Financial Education". Member of the organizing committee for the 28th Annual Multinational Finance Society Conference. Combines academic and multimedia approaches to financial education.
Digital Economy – Polish	Dr Nadzeya Sabatini	Assistant Professor in Digital Transformation. Lecturer at Università della Svizzera Italian and research fellow at the Institute of Digital Technologies for Communication. Coordinator of MSc in Digital Fashion. Her interdisciplinary background enhances her expertise in digital business education.
Financial Management – Polish	Dr hab. Wojciech Wyrzykowski	Senior researcher at the Department of Finance. Author of 70 scientific publications including 5 monographs. Specializes in tax systems and entrepreneurship. Recognized expert in fiscal policy and its impact on SMEs.
Management Accounting – Polish	Dr Justyna Kujawska	Researcher in finance and healthcare cost accounting. Author/co-author of over 50 academic publications. I specialize in financial and management accounting, particularly in public sector and healthcare systems.
Basics of Financial		

Accounting – Polish		
Corporate Social Responsibility – Polish	Dr Jakub Gużyński	Philosopher and sociologist. Specialist in globalization, European integration, sustainable development ethics, and public communication. Combines philosophical reflection with contemporary business ethics.
Logistics Management – English	Magdalena Laskowska	Specialist in production, quality, and logistics management. Instructor with practical industry experience. Known for integrating operational case studies into logistics teaching.
Supply Chain Management – English	Dr Joanna Czerska	Expert in lean management and supply chains. Passionate educators focused on organizational development. Offers consultancy and training in process optimization and value stream management.
Essentials of Marketing – English	Dr Bruno Schivinski	Marketing researcher specializing in e-marketing, social media, and consumer behavior. Published internationally. Expert in digital branding and consumer psychology.
Sustainability Management – English	Magdalena Fabjanowicz	Lecturer on sustainability and process simulation. Focus on applied sustainability education. Experienced in managing interdisciplinary sustainability projects and simulations.
Methodology of Writing a Diploma Thesis	Dr Marta Szeluga-Romańska	Expert in management, labor markets, ethnography, and communication. Experienced in qualitative and quantitative methods. Guides students in research project development and interdisciplinary thesis work.
Modelling the Labour Market – English	Dr hab. Dagmara Nikulin	Labor market economist. Specializes in econometrics, contemporary labor markets, and microeconomic analysis. Conducts applied labor market research and policy impact assessments.
Economic Policy – Polish	Dr inż. Anita Richert-Kaźmierska	Expert in regional development, aging societies, and socio-demographic change. Active in local policy research. Involved in national and EU-funded projects on demographic trends.
Environmental Management Systems – Polish	D. Ciachorowski (PhD candidate)	Specialist in sustainable digital transformation. Experienced in NGO strategy, multicultural teams, and innovation management. Combines academic research with practical engagement in civic and ecological initiatives.

2.27 Consultations and Student Support

In addition to scheduled instructional hours, each teacher was required to provide 15 hours of office consultations per course. These consultations aimed to support students' individual learning needs, clarify complex topics, and provide guidance on course assignments and projects.

Furthermore, personalized consultations were available upon request, either in-person or online, ensuring flexibility and accessibility for all participants.

2.28 Summary and Conclusions

The testing of the programme modules at GdanskTech was successfully completed, confirming the relevance and adaptability of the curriculum to the local academic context. The alignment of courses, active engagement of experienced faculty, and broad student participation created a solid foundation for assessing the pilot's effectiveness.

The results and feedback gathered during this phase will inform further development and refinement of the international dual study program. The Faculty of Management and Economics remains committed to advancing interdisciplinary, sustainability-focused business education aligned with both academic excellence and market needs.

2.3 Participants Profile

2.31 Student Participation and Demographic Analysis

A total of 623 students enrolled in first- and second-cycle study programs participated in the courses tested within the dual study program. Of this number, 315 students were female, which accounts for 50.56% of all participants. This result provides clear evidence that the study programs conducted at the Faculty of Management and Economics, GdanskTech, ensure gender equality in access to higher education. Notably, courses oriented toward acquiring managerial and leadership skills attracted considerable interest from both female and male students, indicating balanced engagement across genders in the pursuit of advanced business competencies.

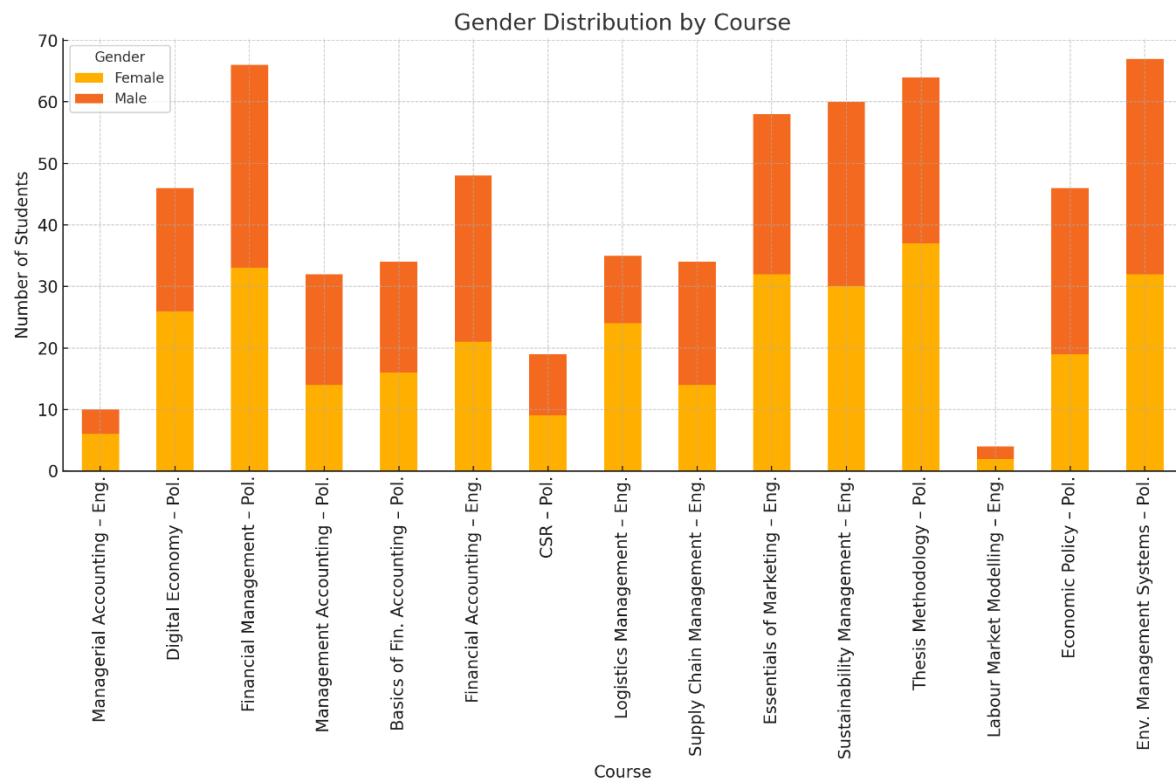
The gender distribution across individual courses is presented in Table 4 and Figure 1.

Table 4: Gender Distribution of Participants by Course

COURSE NAME / LANGUAGE	ORIGINAL STUDY COURSE	PARTICIPANTS	FEMALE	MALE
Managerial Accounting – English	Second-cycle Management / 4th semester	10	6	4
Digital Economy – Polish	First-cycle Engineering Management / 6th semester	46	26	20
Financial Management – Polish	First-cycle Engineering Management / 3rd semester	66	33	33
Management Accounting – Polish	Second-cycle Management / 2nd–3rd semester	32	14	18
Basics of Financial Accounting – Polish	First-cycle Economics / 5th semester	34	16	18
Financial Accounting – English	First-cycle Management / 4th semester	48	21	27

Corporate Social Responsibility – Polish	Second-cycle Economic Analytics & Management / 3rd–4th semester	19	9	10
Logistics Management – English	First-cycle Engineering Management / 6th semester	35	24	11
Supply Chain Management – English	First-cycle Engineering Management / 6th semester	34	14	20
Essentials of Marketing – English	First-cycle Management / 2nd semester	58	32	26
Sustainability Management – English	First-cycle Management / 4th semester	60	30	30
Methodology of Writing a Diploma Thesis – Polish	First-cycle Engineering Management / 6th semester	64	37	27
Modelling the Labour Market – English	Second-cycle Economic Analytics / 4th semester	4	2	2
Economic Policy – Polish	First-cycle Economics / 3rd semester	46	19	27
Environmental Management Systems – Polish	First-cycle Engineering Management / 4th semester	67	32	35

Figure 1. Gender Distribution of Participants by Course



2.32 Age and International Participation

Students participating in the tested courses were typically aged between 19 and 25. First cycle (bachelor-level) students generally ranged from 19 to 23 years of age, while second cycle (master-level) students were predominantly in the 23 to 25 age range. This reflects the standard academic progression patterns within the Polish higher education system.

