

**Programme accreditation** 

ASSESSMENT REPORT

Applied Information Technology (Bachelor) at International Business College Mitrovica (IBC-M), Kosovo

# IMPRINT evalag (Evaluationsagentur Baden-Württemberg) Foundation under public law M 7, 9a-10, 68161 Mannheim; Germany www.evalag.de

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# 1. International Business College Mitrovica (IBC-M)

IBC-M is an independent non-profit educational foundation in Kosovo, under the umbrella of the Ministry of Public Administration and licenced by the Ministry of Education Science Technology and Innovation of Kosovo. Originally founded in 2010 by the Dutch NGO SPARK its current main donor is the European Union.

Being accredited by **evalag** (Evaluationsagentur Baden-Württemberg) as well as by the Kosovo Accreditation Agency (KAA), IBC-M offers the following study programmes:

- International Sales and Marketing (Bachelor)
- Public Service Management (Bachelor)
- Environmental and Agricultural Management (Bachelor)
- International Management and Leadership with specialisation on Business Management and Environmental Management (Master)

In addition to these programmes and in cooperation with the University College Lillebaelt (Denmark) IBC-M offers a double degree on Academy Profession (ISCED level 5) in:

- Environmental and Agricultural Management
- Marketing and Management
- Public Administration

Three other bachelor degrees are double issued by IBC-M, University College Lillebaelt (Denmark) and VIKO University of Applied Sciences (Lithuania).

The language of instruction and communication at IBC-M is English only. In order to facilitate studying in English, IBC-M prepares prospective students in optional three months English courses, which are offered free of charge. Upon enrolment, academic English lessons and tutoring are provided by a native speaking teacher throughout their study programmes.

IBC-M intends to offer the new programme "Applied Information Technology (Bachelor)" for the first time in winter semester 2020/21. The programme's duration is three years, a maximum of 60 students may enrol.

## 2. The accreditation procedure

Since the study programme is newly developed and has not yet been offered, a concept assessment was performed. This procedure took place as an informed peer review on the basis of the self-evaluation report provided by IBC-M, a site visit conducted online by an international expert panel, an assessment report by the expert panel and the accreditation decision made by the **evalag** Accreditation Commission.

<sup>&</sup>lt;sup>1</sup> Due to the consequences of the corona pandemic, an on-site visit was not possible. An agreement was reached with IBC-M to hold a full-day video conference which was also considered sufficient by the Kosovo Accreditation Agency (KAA). ZOOM was used a technical platform for this purpose, since there is a contract between **evalag** and ZOOM for commissioned data processing in order to ensure that the conferences are carried out in conformity with European data protection law. The discussions during the video conferences were not recorded. The length of the web conferences did not differ from the conversations that would have taken place in an on-site inspection. Instead of a personal inspection of the premises, the group of experts was provided with various video and image material to enable them to inspect the campus, the premises and the equipment.

The procedure applies the eligibility for purpose approach which assesses to what extent a programme complies with the **evalag** criteria for programme accreditation.<sup>2</sup> These are formulated in coherence with the European Standards and Guidelines (ESG).<sup>3</sup>

These criteria mainly focus on the profile of the programme and its curriculum. Furthermore, the criteria cover all aspects of the implementation of a study programme, its quality assurance and its resources. With regard to the criteria of programme profile and curriculum, **evalag** also assesses if the programme meets academic standards that are accepted in the European Higher Education Area (EHEA).<sup>4</sup>

The following six criteria are applied:

- Programme profile
- Curriculum
- Student assessment
- Organisation of the study programme
- Resources
- Quality assurance

The experts express the extent of compliance of the criteria with the following assessments: "passed", "passed subject to conditions", "suspension of the accreditation procedure" or "failed". Depending on the degree to which a programme meets the criteria, the programme will be accredited, accredited with conditions or not accredited.

The proceedings can be suspended until a new application if the programme does not fulfil relevant criteria, but it is likely that the institution will be able to remedy the short-comings within 18 months after the assessment.

As a first step of the procedure and in preparation for the site visit, IBC-M provided a self-evaluation report considering guidelines provided by **evalag**. At the same time **evalag** formed an expert panel consisting of five experts including one student expert:

#### Academic experts:

- Prof. Astrid Beck, Professor for Human-Computer-Interaction at Hochschule Esslingen – University of Applied Sciences (Germany), President of the German Usability Professional's Association (German UPA)
- FH-Prof. Dipl.-Ing. Werner Fritz, Head of Department of Applied Computer
   Sciences and Head of Institute of Information Management at FH JOANNEUM
   University of Applied Sciences Graz (Austria)
- Prof. Dr. Andreas Henrich, Chair of Media Informatics at University of Bamberg (Germany)

# Expert from professional practice:

 Anne Hadler, Senior Director Digital Germany & Switzerland at Cognizant, Frankfurt am Main (Germany)

<sup>&</sup>lt;sup>2</sup> https://www.evalag.de/fileadmin/dateien/pdf/akk\_international/standards\_kriterien/prog\_acc\_process\_criteria\_171201.pdf (accessed July 24, 2020)

<sup>&</sup>lt;sup>3</sup> https://enqa.eu/wp-content/uploads/2015/11/ESG\_2015.pdf (accessed July 24, 2020)

<sup>&</sup>lt;sup>4</sup> The European Higher Education Area (EHEA) is a group of 48 countries that cooperate to achieve comparable and compatible higher education systems throughout Europe. Member countries of the EHEA follow the directives of the so-called Bologna Process to achieve these goals.