Additionally, several courses delivered in English were attended by international students enrolled at the Faculty of Management and Economics through the Erasmus+ exchange program. Their participation contributed to a multicultural and inclusive learning environment and provided valuable opportunities for cross-cultural collaboration.

2.33 Data Privacy Compliance

In accordance with the General Data Protection Regulation (GDPR) in force in Poland, it is not permissible to include name-specific student records as part of this report. However, such records may be made available for inspection by the Project Leader upon formal request for control or verification purposes.

2.4 Execution of the Training

2.41 Organisation of Teaching and Evaluation

Courses were delivered across both the winter and summer semesters of the 2024/2025 academic year at the Faculty of Management and Economics, GdanskTech. Each academic semester lasted 15 weeks and included a range of structured learning activities such as lectures, seminars, tutorials, laboratory sessions, and project work. Students accumulated credits through active participation, continuous assessment, and completion of coursework aligned with the intended learning outcomes.

The instructional framework placed emphasis on integrating theoretical foundations with real-world applications, a hallmark of the Faculty's approach to business and management education. Depending on the course structure and the nature of the subject matter, final assessments took the form of written exams, oral presentations, practical projects, or a combination thereof. These assessments were conducted in accordance with the regulations specified in the course syllabus (karta przedmiotu) and further elaborated by the responsible instructors.

The primary examination session for the winter semester took place from 31 January to 11 February 2025, followed by a resit examination period from 12 to 18 February 2025. For the summer semester, final examinations were held from 16 to 29 June 2025, with the resit session scheduled for 6 to 14 September 2025. These dates are consistent with the university-wide academic calendar approved by the GdanskTech Senate.

The systematic organisation of the teaching and examination cycle ensures clarity, academic rigor, and optimal alignment with the European Credit Transfer and Accumulation System (ECTS), facilitating international recognition of student achievements.

2.42 Academic Quality and National Recognition

The Faculty of Management and Economics at GdanskTech has long been recognised as one of the leading academic institutions in Poland in the fields of business, economics, and management. This recognition is reflected in the most recent Perspektywy University Ranking (2024), where the Management programme was ranked 5th nationally and the Economics programme placed 6th.

The Perspektywy ranking is regarded as the most prestigious and methodologically rigorous university ranking in Poland, and has been published annually for the past 26 years. Its methodology includes a comprehensive evaluation of teaching quality, graduate employability, academic prestige, internationalisation, and research output. The success of the Faculty is attributable to a strong academic team, innovative curricula, investment in student support services, and dynamic engagement with the business community.

This performance is a testament to the Faculty's continuous improvement initiatives, such as the implementation of sustainability-focused content in line with contemporary European education strategies. The high quality of instruction is complemented by modern infrastructure, digital learning tools, access to international mobility programmes, and close cooperation with business leaders, ensuring that students are equipped with future-ready competencies.

2.43 Student Evaluation and Feedback

Student feedback constitutes a core element of the Faculty's internal quality assurance system. Every academic year, students are invited to participate in an anonymous online evaluation of courses, instructors, and learning experiences. The survey encompasses various criteria such as clarity of instruction, course organisation, accessibility of learning materials, engagement with students, and the perceived usefulness of acquired knowledge and skills.

Although the results for the 2024/2025 academic year will only become available in November–December 2025, historical trends consistently show that the courses and instructors involved in the tested modules receive high ratings. Previous evaluations have highlighted the effectiveness of participatory teaching styles, clarity in the presentation of complex concepts, and the relevance of course content to current market and sustainability challenges.

Many of the lecturers engaged in the testing phase have established reputations in both academia and professional practice. Their ability to connect theory with practice, foster student engagement, and integrate international perspectives has been

frequently cited in open comments from previous student surveys. Notably, courses delivered in English have also attracted positive attention from international students participating via Erasmus+, contributing to the overall intercultural dimension of the Faculty.

The feedback collected through these evaluations not only supports institutional self-assessment but also informs continuous improvements to curricula, teaching strategies, and student services. It also reinforces the Faculty's commitment to excellence and innovation in higher education, both at the national and European level.

2.5 Main Findings and Conclusions

2.51 Summary Assessment of Implementation

The pilot testing of the three-stages dual study programme Business Administration & Sustainable Management of SMEs was successfully conducted at the Faculty of Management and Economics GdanskTech, during the academic year 2024/2025. The implementation was based on a mapping of the project's modules onto existing academic courses offered at the Faculty. Despite institutional and regulatory constraints specific to the Polish higher education system, the adopted approach proved effective in reflecting the project's curricular objectives. A total of 15 courses were delivered across two semesters, involving 623 students and a team of experienced instructors.

Thematically aligned content ensured the fidelity of the tested curriculum in relation to the project's educational goals.

Courses were conducted in both Polish and English, allowing for participation by international students, particularly those in the Erasmus+ programme.

Teaching staff combined academic and practical experience, which was consistently appreciated in historical student evaluations.

Gender parity in participation (50.56% female students) confirmed the inclusive and equitable character of the Faculty's study programmes.

Selected modules addressed contemporary challenges in sustainable management, reflecting the relevance of the programme to current business and societal needs.

The pilot phase was subject to a number of limitations. First, strict procedural and legal requirements in the Polish higher education system prevented the formal implementation of the entire dual study programme as an independent offering. As a result, course equivalency had to be established through thematic alignment rather than structural integration.

Second, differences in course formats and contact hours sometimes required the combination of two or three local courses to reflect a single project module.

Furthermore, final student evaluation results for 2024/2025 will only be available at the end of the calendar year, which limits the immediate feedback analysis.

Lastly, due to data protection regulations (GDPR), personal student data could not be included in the reporting.

2.52 Hints for Future Use and Suggestions for Further Development

Future implementations could benefit from the following improvements:

- Develop modular elective courses based on the project's content, allowing for more flexibility in integration and recognition.
- Expand the use of case studies, simulations, and project-based learning to further enhance applied competencies.
- Create a transparent matrix for course-to-module alignment to standardise equivalence assessment.
- Strengthen international and cross-institutional collaboration for co-teaching, joint curriculum design, and shared accreditation schemes.

The institutional strategy foresees continued development of existing accredited programmes in Management, Economics, and Analytics. Elements of the project's curriculum – especially those relating to sustainability, strategic management, and innovation – may be selectively incorporated into these programmes, depending on evolving educational priorities.

The likely beneficiaries of these selected contents include:

- Full-time undergraduate and postgraduate students
- International students participating through mobility programmes
- Select groups within lifelong learning or postgraduate courses, if justified by demand or external cooperation

3 Evaluation concept⁵

3.1 The evaluation

3.1.1 Background information on the evaluation

Current evaluation concept is compiled by PP3 Tallinn University of Technology (TalTech) Tartu College as a part of ERASMUS+ co-funded project “Promoting permeability through dual bachelor's programs with integrated initial and further vocational training” (BA&VET), work package WP3, activity A6 *Dual Bachelor's Study Program “Business Administration and Sustainable Management for SMEs”*.

The term evaluation is commonly used to refer to studies implemented to assess and report on the strengths and weaknesses of policies, programmes, curricula, etc., and in that way give an opportunity to improve their effectiveness (Hafeez, Naureen and Sultan, 2022). In common, evaluation includes different levels. Macro level deals with framework and facilitations of the programme; medium level approaches the individual course or study programme; micro level studies the experiences, feeling and success of an individual student or trainee in the learning process (Fitzpatrick, 2004) (Lilja, Kari; Sandelin, no date).

The focus of evaluation depends on goals of the process evaluated. Concerning the evaluation also further aspects such as “*Timeline*” and the “*Opportunity to impact*” have to be considered. If the aim of the evaluation is to help and enable developing and improving the dual bachelor's study program, the evaluation should be focused on such issues that in a way or another tell us, how to change the process and that are under our control, thus, the focus should be directed to the future. If the goal of the evaluation is to find out how did the policy, programme or course succeed, an approach should have a look at backward and concentrate on outcomes, that not necessary are under supervision.

In common, evaluations tend to be multilevel and have a look at both towards and backwards. The aim of the evaluation is to support implementing and improving of the dual bachelor's study program; thus, the evaluation is multilevel, and the focus is on issues that we have an opportunity to impact on.

The evaluation should be scheduled so, that the whole course/module is still in the memory of respondents. If the course is single activity like lecture, practical training, or e-learning session, this is no problem. The evaluation survey or interview can be conducted immediately after the training without any risk on confusions concerning the target of the evaluation. But if there are more activities, the course/module lasts weeks or months, or consists of many meetings with certain interval, the risk of bias, caused by uncertainty about which part the survey or interview deals with, increases. This

⁵ Compiled by Mihkel Kiviste (PhD) and Krista Toom (MSc), Tallinn University of Technology, School of Engineering, Tartu College

means that in such cases either the survey should be conducted separately after each phase or questions should be written so, that the risk of bias becomes minimized.

3.12 The evaluation process

In best cases, the evaluation survey and the report should cover some of modules of the evaluated dual bachelor's study program.

This evaluation concept covers different modules of the dual bachelor's study program. However, the evaluation method, phases and tools are similar in each case. The evaluation will be conducted using the online survey application, which enables the anonymity of the respondents, and – If needed – follows the sent invitations and sends reminders to those who have not responded. The questionnaire will be pre-prepared and saved as a template (Appendix A). The prepared survey will be tested to see if the questionnaire is working, and if the reporting will be possible in a desired way (Figure 1.1).

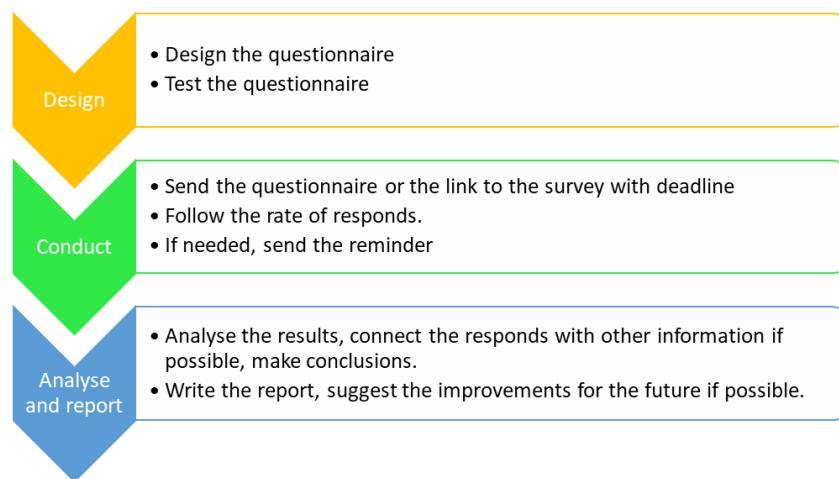


Figure 1.1. The evaluation process.

3.13 Target groups of the evaluation

The main target groups are participants and lecturers/trainers of the dual bachelor's study program. Therefore, separate questionnaires are developed to participants (Appendix 1) and lecturers (Appendix 2). It is recommended that these questionnaires will be completed by each participant as well as by each lecturer separately for the module that has been completed and chosen for evaluation.

3.14 Online questionnaires and duties of each test facilitator

The online questionnaire will be prepared by TalTech in English using the template created in *Google Forms*. TalTech will send the links to questionnaire to the facilitator who delivers the links and instructs the target groups to complete the questionnaire.

3.15 Needs to translate the questionnaire

If the questionnaire needs to be translated to domestic language, a facilitator should announce this at least a month before the dual bachelor's study program starts.

TalTech will then send a preliminary questionnaire of each target group to be translated. Facilitator will send the translated version to TalTech latest two weeks before the the dual bachelor's study program starts.

3.16 When the modules of the programme start

In the beginning of module that has been chosen for evaluation, the facilitator informs, that the module will be evaluated, and that participants will receive a link to the evaluation questionnaire during the programme. Participants should be informed that the evaluation helps the facilitators to develop and improve the programme in the future.

3.17 When the modules of the programme end

In the end of the module, facilitator gives the link to the survey to participants (students), reminding them that each answer is important, and informs the period when the evaluation survey is active.

After the responding period has finished, TalTech will collect the results from the online system, analyse them and write a report.

Table 1.1: Summary of the duties, process and schedule of the test

Deadline and responsible party	Task
When the course starts, facilitator will inform the participants, teachers/trainers, and enterprises that	<ul style="list-style-type: none"> the module will be evaluated, the link to the evaluation survey will be given or sent during the programme, and that it is important for developing the programme that everyone complete the questionnaire.
When the module, facilitator will	<ul style="list-style-type: none"> deliver the links to survey to respondents either by e-mail or in other acceptable way, inform the respondents about the deadlines, and remind them about the importance of the evaluation.
When the given deadline has been passed, TalTech will	<ul style="list-style-type: none"> open the database and collect and analyse the results, write a report, and send the report to be discussed.

3.18 The evaluation report

In the report, following issues will be reported: A rough description of the group of respondents, have they been satisfied with the facilitations, topics, teachers, and their group, do they believe the dual bachelor's study program has been beneficial, and what could have been made in other way.

All the evaluations will be summarized together concluding the findings and some suggestions concerning the opportunities to improve and develop the dual bachelor's study program.

3.2 Dual Bachelor's Study Program "Business Administration and Sustainable Management for SMEs"

3.21 Background and relevance of the sustainable management

Sustainability has been defined as the balance between the environment, equity, and economy. Today, there exist many global challenges, which affect the sustainability in business, i.e a) global climate crisis, b) continuous consumption of the earth's natural resources and c) advancing environmental destruction. These challenges have changed the behaviour of consumer, who is more conscious about the consumption of sustainable products. This has been understood at the political setting of environmental and climate targets, e.g., EU's Green Deal.

These challenges however are the possibility to create new opportunities for small and medium enterprises (SME-s). Further on both climate-neutral and sustainable products should be developed. At the same time resource-saving processes must be implemented along the entire value chain. Also, the compliance with human rights, health and safety regulation must be ensured at all stages of global value chain. Sustainable actions affect all functions along the value chain (Figure 2.1).



Figure 2.1. A principle of management of sustainable value chains of a product.

This require a) the knowledge about the use of environmentally friendly and renewable resources and, b) business administration competences as well as the basis, c) for the finding of entrepreneurial decisions that make economically and ecologically sense and are ethically responsible.

3.22 Data collection

The data is collected separately for each module. The evaluation data is collected online on the basis of standardised questionnaires. At the end of the module, the

participants and lecturers (trainers) of the module are each asked to complete a questionnaire.

- The questionnaire for the participants is attached as Appendix 1.
- The questionnaire for the trainers is attached as Appendix 2.

The implementing partner shall ensure that the questionnaires are completed on 15.06. On this basis, the evaluator carries out all analyses and prepares a comprehensive evaluation report no later than 15.08.2025.

3.3 References

Fitzpatrick, J.L. (2004) 'Exemplars as Case Studies: Reflections on the Links Between Theory, Practice, and Context', *The American Journal of Evaluation*, 25(4), pp. 541–559. Available at: <https://doi.org/10.1016/J.AMEVAL.2004.09.008>.

Hafeez, M., Naureen, S. and Sultan, S. (2022) 'Quality Indicators and Models for Online Learning Quality Assurance in Higher Education', *Electronic Journal of e-Learning*, 20(4), pp. 374–385. Available at: <https://doi.org/10.34190/ejel.20.4.2553>.

Lilja, Kari; Sandelin, S. (no date) *Evaluation concept. The evaluation of Train The trainer - test (WP3) and test training of WP4*.

3.4 Appendix 1: Questionnaire for **participants** of the bachelor's degree "Business Administration & Sustainable Management of SMEs"

Link to the questionnaire: <https://forms.gle/zkgoFdpzDDRaqZcU8>

Dear participant,

At the end of the module, please complete the following questionnaire. The questionnaire is anonymous. This will help us to continuously improve and develop the dual bachelor's study program.

General information

(1) Please indicate your gender

- Male
- Female
- Prefer not to answer

(2) Please indicate your age

- Younger than 18
- 18 - 24

- 25 - 34
- 35 – 44
- 45 – 54
- older than 55
- Prefer not to answer

(3) Please indicate which year of study are you in?