#### Student expert:

 Thomas Bach, PhD student in Computer Science at Heidelberg University (Germany), Member of the QA pool of European Students' Union (ESU)

All experts declared to be free of any conflict of interest.

IBC-M submitted the Self Report on June 1, 2020. The online meetings (annex) took place on July 20, 2020. The expert panel met the leadership of IBC-M, academic and administrative staff, students and alumni from current study programmes.<sup>5</sup> A five-minute film gave an impression of the local conditions.

After the online meetings the expert panel produced an assessment report which was submitted to the university for correction of potential factual errors on August 19, 2020.

In response, IBC-M has made some fundamental changes to the concept of the study programme and submitted new documents on September 1, 2020. The present report takes these changes into account.

From **evalag**'s side, Georg Seppmann coordinated and carried out the project, assisted by Sibela Drekovic.

The experts thank the organisers of the online meetings for the opportunity for additional questions and the open discussion during the online meetings and thereafter. In presenting the new concept, IBC-M addressed most of the critical aspects mentioned in the August report in a very short time. The experts consider this to be an impressive example that internal quality management works effectively at IBC-M.

The present assessment report is structured along the six assessment criteria, which form the basis for the decision of the **evalag** international programme accreditation. After a short description of the criterion, each chapter starts with a presentation of the current status regarding the criterion which is based on the information from the self-assessment report of the university as well as the information acquired during the online meetings. On this basis, the expert panel assesses the criterion. Finally, the experts provide their recommendations for further improvement.

# 3. Programme assessment

#### 3.1 Programme profile

The profile and objectives of a study programme is an essential criterion for the assessment. The experts have to evaluate, whether the objectives of the programme are in line with the profile and the strategic goals of the institution. Further, they assess if the intended learning outcomes of the programme are well defined, publicly accessible and whether they correspond to the type and level of qualification provided by the programme. They also consider whether the intended learning outcomes are based on academic or professional requirements (standards), public needs and the demands of the labour market, and if they contribute to the employability of the graduates. The experts have to evaluate the programme's relation to research (procurement of scientific methods in theory and practice, research-based teaching). The experts assess whether the profile and objectives of the programme comply with internationally accepted standards. The experts consider the international dimension of the programme and verify

<sup>&</sup>lt;sup>5</sup> Since the programme has not yet started, the experts talked to students and alumni from other IBC-M programmes.

whether the qualification of the academic staff is adequate in terms of the profile and the objectives of the programme.

#### **Current status**

Programme profile and objectives

The study programme "Applied Information Technology (Bachelor)" is a full-time programme organised in seven semesters. Successful graduates receive a bachelor degree. Table 1 shows some statistical information on the programme:

Name of study programme	Applied Information Technology
Planned start	Academic year 2020/2021
Final degree	Professional Bachelor
Duration of study	3.5 years
Credits (ECTS or other system)	210 ECTS credits
Capacity per semester/study year	60 quota/academic year
Academic staff intended for the programme	Heads 13 / 10.5 FTE contributing at least partially to the programme
Part-time academic staff in the programme	hired on basis of future programme needs and/or number of students

Tab. 1: Data on the study programme<sup>6</sup>

According to the self-report, the programme "Applied Information Technology (Bachelor)" aims to respond to the essential needs of Kosovo society and links IT knowledge with business and entrepreneurship using the support of digital media. According to the programme handbook, the primary objective of the study programme is to educate competent professionals in the fields of computer science and information technology later required in the domestic as well as in international markets. Graduates would be "able to solve all IT problems by using the tools of computer science, software engineering and information technologies."

The documents submitted explain that the programme aims to offer new and modern content in computer science to students, with a focus on core IT areas like algorithms and data structures, databases, networks, data analytics, cloud technologies, design and software development in practice, mobile and web application programming, but also the practical thinking how to apply these technologies in the domestic and international markets. This focus on an applied qualification shall combine theoretical components of a traditional study in computer science with a focused approach giving students real-world skills and applicable concepts geared toward their chosen career path. During the study, theoretical and practically useful knowledge would be acquired that enables quick employment, sometimes even before the end of studies.

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<sup>&</sup>lt;sup>6</sup> Source: Self-report by IBC-M

<sup>&</sup>lt;sup>7</sup> Programme handbook, p. 2

Beyond technical learning, the study programme also shall prepare its graduates for Kosovo and the European labour market with various theoretical and applied training on soft skills like problem-solving, communication skills, team work, self-awareness, negotiation and more, and finally a one-semester practical internship in either IT companies, business or civil society organisations and institutions.

The programme is organised in seven semesters. Four semesters consist of six compulsory courses each while in the 5th and 6th semester there are compulsory and elective courses.