- First year
- Second year
- Third year
- Fourth year

(4) Please indicate your current professional activity

- I am student at the moment, not working
- I am a self-employed entrepreneur
- I am an employee in a company

(5) Please indicate your professional work experience

- no professional work experience
- 0-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- more than 10 years

(6) Please indicate your educational background

- junior high school
- vocational school
- high school
- technical high school

- college/ university (Bachelor's Degree/ Engineering Degree)
- college/ university (Master's Degree)
- Other

(7) Did you attend any additional courses/ trainings before you enrolled dual Bachelor's Study Program?

- YES
- NO

If you answered Yes, please specify which additional courses / trainings did you attend?

Questions about the module and the dual bachelor's study program "Business Administration and Sustainable Management for SMEs "

(8) Your opinion about the dual bachelor's study program "Business Administration and Sustainable Management for SMEs ".

Scale: 1= Strongly disagree, 2=Disagree, 3=Neither disagree or agree, 4=Agree, 5=Strongly agree

The curriculum provided sufficient practical skills for business administration of small and medium-sized (SME) enterprises	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
The curriculum provided sufficient knowledge about sustainable management for SMEs.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
The balance between theory and practical training was adequate	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

(9) Identification of the program module

Please choose the module you have completed and evaluating.

Module number	Module name	Please mark one module only
1	Scientific work and research methodology	<input type="checkbox"/>
2	Business English	<input type="checkbox"/>
3	Communication and consultancy	<input type="checkbox"/>

4	Basics of project management	<input type="checkbox"/>
5	Basics of general economics	<input type="checkbox"/>
6	Basics of environmental economics	<input type="checkbox"/>
7	Basics of business administration	<input type="checkbox"/>
8	Human resources management in SMEs	<input type="checkbox"/>
9	Sustainable Marketing	<input type="checkbox"/>
10	External accounting	<input type="checkbox"/>
11	Sustainable financing and investment	<input type="checkbox"/>
12	Basics of commercial and labor law	<input type="checkbox"/>
13	Internal accounting and basics of business taxation	<input type="checkbox"/>
14	Organization and change management	<input type="checkbox"/>
15	Strategic Sustainability Management	<input type="checkbox"/>
16	Sustainable supply chain management	<input type="checkbox"/>
17	Corporate Controlling	<input type="checkbox"/>
18	Human resources development in SMEs	<input type="checkbox"/>
19	Qualification of trainers in SMEs	<input type="checkbox"/>
20	Cradle to Cradle and green innovation in SMEs	<input type="checkbox"/>
21	Sustainable Entrepreneurship	<input type="checkbox"/>
22	Business English (intensification)	<input type="checkbox"/>
23	Introduction to business computing	<input type="checkbox"/>
24	Reflections on practice	<input type="checkbox"/>

(10) Please choose the scale that applies to your opinion on the following aspects of the module you participated.

Scale: 1= Strongly disagree, 2=Disagree, 3=Neither disagree or agree, 4=Agree, 5=Strongly agree

1. The facilitation (location, room etc.) was suitable for learning	<input type="checkbox"/>				
2. The topics and issues were relevant and responded to the goals of dual bachelor's study program	<input type="checkbox"/>				
3. The information presented were up-to-date	<input type="checkbox"/>				
4. The presentations during the module were clear and understandable	<input type="checkbox"/>				
5. The lecturers explained topics of the lessons, additional questions, experiences, and topical issues arisen during the course well	<input type="checkbox"/>				

6. There were enough time scheduled for each issue.		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
7. I got valuable knowledge from lessons and examples presented by lecturers.		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
8. I believe that I can utilize the knowledge gained from lessons in my future career.		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
(11) How large was the group?	<input type="checkbox"/> Less than 10 students <input type="checkbox"/> 10-20 students <input type="checkbox"/> 21-30 students <input type="checkbox"/> 31-40 students <input type="checkbox"/> Over 41 students					
(12) Was the group size optimal for acquiring knowledge?	<input type="checkbox"/> Too few students <input type="checkbox"/> Group size was optimal <input type="checkbox"/> Too many students					
(13) Would you recommend the module to someone you know?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No Please specify if No, why?					
(14) Was the proportion of topics and issues inside module suitable or should something be done?	<input type="checkbox"/> The module was well balanced <input type="checkbox"/> The module was mostly suitable <input type="checkbox"/> The module needed better balance Please specify, what should have been balanced better					

g be increased / decrease d						
(15) Was there anything missing from the theoretical learning that was needed in practical training?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Some things were missing. <input type="checkbox"/> Please specify, what was missing.....					
(16) What was good?						
(17) What could have been done better? (E.g. was some topic missing or unnecessary)						

Thank you for your answer.

3.5 Appendix 2 Questionnaire for **lecturers of the dual bachelor's study program "Business Administration & Sustainable Management of SMEs"**

Link to the questionnaire: <https://forms.gle/Dma49cFyt4fqWzMj7>

Dear lecturer,

At the end of the module, please complete the following questionnaire. The questionnaire is anonymous. This will help us to continuously improve and develop the dual bachelor's study program.

1. Identification of the program module

Please tick which module you have completed and evaluated.

Module number	Module name	Please mark one module only
1	Scientific work and research methodology	<input type="checkbox"/>
2	Business English	<input type="checkbox"/>
3	Communication and consultancy	<input type="checkbox"/>

4	Basics of project management	<input type="checkbox"/>
5	Basics of general economics	<input type="checkbox"/>
6	Basics of environmental economics	<input type="checkbox"/>
7	Basics of business administration	<input type="checkbox"/>
8	Human resources management in SMEs	<input type="checkbox"/>
9	Sustainable Marketing	<input type="checkbox"/>
10	External accounting	<input type="checkbox"/>
11	Sustainable financing and investment	<input type="checkbox"/>
12	Basics of commercial and labor law	<input type="checkbox"/>
13	Internal accounting and basics of business taxation	<input type="checkbox"/>
14	Organization and change management	<input type="checkbox"/>
15	Strategic Sustainability Management	<input type="checkbox"/>
16	Sustainable supply chain management	<input type="checkbox"/>
17	Corporate Controlling	<input type="checkbox"/>
18	Human resources development in SMEs	<input type="checkbox"/>
19	Qualification of trainers in SMEs	<input type="checkbox"/>
20	Cradle to Cradle and green innovation in SMEs	<input type="checkbox"/>
21	Sustainable Entrepreneurship	<input type="checkbox"/>
22	Business English (intensification)	<input type="checkbox"/>
23	Introduction to business computing	<input type="checkbox"/>
24	Reflections on practice	<input type="checkbox"/>

2. How long is your experience in teaching (years) ?

3. General assessments of the module

1 = Poor; 2= Satisfactory; 3= Good; 4= Very good; 5= Excellent

The level of the overall content of module topics	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
The topics in module match to the needs and goals of the students (average)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
There was enough time to cover the planned topics	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
Level of the students	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
Motivation of the students	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

The content of the education match to the requirements of the qualification

1	2	3	4	5
<input type="checkbox"/>				

4. Were all the necessary skills and knowledge taught during the module?

- Yes
- More or less, some topics remained uncovered
- No

5. What opportunities do you see for module development?

.....
.....

Thank you for your answer.

4 Evaluation Report⁶

This report provides a module-based evaluation of the Bachelor's degree program "Business Administration & Sustainable Management of SMEs". The analysis is based on documented feedback regarding the structure, clarity, and implementation of each module. The feedback was received from the Gdansk University of Technology, which conducted the survey among its students. The goal is to assess the program's overall coherence, strengths, and areas for improvement.

The evaluation report is divided into two parts – feedback from the lecturers and feedback from the students.

4.1 Feedback Analysis Based on Lecturers' Responses

The evaluation was based on teaching experience, general assessment of the modules, and suggestions for development.

During the survey, the following subjects/modules were evaluated:

Financial Management – Polish
Economic Policy – Polish
Basics of Financial Accounting -Polish
Digital Economy – Polish
Managerial Accounting – English
Corporate Social Responsibility – Polish
Supply Chain Management – English
Environmental Management Systems (team project)– Polish
Modelling the Labour Market - English

4.11 Lecturers' Teaching Experience

The respondents' teaching experience ranged from 1 to 26+ years, representing both novice and highly experienced instructors.

The participants' teaching experience varied widely, covering all stages of professional development. Based on the data:

- **1–5 years:** 2 participants
- **6–10 years:** 0 participants
- **11–15 years:** 2 participants
- **16–20 years:** 0 participants
- **21–25 years:** 3 participants

⁶ Compiled by Krista Toom (MSc), Tallinn University of Technology, School of Engineering, Tartu College

- **26+ years:** 3 participants

This shows that most participants had considerable experience (21 years or more), while a smaller group was at the beginning of their teaching careers.

4.12 General Assessment of Modules

The overall assessment of the modules by the participants was very positive across all evaluated aspects, indicating that the program content and delivery meet the expectations and needs of both teachers and students.

Content level of module topics

Most lecturers rated the level of the module topics as *very good*, with one rating as *excellent* and one as *satisfactory*. This suggests that most modules offer appropriate depth and breadth of content, although there is room for improvement in some cases, particularly in the *Basics of Financial Accounting*, which received the lowest rating.

Relevance of topics to students' needs and goals

The relevance of the module topics to students' needs was also rated highly, with most ratings being *good*, *very good*, or *excellent*. This indicates that the modules are well aligned with the expected learning outcomes and professional goals of students.

Sufficiency of time to cover planned topics

The ratings here were slightly more mixed. While several modules received *very good* or *excellent*, others were rated *good* or even *poor*. Notably, the *Corporate Social Responsibility* module was marked *poor* in this regard, suggesting that more time may be necessary to cover the content adequately.

Level of students' knowledge

Lecturers generally assessed the students' prior knowledge as *good* or *very good*, though some noted challenges (one *poor* rating in *Managerial Accounting*). This suggests some variability in students' preparedness, which may affect how the content is delivered.

Students' motivation

Student motivation was rated by lecturers between *good* and *excellent*, with most modules receiving a *very good* rating. This implies that students are generally engaged and interested in the topics.

Content meeting qualification requirements

Finally, the match between the content of education and qualification requirements was consistently rated as *very good* or *excellent*, indicating that the modules meet the formal academic and professional standards expected of a bachelor's program.

In summary, the general assessments highlight that the modules are well-designed and effective, though some specific areas, such as the time allocated to certain topics and content depth in a few modules, could be improved to further enhance the program.

An examination of the data shows that the general assessments of the modules did not strongly depend on the length of teaching experience. Lecturers with both shorter and longer teaching careers gave mostly *very good* or *excellent* ratings across the different criteria.

For example:

- Lecturers with over **25 years of experience** rated modules as *very good* or *excellent* almost uniformly, showing satisfaction with the content and relevance.
- The lecturers with only **1 year of experience** also rated the module very positively (*very good* in all categories), indicating no noticeable lack of appreciation or understanding due to limited experience.
- Those in the **11–15 years** range and the **3 years** range also provided largely positive ratings (*good*, *very good*, *excellent*) but did note specific suggestions for improvement, especially about time allocation and teaching methods.

Thus, while experienced lecturers sometimes provided more nuanced qualitative comments and suggestions for improvement, the overall ratings were consistently high regardless of experience level. This suggests that the modules were perceived as relevant, well-structured, and appropriate by both novice and seasoned educators.

4.13 Skills and Knowledge

All respondents confirmed that the necessary skills and knowledge were taught during the modules.

4.14 Suggestions for Module Development

Financial Management – Polish

Accounting subjects are covered to a sufficient extent; no additional development suggested.

Economic Policy – Polish

The module should be further developed by aligning its content with the knowledge and goals of the Agenda 2030 Targets.

Managerial Accounting – English

The module could be improved by introducing advanced tasks that integrate content from multiple modules and by adopting more modern teaching methods.

Basics of Financial Accounting – Polish

The content sufficiently supports the acquisition of basic knowledge and skills; no further changes proposed.

Corporate Social Responsibility (CSR) – Polish

More time is needed to not only introduce and discuss the basic concepts of CSR, but also to have the opportunity to critically analyze them and conduct a case study so that students have a deeper understanding of the social and environmental dimensions of economic activity.

Supply Chain Management – English

Restructure the meetings to begin with a case study at the start of the semester, that will bring the context to students and should increase student motivation.

Digital Economy – Polish

No specific suggestions provided.

Environmental Management Systems (team project) – Polish

No specific suggestions provided.

Modelling the Labour Market – English

Prepare additional materials on the impact of AI on the labour market to enrich the module content.

4.15 Conclusion

The bachelor program modules were well-received, with strong ratings in content quality and relevance. Key recommendations emphasize deepening practical analysis, modernizing teaching formats, and better integrating global and technological trends. These insights provide a solid foundation for further improving the curriculum to meet both academic and professional standards.

4.2 Feedback Analysis Based on Students' Responses

This part of evaluation report evaluates the structure, quality and effectiveness of the Bachelor's degree program in „Business Administration & Sustainable Management of SMEs”. The evaluation is based on a questionnaire, which was carried out after the end of every module. Each module is reviewed individually.

Altogether 39 students completed the survey.

During the survey, the following subjects/modules were evaluated by the students:

Evaluated program module	Number of answers received
Financial Management – Polish	2
Economic Policy – Polish	19
Basics of Financial Accounting -Polish	1
Supply Chain Management – English	1
Digital Economy – Polish	5
Modelling the Labour Market – English	1
Financial Accounting – English	4
Management Accounting – Polish	3
Methodology of Writing a Diploma Thesis - Polish	3
Total	39

4.21 Participant Profile

Of the respondents to the questionnaire, 15 were female and 24 were male (Figure 1).

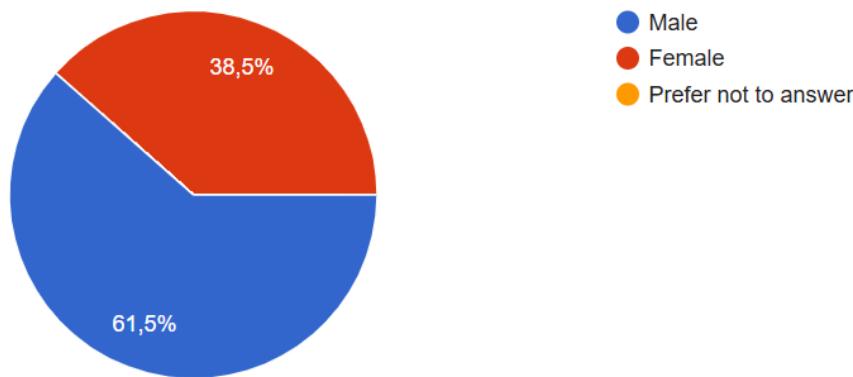


Figure 1. The gender distribution of the questionnaire respondents

All the students participating in the survey were 18 - 24 years old.

Almost three quarters of the respondents are in the 2nd year, 18 % from the third year, a few are in the 3rd, 4th, and 5th year (Figure 2).

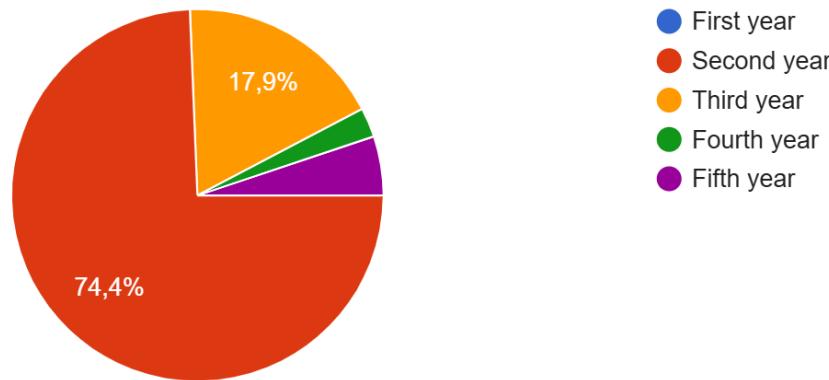


Figure 2. The distribution of respondents by year of study

Professional experience: Almost half of the respondents didn't have any previous professional experience, one third had up to one year of work experience (Figure3). Three respondents had professional experience for four or five years.

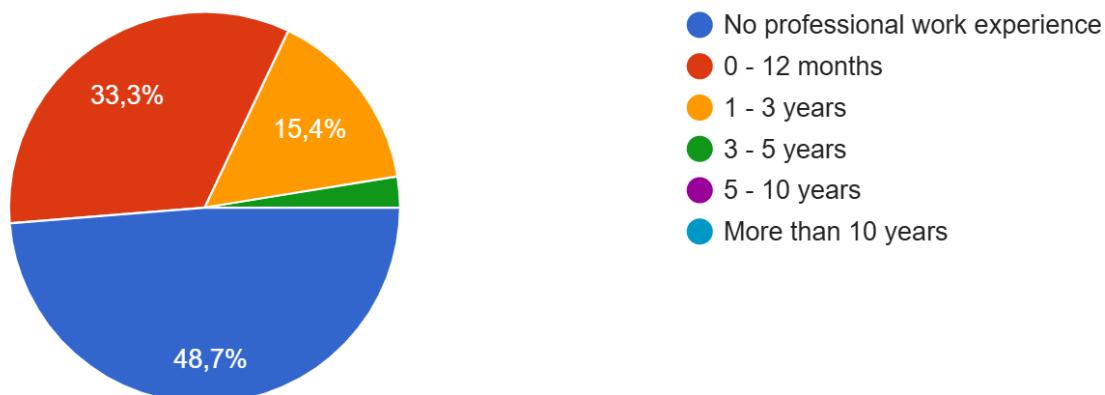


Figure 3. The distribution of respondents by professional experience

The respondents were mostly high school graduates (26 respondents), four with technical high school, 8 with college/university (Bachelor's Degree) background and 1 with Master's Degree from college/university (Figure 4).