In order to ensure the practicality of the profession, the 7th semester will be organised as a full semester internship in IT companies, business, and civil society organisations and institutions. At the end of the 7th semester students will complete their individual work on their bachelor thesis.

#### Learning outcomes

The learning outcomes include professional skills as well as generic competences:

- share professional
- work in teams
- follow ethical and professional behaviour
- business planning
- prove knowledge of advanced programming skills
- development of software solutions
- programming and development of web applications
- design, create and modify databases,
- design, create and modify software user interfaces
- designing and creation of mobile applications
- development of information systems
- development, analysis and implementation of information security systems
- development and implementation of intelligent data analysis and visualisation
- administration of networked systems
- administration of computer systems
- digital media
- designing and creation of IoT solutions
- planning and implementation of cloud computing solutions
- designing and creation of AI solutions
- employ industry-standard design software and technologies in the development and management of software projects
- implementation of various e-system models like e-Commerce, e-Government, e-Banking, e-Learning, m-Commerce
- develop the interest and skills base to continue with an academic study of the master level

Graduates should later be employed in a position in which they may successfully use their information technology skills (including: problem solving, analytic, critical and creative thinking, presentation and personal skills). The programme aims to create "effective communicators" (both written and oral) who appropriately apply their learning and leadership style and strengths and work effectively in teams, whether as a participant or as a leader. The field of work would be mainly the software and hardware market in the spheres of software system design, programming, database design, design and implementation of Internet technology etc.

Relation to academic and professional requirements and public needs

According to the self-evaluation report and the interview sessions with the university management, the study programme "Applied Information Technology (Bachelor)" is designed and implemented to answer the lack of programmes that enable students to learn about the effects of Applied IT in business and other economic and social activities. Furthermore, the programme aims to provide the market with potential IT skilled managers and administrators that will enable the use of advanced IT technology in businesses and other entities to contribute towards a higher efficiency of the work processes within their sectors, thus contributing to an overall increase of sustainable development.

After graduating, students would have the required skills to work in firms that are interested in changing their business strategy to a more sustainable direction using the application of ICT. The graduates would be able to build a career as developers, business analysts, network administrators, web masters in all IT-related professional sectors. They could also become an IT expert in a non-governmental or government agency, or in national or international business.

#### Relation between study and research

According to the self-report, IBC-M combines an approach of using basic research practice with applied research needs for the implementation of its study programmes having a tangible impact on the society and environment. In this regard, IBC-M will maximally engage students in potential research and interdisciplinary projects and initiatives that are related to the scope of the current programme. Research activities will be oriented in three main areas below:

- Initiating and performing research and interdisciplinary projects in partnership with local companies, community organisations and other educational institutions (provision of problem-solving expertise in the field of IT)
- Providing an exchange forum for stakeholders in academic and professional communities by hosting annual scientific and innovation conferences (knowledge exchange and dissemination)
- Developing and publishing IT case studies to support student learning (research-based learning tools)

#### International dimension

In accordance with the international college profile, all courses of the study programme are held in English. Besides, from its founding, one of the main intentions of IBC-M was continuously to expand the network of international partners thus both to offer staff and student body participation opportunities in international projects.

Students of IBC-M are coming from all countries in the Balkan region. Partnership agreements with universities from abroad as well as international double degree programmes exist.

In the present case, IBC-M has already held a meeting with programme and faculty representatives from VIKO (Vilniaus Kolegija - University of Applied Sciences) about possible cooperation with their programme "Professional Bachelor in Software Engineering". An agreement was reached on harmonisation of curricula with future perspective to a double degree graduation. Currently, IBC-M and VIKO are working out the details about the cooperation contract. IBC-M has matched the programme curriculum with that of VIKO to a more than 75% level of comparability as required by international double degree standards.

Besides, IBC-M has also contacted the University of Luxembourg to discuss possible cooperation and harmonisation between programmes.

Staff qualification (see also criterion 5)

The staff engaged in the programme is from Kosovo, international staff is mostly from neighbouring countries. They have proven experience and good academic practice in their respective fields. Most of them are already teaching in existing study programmes at the college, three teachers have been recruited recently. The documents attached to the self-evaluation report contained up-to-date lists of publications in addition to the CVs.

Staff recruitment is done according to defined regulations and takes place via a selection process with clear objectives and criteria. A description of staff-related procedures and responsibilities is part of the faculty staff handbook, provided to each member of staff (last updated in November 2019).

#### **Assessment**

Programme profile and objectives

During the interview sessions the experts experienced IBC-M presenting itself as a higher educational institution with high ambition to offer competitive studies of international quality standards. "From theory to practice" was a statement often quoted. All representatives, the experts could talk to, have internalised the college mission as a multi-ethnical, innovative and influential teaching institution which contributes to the further development and growth of society and economy in Kosovo. The experts highlight how enthusiastic and dedicated staff, students and alumni presented themselves in the interview sessions.