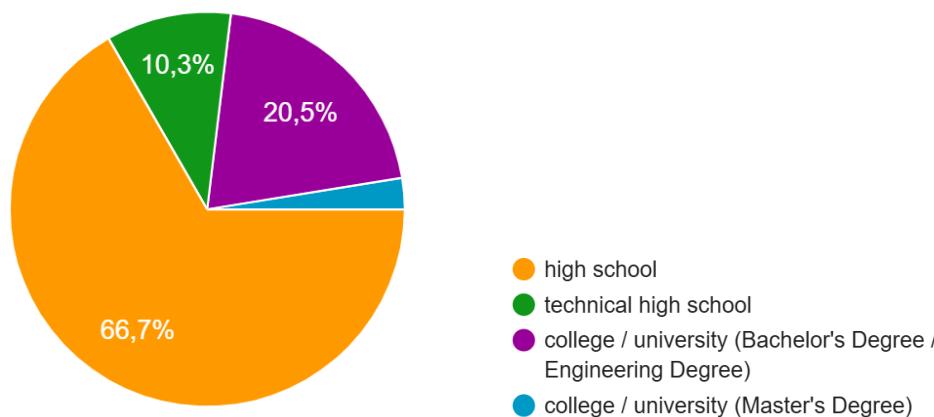


Figure 4. Educational background of respondents

Only few participants (4) had previous additional courses before enrollment. The additional courses were in IT, economics and accounting.

4.3 Opinions about the Study Program “Business Administration & Sustainable Management of SMEs”

The Study Program was evaluated from three perspectives.

- 1) The Study Program provided sufficient practical skills for business administration of small and medium-sized (SME) enterprises.
Of all the respondents 62% agreed with this statement and 18% of respondents believed that the curriculum did not provide sufficient practical skills for business administration. The remaining respondents had no clear opinion on this matter.
- 2) The curriculum provided sufficient knowledge about sustainable management for SMEs.
The results were the same as for the previous question - also 62% of respondents agreed with this statement and 18% of the respondents believed that the curriculum did not provide sufficient knowledge about sustainable management for SMEs. The remaining respondents had no clear opinion on this matter.
- 3) The balance between theory and practical training was adequate.
Compared to the previous statement, a larger proportion of respondents expressed agreement - 72% of respondents agreed with this statement and only 13% of respondents believed that the theory and practical training wasn't in balance. The remaining respondents (15%) had no clear opinion on this matter.

4.31 Evaluation of the Module "Economic Policy – Polish"

The module was evaluated by 19 participants. Below, the responses received have been analyzed sequentially by question.

a. Facilitation (location, room, etc.)

Opinions ranged from strongly disagree to strongly agree, in summary 79% agreed that the facilitation was suitable for learning. Only 11 % disagreed with that and 10% had no clear opinion on this matter.

b. Relevance of topics and issues

79 % of the respondents found that the topics and issues were relevant and responded to the goals of study program, 21 % of the respondents disagreed with this statement.

c. Up-to-date information

Again, polarization was visible: 63% of the students appreciated the currency of the material, while others disagreed (37%), indicating that more recent examples or updated references might be needed.

d. Clarity and understanding of presentations

74% of the participants agree or strongly agree, showing general satisfaction. However, a smaller group (15%) reported poor clarity, the other 11% had no clear opinion on this matter.

e. Lecturer explanations

Most respondents (85%) acknowledged that explanations were clear and understandable, though negative responses also appeared (15%), who didn't agree, that the lecturers explained topics of the lessons clearly and understandably.

f. Handling additional questions and issues

Mixed but mostly positive, 79% of the students felt that additional questions and topical issues arisen during the course were handled well. Only one person felt that the questions remained unanswered, he was generally very critical of all the answers, but he still recommends this course to others. Two people had no clear opinion on this matter.

g. Time allocation

Diverse views were reported. 63% of students agreed that there was enough time per topic, but 37% of respondents disagreed with that.

h. Knowledge gained

Most participants (74%) felt they acquired valuable knowledge from the lessons. Still, a few (21%) disagreed. One person had no clear opinion on this matter.

i. Application of knowledge to career

Over half (58%) agreed or strongly agreed they could utilize the knowledge gained from lessons in their future career, yet some respondents (36%) expressed doubt in that. One person had no clear opinion on this matter.

4. Group Size and Dynamics

Most groups had 21–30 students, with a few reporting 31–40 or 10–20. All students agreed that group size was optimal for learning.

5. Recommendation of the Module

A little less than half of the respondents recommend the course to the others. There was nobody against recommending the module to someone you know, but slightly over half of the respondents answered this question maybe.

6. Balance of Topics

Almost everybody agreed that the proportion of topics and issues inside module was suitable, only one person thought that the proportion of topics and issues inside module should be better balanced.

7. Reported Strengths of the Course

- Reliability, interesting activities
- Global perspective, current relevance
- Practical knowledge and many important information about political topics
- Positive classroom atmosphere
- Additional knowledge about regional policy
- Insurance
- Good practice, interesting topics

8. Suggestions for Improvement

There was only one suggestion for improvement – feedback on time.

4.32 Evaluation of the Module “Digital Economy – Polish”

The module was evaluated by five participants. Below, the responses received have been analyzed sequentially by question. One participant rated all aspects very negatively (strongly disagreed across most items), but at the end he gave positive feedback that the presentations were good.

a. Facilitation (location, room, etc.)

Opinions ranged from strongly disagree to agree, in summary two respondents (40%) agreed that the facilitation was suitable for learning, one (20%) disagreed with that and two (40%) had no clear opinion on this matter.

b. Relevance of topics and issues

Three respondents (60%) found that the topics and issues were relevant and responded to the goals of study program, one respondent (20%) disagreed, and one had no clear opinion on this matter.

c. Up-to-date information

Most of the students (60%) appreciated the currency of the material, while one disagreed (20%) and one had no clear opinion on this matter.

d. Clarity and understanding of presentations

40% of the participants agreed and just as many disagreed that the presentations during the module were clear and understandable. One person had no clear opinion on this matter.

e. Lecturer explanations

Most respondents (60%) acknowledged that explanations were clear and understandable, though one negative response also appeared (20%), who didn't agree, that the lecturers explained topics of the lessons clearly and understandably. One person had no clear opinion on this matter.

f. Handling additional questions and issues

Only one student (20%) felt that additional questions and topical issues arisen during the course were handled well. Only one person felt that the questions remained unanswered. 60 % had no clear opinion on this matter.

g. Time allocation

Diverse views were reported. One person (20%) agreed that there was enough time per topic, but 40% of respondents disagreed with that and just as many had no opinion on the matter.

h. Knowledge gained

Most participants (60%) felt they acquired valuable knowledge from the lessons. Still, a few (40%) disagreed.

i. Application of knowledge to career

A little less than half (40%) agreed they could utilize the knowledge gained from lessons in their future career, yet one respondent (20%) expressed doubt about that. Two people had no clear opinion on this matter.

4. Group Size and Dynamics

Group sizes varied between responses—from 10–20 students to over 41 students—likely indicating that participants attended different subgroups or sessions. All respondents agreed that the group size was optimal for acquiring knowledge.

5. Recommendation of the Module

Two students (40%) recommend the course to the others. There was nobody against recommending the module to someone you know, but 60% of the respondents answered this question maybe.

6. Balance of Topics

Everybody agreed that the proportion of topics and issues inside module was suitable and well balanced.

7. Reported Strengths of the Course

- Positive mention of good presentations.
- Group work and collaborative activities were appreciated by multiple participants.
- The course helped them understand real-life contexts better.

8. Suggestions for Improvement – there were no suggestions for improvement.

4.33 Evaluation of the Module “Financial Management – Polish”

The module was evaluated by two participants. Below, the responses received have been analyzed sequentially by question.

a. Facilitation (location, room, etc.)