The panel appreciates that IBC-M intends to address an obvious need for IT qualification with its new study programme. The programme concept presented looks workable. While the aims of the programme to unite business, IT and digitalisation on an applicable level are by and large clear, yet the description of the objectives of the programme are sometimes kept a little too general. They should be better differentiated according to the experiences made in the first semesters of implementation.

In its duration of seven semesters the programme follows IBC-M's proven concept. According to the experts, the possible electives in the fifth and sixth semesters offer individual opportunities for specialisation.

The experts note a strong preference for certain software products and certificates from dedicated manufacturers only. In the experts' view, this should be reconsidered with respect to the profile of a programme in particular: A bachelor degree even with focus on applicable knowledge must teach the fundamentals and concepts in the first place. The balance between these fundamentals and specific application programmes to be used must be ensured. Knowledge mostly acquired from application programmes might become quickly outdated, especially as soon as new versions are being published. Especially in a bachelor degree in applied IT, dependence on specific products has to be avoided. The experts emphasise that there is no objection to practical working with programmes as long as the academic level is maintained and the underlying basics are in focus.

It may make the programme attractive if certificates relevant to the profession are acquired together with the studies, but this should only be regarded as optional in a university programme on bachelor level.

Learning outcomes and relation to academic and professional requirements and public needs

The learning outcomes described in both self-report and programme handbook reflect the concept stage of a study programme not yet implemented. The descriptions make it sufficiently clear what is to be taught. Nevertheless, after the first semester it will be necessary to critically review all descriptions in the light of the experience made, with the involvement of teachers and students. Platitudes such as "students will be able to solve all IT problems by using the tools of computer science and software engineering, computer applications and information technologies" should be rephrased in a longer perspective since they do not provide any real evidence of qualification.

Even the current description of potential future job profiles seems too broad (ranging from becoming an IT Security Specialist up to an IT Administrator). The expert panel understands that at this very stage further differentiation is not possible. A concept of monitoring the career of graduates as well as a formalized and structured exchange with representatives from the labour market or from institutions hosting internships would help further concretisation of career prospects.

Furthermore, in the panel's assessment, a continuous adjustment of the study programme against accepted curricular recommendations (such as the curricula recommendations of the ACM, <a href="https://www.acm.org/education/curricula-recommendations">https://www.acm.org/education/curricula-recommendations</a>) would be desirable and useful.

#### Relation between study and research

With regard to the college's research activities, the experts learned in the interviews with the academic staff that research cooperation and especially applied research-oriented teaching takes place. Indeed, the college is a grant holder for the Erasmus+ project "Enhancing Research Culture in Higher Education in Kosovo (ResearchCult)". Furthermore, the college encourages its teachers and students to pursue applied research activities such as case studies, field trips, (joint) research projects and publications (with partner institutions and companies), participation in scientific conferences at IBC-M, in Kosovo or abroad in order to expand their knowledge and gain experiences.

The expert panel appreciates that IBC-M makes great efforts to connect teaching and applied research by supporting the integration of project work into the curriculum. However, the thematic fields are not yet visible or at least drafted.

The module descriptions have been revised after the online meetings and can now be considered appropriate and up to date. All module topics should be continuously reviewed in this respect in the future.

#### International dimension

Due to the international programme profile, which includes teaching exclusively in English language and opportunities for international mobility, an international dimension is clearly visible. The experts appreciate the explicit multi-ethnical, international orientation of IBC-M.

Having said that, it becomes even more important, that the profile of the study programme needs to be internationally compatible – to the European labour market as

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<sup>8</sup> Self-report, p.27

<sup>9</sup> Accessed July 24, 2020

well as to prospective European host universities for a continuation of studies (Master, PhD). First efforts in this direction are made (see above).

Staff qualification (see also criterion 5)

In the view of the expert panel, the qualification of the teaching staff at IBC-M seems adequate for a bachelor programme. The experts recognise that there are explicit criteria for staff recruitment and that the recruitment process itself is well developed and transparent.

The relation between full-time and half-time staff seems appropriate. The experts note from the interview sessions that teaching is performed by committed and motivated lecturers. Some of them have international working and teaching experience which is appreciated by the expert panel.

Nevertheless, the course of study as such seems to rest mainly on the shoulders of three professors who cover the main part of the teaching. The college should keep this in mind once the programme has started and continuously monitor the teachers' workload.

#### Areas for improvement

There seems to be a good connection between IBC-M and its surrounding labour market, e.g., through common events and internships. This connection should be used, for example by granting local professional experts a more active role in the redesigning of the new study programme. The expert panel proposes to establish an advisory board to the programme with representatives of the labour market to support the specialisations within the programme. The experts appreciate that European partner universities have been involved more closely into the conception of the programme. They would like to encourage IBC-M to develop this further. This could range from dedicated content design to defining future study paths at other partner and host universities.

Since the IT sector is constantly subject to major changes, it might also make sense to include a feedback-loop from internship experiences, ensuring to include challenges, knowledge, relevant skills as well as new content elements into the programme.

The offering of guest lectures by representatives from the field of practice could bring real-life and practical examples into the programme. Internship experiences may be worth to be presented in front of a wider audience and could be integrated in teaching.