Both participants agreed that the facilitation was suitable for learning.

b. Relevance of topics and issues

One of the students agreed that the topics and issues were relevant and responded to the goals of study program, the other had no clear opinion on this matter.

c. Up-to-date information

Both participants agreed that the information presented was up to date.

d. Clarity and understanding of presentations

Both respondents had no clear opinion on this matter.

e. Lecturer explanations

Both respondents had no clear opinion on this matter.

f. Handling additional questions and issues

Both students agreed that additional questions and topical issues arisen during the course were handled well.

g. Time allocation

Both students agreed that there was enough time per topic.

h. Knowledge gained

One respondent felt that she acquired valuable knowledge from the lessons. Still, the other one disagreed.

i. Application of knowledge to career

One of the students agreed that he could utilize the knowledge gained from lessons in their future career. The other one had no clear opinion on this matter.

4. Group Size and Dynamics

The groups had 21–30 students, both students agreed that group size was optimal for learning.

5. Recommendation of the Module

There was nobody against recommending the module to someone you know, but both students answered this question maybe.

6. Balance of Topics

One student agreed that the proportion of topics and issues inside module was mostly suitable, the other one thought that the proportion of topics and issues inside module should be better balanced, there wasn't enough practical knowledge.

7. Reported Strengths of the Course

- Many jobs' prospects
- Practical training

8. Suggestions for Improvement

- Too many unnecessary topics such as philosophy, PE, not enough real knowledge associated with running a business

4.34 Evaluation of the Module “Basics of Financial Accounting -Polish”

The module was evaluated by one participant. Below, the responses received have been analyzed sequentially by question.

a. Facilitation (location, room, etc.)

Respondents agreed that the facilitation was suitable for learning.

b. Relevance of topics and issues

The respondent found that the topics and issues were relevant and responded to the goals of study program.

c. Up-to-date information

Also, the respondent strongly agreed that the information presented was up to date.

d. Clarity and understanding of presentations

The participants had no clear opinion on this matter.

e. Lecturer explanations

The respondent acknowledged that explanations were clear and understandable.

f. Handling additional questions and issues

A student strongly agreed that additional questions and topical issues arisen during the course were handled well.

g. Time allocation

A respondent agreed that there was enough time per topic.

h. Knowledge gained

A student agreed that she acquired valuable knowledge from the lessons.

i. Application of knowledge to career

Also, she agreed she could utilize the knowledge gained from lessons in her future career.

4. Group Size and Dynamics

Group size was 31–40 and it was optimal for learning.

5. Recommendation of the Module

She would recommend the course to the others.

6. Balance of Topics

The module was well balanced, the proportion of topics and issues inside module was suitable.

7. Reported Strengths of the Course

- Presentations and exam

8. Suggestions for Improvement – there were no suggestions for improvement.

4.35 Evaluation of the Module “Supply Chain Management – English”

The module was evaluated by one participant. Below, the response received has been analyzed sequentially by question.

a. Facilitation (location, room, etc.)

A respondent strongly agreed that the facilitation was suitable for learning.

b. Relevance of topics and issues

The respondent found that the topics and issues were relevant and responded to the goals of study program.

c. Up-to-date information

Also, the respondent agreed that the information presented was up to date.

d. Clarity and understanding of presentations

The participant strongly agreed that the presentations during the module were clear and understandable.

e. Lecturer explanations

The respondent acknowledged that explanations were clear and understandable.

f. Handling additional questions and issues

A student strongly agreed that additional questions and topical issues arisen during the course were handled well.

g. Time allocation

A respondent agreed that there was enough time per topic.

h. Knowledge gained

A student strongly agreed that he acquired valuable knowledge from the lessons.

i. Application of knowledge to career

Also, he agreed he could utilize the knowledge gained from lessons in his future career.

4. Group Size and Dynamics

Group size was 21–30 and it was optimal for learning.

5. Recommendation of the Module

She would maybe recommend the course to the others.

6. Balance of Topics

The module was well balanced, the proportion of topics and issues inside module was suitable.

7. Reported Strengths of the Course

- Interesting

8. Suggestions for Improvement – there were no suggestions for improvement.

4.36 Evaluation of the Module “Financial Accounting – English”

The module was evaluated by four participants. Below, the response received has been analyzed sequentially by question. This module got the most positive feedback from students and was highly rated.

a. Facilitation (location, room, etc.)

All respondents agreed that the facilitation was suitable for learning.

b. Relevance of topics and issues

All respondents found that the topics and issues were relevant and responded to the goals of study program.

c. Up-to-date information

Also, all the respondents agreed that the information presented was up to date.

d. Clarity and understanding of presentations

The participants strongly agreed that the presentations during the module were clear and understandable.

e. Lecturer explanations

The respondent acknowledged that explanations were very clear and understandable.

f. Handling additional questions and issues

All students agreed and strongly agreed that additional questions and topical issues arising during the course were handled well.

g. Time allocation

A respondent agreed that there was enough time per topic.

h. Knowledge gained

All students strongly agreed that he acquired valuable knowledge from the lessons.

i. Application of knowledge to career

Also, all agreed they could utilize the knowledge gained from lessons in their future career.

4. Group Size and Dynamics

Group size was 21–30 and 10-20 students, both groups were optimal for learning.

5. Recommendation of the Module

All students would recommend the course to others.

6. Balance of Topics

75 % of the students considered the module was well balanced, 25% considered the proportion of topics and issues inside module was mostly suitable.

7. Reported Strengths of the Course

- Master important financial skills
- Actual practical knowledge gained and a lot of tasks, not just dry theory. A well-established balance.
- The course provided the fundamentals of accounting that are essential in any business-related job and just good for general knowledge. Also, Professor Ziętarski.

8. Suggestions for Improvement - Everything was the best.

4.37 Evaluation of the Module “Modelling the Labour Market – English”

The module was evaluated by one participant. Below, the response received has been analyzed sequentially by question.

a. Facilitation (location, room, etc.)

A respondent strongly agreed that the facilitation was suitable for learning.

b. Relevance of topics and issues

The respondent found that the topics and issues were relevant and responded to the goals of study program.

c. Up-to-date information

Also, the respondent agreed that the information presented was up to date.

d. Clarity and understanding of presentations

The participant strongly agreed that the presentations during the module were clear and understandable.

e. Lecturer explanations

The respondent acknowledged that explanations were clear and understandable.

f. Handling additional questions and issues

A student strongly agreed that additional questions and topical issues arisen during the course were handled well.

g. Time allocation

A respondent agreed that there was enough time per topic.

h. Knowledge gained

A student strongly agreed that he acquired valuable knowledge from the lessons.

i. Application of knowledge to career

Also, he strongly agreed he could utilize the knowledge gained from lessons in his future career.

4. Group Size and Dynamics

Group size was less than ten students, and it was optimal for learning.

5. Recommendation of the Module

He would recommend the course to the others.

6. Balance of Topics

The module was well balanced, the proportion of topics and issues inside module was suitable.

7. Reported Strengths of the Course

- Communication, studio skills

8. Suggestions for Improvement – there were no suggestions for improvement.

4.38 Evaluation of the Module “Management Accounting – Polish”

The module was evaluated by three participants. Below, the responses received has been analyzed sequentially by question.

a. Facilitation (location, room, etc.)

67% of the respondents agreed that the facilitation was suitable for learning, 33% had no clear opinion on this matter, 33% disagree with that.

b. Relevance of topics and issues

67% of the respondents found that the topics and issues were relevant and responded to the goals of study program.

c. Up-to-date information

Also 67% of the students agreed that the information presented was up to date, 33% disagree with that.

d. Clarity and understanding of presentations

One third agreed that the presentations during the module were clear and understandable, one third disagreed with that and one third had no clear opinion on this matter.

e. Lecturer explanations

Two thirds acknowledged that explanations were clear and understandable, one third disagreed with that.

f. Handling additional questions and issues

67% of the students agreed that additional questions and topical issues arisen during the course were handled well, 33% had no clear opinion on this matter.

g. Time allocation

67% of the students had no clear opinion on this matter ,33 % agreed that there was enough time per topic.

h. Knowledge gained

67% of the students agreed that they acquired valuable knowledge from the lessons, 33% had no clear opinion on this matter.

i. Application of knowledge to career

Only one person agreed he could utilize the knowledge gained from lessons in his future career, two people had no clear opinion on this matter.

4. Group Size and Dynamics

Group sizes were: 10-20, 21-30, 31-40 - all the group sizes were optimal for learning.