#### **Conditions and recommendations**

Once the programme has started, IBC-M should use the experience to further work on the programme's profile in all aspects, especially in the elaboration of the learning outcomes and competences of the graduates.

After the first three semesters IBC-M must evaluate the programme and report the experiences gained so far to **evalag.** 

The university should formally involve stakeholders, esp. from the labour market and international partner universities, in programme development, e.g., by instalment of an advisory board with both internal and external members.

#### 3.2 Curriculum

The second criterion concerns the curriculum as well as the teaching and learning methods. The expert panel evaluates, whether the curriculum of the programme is adequately structured to achieve the intended learning outcomes and whether the curriculum provides the necessary knowledge and methodological expertise of the relevant discipline(s). The experts also evaluate the organisation of the learning process, especially if there are appropriate student-centred teaching and learning methods, if students are encouraged to take an active role in creating the learning process and whether the diversity of students and their needs is taken into account.

#### **Current status**

#### Programme structure

The study programme "Applied Information Technology (Bachelor)" is a three and a half years full-time programme with 210 ECTS credits. Credit points are a quantitative measure for the overall workload of a student. The overall student workload consists of the time for attending lectures as well as the time for preparing and taking exams, thesis writing, seminars and semester assignments. An effort of 30 hours is taken as a basis to earn one credit point. One study year's effort equals 1,800 hours of work. Consequently, the whole programme corresponds to 6,300 hours of work.

The total credits per semester and the respective workload can be summarised as follows:

- 1 academic year has 60 ECTS
- 1 academic year has 32-36 teaching weeks in auditorium, including the examweeks
- 1 semester has 16-18 teaching weeks in auditorium, including the exam weeks
- 1 ECTS = 30 hours of student work
- 1 lesson hour = 90 minutes

The curriculum comprises six semesters with compulsory courses as well as elective courses. In the first academic year, students take ten compulsory courses and two elective courses, in the second year eight compulsory courses and four elective courses, and in the third year five compulsory courses and two electives. In overall, during the three academic years, students take twenty-three compulsory courses and eight elective courses that they select in dependence on their specialisation. All courses are held in English.

The curriculum is structured as follows:

	YEAR 1: 60 ECTS			
	SEMESTER 1 (GENERAL): 30 ECTS			
No Type Course Lessons per semester		ECTS 1 ECTS=30 hours		
1	С	Introduction to Informatics	20	5
2	С	Mathematics	20	5

3	С	Programming 1	28	7
4	С	Introduction to graphics	16	4
5	С	Academic English and study skills I	16	4
6	С	Operating Systems	20	5
		SEMESTER 2: 30 EC	стѕ	
7	С	Data structures and algorithms	20	5
8	С	Discrete Mathematics	20	5
9	С	Probability and Statistics	20	5
10	С	Academic English and Study skills 2	16	4
11	С	Programming 2	24	6
12	С	Computer Networks	20	5
		YEAR 2: 60 ECTS	3	
		SEMESTER 3: 30 EC	стѕ	
13	С	Human-Computer Interaction	20	5
14	С	Databases	20	5
15	С	Web languages and technologies	20	5
16	С	Cloud Computing	20	5
17	С	Introduction to Artificial Intelligence	20	5
18	С	Software Engineering	20	5
		SEMESTER 4: 30 EC	CTS	
19	С	Web application development	24	6
20	С	Introduction to IT security	20	5
21	С	User Interface Design	16	4
22	С	Project management	20	5

23	С	Multimedia Technologies	20	5
24	С	Data analysis and visualisation	20	5
		YEAR 3: 60 ECTS		
		SEMESTER 5: 30 EC	стѕ	
25	С	Mobile App Development	20	5
26	С	System Administration	20	5
27	С	Economics	20	5
28	С	Information systems	20	5
29	E	Big Data     Branding	20	5
30	E	Innovation     Internet of Things	20	5
		SEMESTER 6: 30 EC	CTS	
31	С	Client web technologies	20	5
32	С	Software testing	20	5
33	С	E-systems	20	5
34	С	Business planning	20	5
35	E	Programming in Java     3D Graphic and Animations	20	5
36	E	Augmented, Virtual & Mixed Reality     Non-Relational Databases	20	5
		YEAR 4: 30 ECTS	6	
		SEMESTER 7: 30 EC	CTS	
37	С	Internship		15
38	С	BA thesis		15

Tab. 2: Curriculum structure

Each course is described in detail in the programme handbook structured as follows:

- course name
- semester
- ECTS
- number of lessons
- student workload
- bachelor programme name
- academic year
- course type (compulsory or elective)
- course description
- learning activities and teaching methods
- learning outcomes
- content of teaching (subjects and themes)
- learning material
- · examination and assessment.

#### Mechanisms for providing knowledge and application of scientific methods

In their own words, IBC-M uses the teaching and learning approach "From Theory to Practice", which is a practise-oriented, problem-based teaching and learning methodology. The pedagogical concept of IBC-M is based on four different aspects of learning: conceptualisation, experimentation, experience and reflection. The students learn theoretical concepts, which they both apply in classroom situations and in practical real-world environments, e.g. internships, and which they reflect with regard of the gained theoretical knowledge.

In the conceptualisation phase (mainly in class learning) the students acquire a theoretical knowledge through teacher structured lessons, in class exercises, and real-life examples provided by students, guest speakers or field trips. The experimentation phase (in lab learning) is working with real life problems in a controlled environment, which is conducted by real life cases, role playing, games and simulations, focus groups, debates, experiments, multimedia tools or group work and individual presentations. The experience phase (in field learning) works with the theoretical knowledge in a real-life environment by guest speakers presenting real life cases, fieldwork and research, semester projects and the internship. The reflection phase (competence gaining) links recent knowledge and experience and interrelates it to earlier ones, which allows students to solve problems independently related to their profession. This happens through in class reflection exercises, pre-examination tutorials, reporting on the internship experience and the final thesis. Altogether the new programme has a focus on applied sciences. It consists of about 20% lectured content, 30% of (guided) practice and 50% of independent study, assignment, projects, and practical work.

In IBC-M's existing study programmes, all courses are claimed to be held using contemporary teaching methods, such as problem-based learning, game-based learning, case study method, etc. During their studies, students are involved in practical work and internships in different companies that participate in the project.

#### Organisation of students' learning experience

The programme handbook consists of all descriptions of the modules. The following is an example of a module description<sup>10</sup>:

<sup>&</sup>lt;sup>10</sup> Source: Programme handbook, p.38-39

Cou	Course name: Software Engineering			
Semester	ECTS	Number of lessons	Student Workload	
3 <sup>rd</sup> semester	5	20	150 Hours	
Bachelor Programme	Applied IT	Academic Year	2021/2022	
	Course type		Compulsory	

#### **Course Description**

The aim of the course is to get acquainted with the discipline of software engineering through the process of collecting requirements, design, development, management and documentation of software, application of computer science technologies, project management techniques, engineering, mathematics, design and other disciplines. Introduction to the translation of high-quality software solutions and consideration of features that contribute to quality. Understanding the role and responsibilities of the customer, users and participants in the software development process. Moreover, the course aims to prepare a future software engineer to run a software engineering project in practice with a team following a development methodology. Common methodologies for software engineering and its constituent parts are combined with student presentations on (usually open-source) tools important for software engineering in practice.

Learning activities and teaching methods: The course includes lectures, one project and final exam.

#### **Learning Outcomes**

#### Students will be able to:

- · master the techniques used to collect requests,
- describe the importance of the request collection phase,
- demonstrate types of agile methods, Scrum development model,
- critically analyze and apply current theories, models and techniques in the field of software engineering
- analyze of notations and software design descriptions,
- demonstrate entity-link diagram layouts
- be introduced with layout change diagram layout and Jackson structural diagram layout,
- · learn how to properly comment on programs,
- implement properly the name of functions and naming conventions,
- evaluate the testing and software quality,
- conduct code inspection, black box and white box testing techniques,
- design techniques to produce corrective, adaptive and perfect maintenance requirements,
- understand common software engineering processes including waterfall (linear) development, iterated and incremental approaches, and agile approaches.
- apply the principles and techniques of software engineering in the architectural design, detail design, and implementation of software applications.
- use basic features of the practical tools explained in the group presentations in a practical software engineering project.

#### Content of Teaching (subjects and themes)

- · The process of taking requests
- · Sources of software requirements
- Software request collection techniques
- Analysis and classification requirements
- Specification required
- Measurement requirements
- Software development methodology
- Development models
- Agile methods
- Software structure and architecture
- Architectural styles (macroarchitecture)
- Pattern design (microarchitecture)
- Evaluation and analysis of software design quality
- Software design notation
- Minimization of complexity
- · Standards in construction
- Construction management
- Construction testing
- Construction quality
- Integration
- Selection of test criteria
- Testing efficiency
- Test documentation
- Maintenance categories
- Estimation of maintenance costs
- · Maintenance activities
- Software documentation management

#### Learning Material

- Sommerville, I. (2019). Engineering Software Products: An Introduction to Modern Software Engineering. (1/e) Pearson Publishing. ISBN: 013521064X
- Althoff, G. (2017). The Self-Taught Programmer: The Definitive Guide to Programming Professionally. Self-Thought Media. ISBN: 0999685902
- Jacobson, I., Lawson, H., Ng, P.W., McMahon, P.E. & Goedicke. M. (2019). The Essentials of Modern Software Engineering: Free the Practices from the Method Prisons!: A Craftsman's approach. (4/e) ACM. ISBN: 1947487248.

Grades will be determined on the following basis:

Examination and Assessment

Class participation → 20%

Practical project → 40%

Final exam → 40%

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Tab. 3: Module description (example)

The handbook will be handed to the students in the registration process.

IBC-M is planning to adopt a suitable approach to guide practical learning of students, which will be led and supervised by respective IBC-M relevant academic and professional staff proposed for this study programme as well as from selected mentors from the internship and other cooperation partners.