5. Recommendation of the Module

One student would recommend the course to the others, one said he maybe would recommend this module. One student said he wouldn't recommend the module to others, and the reason was there were irrelevant topics, very boring and confusing at times. This respondent gave to all the questions negative feedback.

6. Balance of Topics

67% found the module was well balanced, and the proportion of topics and issues inside module was suitable. 33% found the module was mostly suitable.

7. Reported Strengths of the Course

- Easy to pass (the answer was given by the student who was previously negative about the module)
- Straight forward course, every aspect explained very well.

8. Suggestions for Improvement – there were no suggestions for improvement.

4.39 Evaluation of the Module “Methodology of Writing a Diploma Thesis - Polish”

The module was evaluated by three participants. Below, the responses received have been analyzed sequentially by question.

a. Facilitation (location, room, etc.)

33% of the respondents strongly agreed that the facilitation was suitable for learning, 67% had no clear opinion on this matter.

b. Relevance of topics and issues

All respondents found that the topics and issues were relevant and responded to the goals of study program.

c. Up-to-date information

All the respondents agreed that the information presented was up to date.

d. Clarity and understanding of presentations

67% strongly agreed that the presentations during the module were clear and understandable, 33% had no clear opinion on this matter.

e. Lecturer explanations

All participants agreed that explanations were clear and understandable.

f. Handling additional questions and issues

67% of the students agreed that additional questions and topical issues arisen during the course were handled well, 33% had no clear opinion on this matter.

g. Time allocation

All the students agreed that there was enough time per topic.

h. Knowledge gained

67% of the students agreed that they acquired valuable knowledge from the lessons, 33% had no clear opinion on this matter.

i. Application of knowledge to career

67% of the students agreed they could utilize the knowledge gained from lessons in his future career, 33% had no clear opinion on this matter.

4. Group Size and Dynamics

Group sizes were over 41 students, 33% of students claimed it is too much for one group. 67% thought the group size was optimal for learning.

5. Recommendation of the Module

One student would recommend the course to the others, two students said they maybe would recommend this module.

6. Balance of Topics

All the students found the topics and issues inside module were mostly suitable.

7. Reported Strengths of the Course

- Up to date
- Very useful
- Interesting course

8. Suggestions for Improvement – there were no suggestions for improvement.

4.4 Conclusion and suggestions

In conclusion, it can be stated that all evaluated modules effectively supported the objectives of the Bachelor's degree program "Business Administration & Sustainable Management of SMEs". Students recognized the relevance and applicability of the modules, noting that the knowledge and skills acquired would be beneficial in their future professional careers.

The optimal group size for effective learning was identified as up to 40 students. Groups exceeding this size make it more challenging to achieve the intended learning outcomes.

In the teaching of different modules, it is important to ensure that modern information and real-life examples are used. Students also emphasize the importance of including practical exercises and group work alongside theoretical content, as this makes the course more diverse and engaging for them.

For the students who participated in the survey, the three main criteria related to the Bachelor's degree program "Business Administration & Sustainable Management of SMEs" were fulfilled:

1. The Study Program provided sufficient practical skills for the business administration of small and medium-sized (SME) enterprises,
2. The curriculum provided sufficient knowledge about sustainable management for SMEs, and
3. The balance between theory and practical training was adequate.

4.5 Prospects for future uses

Germany

The Hamburg University of Applied Sciences (PP7 BHH) already has extensive experience in running dual bachelor's degree programmes in general and specifically in collaboration with SMEs. As part of the BA&VET project, the university has developed the concept, curriculum and teaching materials for a new degree programme in 'Business Administration & Sustainable Management of SMEs' and provided advice on the practical testing of modules. The university has decided to

implement this degree programme in the future. Preparations for this began during the project period and will continue intensively after the end of the project, so that implementation can begin in autumn 2026 at the earliest, but no later than 2027.

Poland

Further implementations are also planned in Poland. Individual modules of the new Business Administration & Sustainable Management of SMEs degree programme will continue to be integrated into existing degree programmes and offered. In order to be able to implement the planned permanent introduction of the entire degree programme, a lengthy process must be completed. Introducing a new study programme at a Polish university, even one with high academic status such as Gdańsk University of Technology (Gdańsk Tech), is a demanding and multi-stage process. It requires coordination between academic staff, internal university authorities, and national accreditation institutions. The process aims to ensure that every programme meets both national legal requirements and European quality standards.

Polish higher education operates under the Law on Higher Education and Science (2018). The act defines who can create new programmes and under what conditions. Universities holding a scientific category of A+, A or B+ in a relevant discipline have the right to create new programmes autonomously.

Gdańsk University of Technology meets these criteria in several disciplines, including Economics and Finance, Management and Quality Sciences, and Environmental and Energy Engineering. Therefore, it can introduce new programmes independently, such as: Business Administration & Sustainable Management of SMEs (WP3),

However, even with autonomy, the path from concept to launch is long and formalized.

To strengthen credibility abroad, GUT also apply for international accreditation: CEEMAN IQA or AACSB/EFMD for business-oriented programmes (such as Sustainable Management).

International accreditation typically follows six stages. (1) Eligibility & scoping: the faculty maps standards (CEEMAN IQA or AACSB/EFMD) to the programme, appoints a steering team, and confirms readiness. (2) Gap analysis & action plan: a diagnostic against ESG-compatible criteria (mission, learning goals, assurance of learning, faculty qualifications, engagement, impact) yields a remediation plan with milestones. (3) Self-assessment report (SAR): a rigorous evidence pack covering governance, curriculum design, AoL processes, stakeholder engagement, research relevance, and continuous improvement. (4) Peer review visit: international reviewers validate evidence through interviews with leadership, faculty, students, alumni, and employers; they test AoL loops and data integrity. (5) Decision & conditions: the board grants accreditation (often with improvement actions) or defers pending fixes. (6) Maintenance: annual reporting and mid-cycle reviews demonstrate ongoing improvement.

The Faculty of Management and Economics remains committed to advancing interdisciplinary, sustainability-focused business education aligned with both academic excellence and market needs. Accordingly, the faculty intends to begin the further internal process and external accreditation of the new degree programme immediately after the end of the project.

Estonia

There have been no dual study programmes in Estonia to date. It is a major success of the BA&VET project that the University of Tartu, Pärnu College (PP3 TUT), based on the project experience, has launched a groundbreaking integrated vocational and applied higher education programme and started its implementation while the project is still running: Tourism and Hotel Management in Estonia. Pärnu College is also planning to implement the newly developed degree programme 'Business Administration & Sustainable Management of SMEs' and has begun internal preparations and consultations with the University of Tartu.

Finland

Satakunta University of Applied Sciences is a higher education institute and belongs to the third stage in the Finnish educational hierarchy. This means, that students applying the universities of applied sciences must have graduated secondary level, i.e., either passed the matriculation exam or graduated the vocational education institute. Universities of applied sciences do not give vocational education and training (VET). Vocational education and training is a privilegium of VET-institutes, that are either private or owned by municipals, foundations or educational federations. The VET-institutes are strictly controlled by government, the curricula are designed or at least controlled and accepted by ministry of education and culture, and an individual school has only limited opportunities to impact on curricula.

Although universities of applied sciences (UAS) are much more independent, each UAS has an obligation to ensure that their curricula are completing the requirements of bachelor's degree or master's degree. This means that each UAS has a process of their own according to which curricula are designed and approved. In common, this process may take from six to twelve months. The implementation and quality of curricula is controlled by collecting feedback from students.

Even if the universities of applied sciences and VET-institutes have different regulation frameworks, many UASs collaborate with local and regional VET-institutes both in RDI-projects and in educational issues. In Finland, it is not possible to implement dual study programmes. The concepts and curricula developed in the project will be used here in future as 'normal' bachelor's degree programmes. To this end, additions will be made to certain subjects (e.g. physics, chemistry, mathematics, liberal arts and language skills) in order to comply with Finnish requirements for bachelor's examinations. In addition, modules from the project's degree programmes will be incorporated into existing degree programmes at Satakunta University (PP2 SAMK). SAMK collaborates

with both vocational education institutions and companies and other organizations too, thus, the results gained and curricula developed can be disseminated to VET institutions, enterprises, and organizations in Finland.

Other countries

From 2024 to 2028, Centres of Vocational Excellence (COVE) will be established in Germany, Denmark, Poland, Lithuania, Finland, the Netherlands, Hungary and Ukraine, which will be jointly operated by universities, vocational schools, chambers and associations. These centres have already decided to use and implement the study programmes developed in the BA&VET project.