The practical learning of students will be organised and supported via the following approaches:

- in the IBC-M computer labs, business clubs or T2P's<sup>11</sup>
- in the industrial enterprises, companies, NGOs and public institutions with whom IBC-M has cooperation agreements
- in the public and media institutes that work on data analysis
- in different private, public and non-governmental organisations

In order to ensure practical learning and internships for students, IBC-M is arranging cooperation agreements with a number of enterprises and organisations relevant to the scope of this study programme.

#### **Assessment**

#### Programme structure

The curriculum gives a structured and logical impression. The modules are described in detail. The level of detail differs slightly between the modules, a clear distinction between knowledge and competences is not always made. Teaching and learning methods are by and large specified.

The experts consider the handbook to be appropriate at this moment. In the course of the programme it should be regularly updated. In the view of the experts, it would make sense to provide additional information for each module: "additional information on admission requirements (other courses or modules that must have been successfully completed prior to this course) and recommended previous knowledge (information that clarifies the expected entry level for this course)". Besides, the description of "learning material" should include not only literature references but also other resources and tools, such as scripts, software and hardware resources, web links, etc.

In general, the handbook meets the requirement of transparency of the programme. After the online meetings, the list of literature was also updated which should be done continuously once the programme has started.

Mechanisms for providing knowledge and application of scientific methods

IBC-M seems to have experience with both appropriate and innovative teaching methods. Students the experts have been talking to reported a good learning atmosphere together with a general policy of openness which makes it easy to solve difficulties and problems fast and sustainable. The experts got the impression that teachers see

<sup>&</sup>lt;sup>11</sup> In December 2018 IBC-M has received an ERASMUS+ grant, Creating Theory to Practice Centres for Innovation and Employment/ CTPCIE, which has been embedded into its Strategic Plan. This project established Theory to Practice Centres (T2Ps) in six locations in Kosovo which serve as a hub for businesses, students and public sector, thus students will have increased opportunities for employment.

themselves to be more of learning supporters than instructors. Appropriate studentcentred teaching and learning methods are generally used at IBC-M, students are also encouraged to take an active role in creating the learning process.

#### Organisation of students' learning experience

According to the experts, IBC-M's "From Theory to Practice" approach ensures that students are placed at the centre of learning. The teaching methods described in general in the self-report, such as real-life cases, role playing, games and simulations, focus groups, debates, experiments, group work and individual presentations encourage students to play an active part in creating their own learning process. Due to the variety of forms of teaching, the diversity of students and their needs seems to be taken into account.

#### Areas for improvement

In the opinion of the experts, the curriculum appears to be feasible, even current developments and recent changes in the IT sector are reflected. Taking these developments into account would be a constant challenge. IBC-M should therefore establish a procedure to ensure that the curriculum remains up-to-date. The university has already made a start by defining the respective contents more broadly, to ensure that there is room for integrating current and relevant developments in the sector.

#### Recommendations

Broad mechanisms for keeping the programme up-to-date should be developed with participation of stakeholders from industry practice in the IT profession as well as benchmarked against IBC-M partner universities with similar study programmes.

Information on admission requirements and recommended previous knowledge is currently not provided in the module descriptions and should be added.

#### 3.3 Student assessment

The third criterion focuses on the organisation of student assessments. The expert panel evaluates how the assessment of intended learning outcomes is organised and whether the amount and requirements of assessments are adequate. They also decide whether the requirements of the thesis reflect the level of the degree.

Overall, it is assessed whether the assessment criteria are transparent and used in a consistent way. It is also evaluated if the staff undertaking assessments is adequately qualified. Last but not least, it should be verified if examination regulations exist and if they provide clear and fair regulations for student absence, illness and other mitigating conditions.

#### **Current status**

Students will be graded through a mix of examinations and class work. In most modules the assessment is divided in two parts: 1) Midterm examinations (exams which are given during the middle of the semester) and 2) Final examinations. Typical forms of examinations are: assignments, projects, written tests, case studies, written exams, opinion papers, team projects, online discussions, peer assessments, individual reports, oral presentations, quizzes, individual research projects, weekly reaction paper, an internship report etc. Class participation can also be taken into account.

The programme ends with a bachelor thesis project where the student completes an independent, interdisciplinary and practise-oriented project related to the level of the degree and writes a thesis on that project. The final grade of the thesis project consists of the written thesis grade and the oral examination grade. The thesis grade counts 50% and the oral examination of 45 minutes grade 50% towards the overall grade. Exam results can be appealed; the appeals procedure is described in the study regulations.

The forms of examination are described in the programme handbooks and in examination regulations. IBC-M uses a 7-point grading scale from plus 12 as the best result to minus 3 for plagiarism as the worst. The grades can be transferred to the ECTS grading scale.<sup>13</sup>

The programme has study, internship and examination regulations, which regulate the study process, internships, course and module examinations and the thesis project.

#### **Assessment**

The examination system of the programme follows a proven practice at IBC-M and the experts see this as appropriate. The different examination methodologies with written and oral exams, course assignments, case studies, internship reports and project work etc. provide the opportunity to assess different competences.

According to the experts, at IBC-M the assessment of intended learning outcomes is well defined, regulated and organised. The amount and requirements of assessments are adequate with regard to the intended learning outcomes. The broad variation of the examination forms defined for each module, enable the competence assessment of the students at different levels. Anyhow, it is recommended to analyse the practicability of this procedure within the framework of module evaluations.

Besides, the experts see that the requirements of the thesis reflect the level of the degree. The assessment criteria are transparent and used in a consistent way. In addition, the staff undertaking the assessments seems to be adequately qualified.

Transparent examination regulations exist and provide clear and fair regulations for student absence, illness and other mitigating conditions and appeal procedure. Students acknowledged that during the online meetings with the experts.

#### Recommendation

The ECTS grading scale is deprecated since 2005 and the ECTS grade distribution should be used instead.

#### 3.4 Organisation of the study programme

Furthermore, the implementation of the programme has to be evaluated. The expert panel assesses the appropriateness of entry qualifications and the regulations for the recognition of qualifications (i.e. Lisbon Convention). It has to be reviewed whether the organisation of the study process allows the programme to be carried out in such a way that the intended learning outcomes will be achieved and whether the organisation

<sup>&</sup>lt;sup>12</sup> Information given by the programme handbook. It differs from the Bachelor Thesis Manual where a ratio of 70% to 30% is described.

<sup>&</sup>lt;sup>13</sup> In the current documents the grading scale from 2009 is used which was replaced in 2015. IBC-M should consider the new scaling.

of the study process also takes the diversity of students and their needs into account. It is evaluated how the implementation of the programme is managed (roles and responsibilities) and even whether the workload of the programme is adequate with respect to the necessity to reach the intended learning outcomes in the scheduled time frame. The organisation of the student life cycle (i.e. all (organisational) relationships between the student and the institution from enrolment to graduation) is also part of this criterion. The experts check whether the care services and student advisory services are suitable and – in case of a cooperation with internal and external partners – how the cooperation is organised.

#### **Current status**

Entry qualifications

All IBC-M study programmes build upon a secondary school education. Students must have an educational background of 12 or 13 years, which is completed with a secondary school degree.

IBC-M conducts entry exams and interviews to ensure sufficient English language skills per student. The exam and interview should take around 1 hour 30 minutes. IBC-M prepares a shortlist of candidates within the pass range, in order to set an administrative basis for selecting students among the applicants, who have passed the entrance exam in the future. Language tests like IELTS (6.0, with a minimum of 5.5 in writing) and TOEFL (82 points, no less than 20 in each category) are also accepted, it they are valid for a period of last two years at the moment of submission.

Applicants can enrol with the winter term, which is starting around 1 October each year. Before registering at IBC-M, an applicant has to follow a five-step application process:

- 1. Submittal of a filled application form, containing personal data;
- Passing of a written entrance exam, testing English language competencies, which should be at B1 level as well as mathematical skills;
- 3. Passing of an interview, testing oral English language skills and considering the personality of the applicant as well as extracurricular activities;
- 4. Submittal of high school degree certificate;
- 5. Based on the applicant's performance in the written entrance exams (65%) and the entrance interview (35%), applicants are shortlisted and invited to enrol. Thereby the minimum pass mark is 50%.

Students applying from abroad also need to demonstrate their English language skills and their mathematical skills as part of the admissions process. They need to provide:

- a letter of motivation, written in English
- an official transcript of the grades in mathematics and English from secondary school. IBC-M requires a passing grade (Grade D and above, or equivalent) in both mathematics and English.
- a certificate of English Language proficiency from an internationally recognised assessor (IELTS, TOEFL, Cambridge, etc), with a minimum level of B1 or equivalent, in line with the Common European Framework of Reference for Languages
- an interview conducted in English, over Skype

Regulations for the recognition of qualifications

IBC-M recognises educational achievements of students, which have been acquired at other higher education institutions. The recognition of qualifications (i.e. Lisbon Convention) is sufficiently regulated in the study regulations of the college.

#### Organisation of the study process

IBC-M uses Google Classroom as its e-learning platform. The virtual learning environment is used by staff and students to create classes, distribute assignments, communicate, access learning materials, document sharing and collaboration and exam submission.

IBC-M has an extensive counselling system for students, which support students in different situations. The student service and career coaching unit assists the students in arranging their internships, signals and assists students that are at risk of falling behind in their study progress, helps to determine what career path students are interested in, and helps to increase study motivation to reduce the dropout rate. Furthermore, the lecturers are also easily approachable for the students.

The teaching and learning forms, qualification goals of the programme, pedagogical concept, admission requirements, selection procedures, internships, study and examination requirements, recognition of achievements at other higher education institutions, regulations for student absence, illness and other mitigating conditions etc. are described in detail in the study regulations and module handbooks of the programme. The rules and regulations as well as the handbooks of all current programmes are available on the IBC-M website, are updated annually and are adapted to changed requirements.

Information on the new study programme has not yet been published.

#### Management of the study programme

The responsibilities are regulated as illustrated by the following organisational chart:

Organs and actors	Areas of responsibility
IBC-M Board of Directors	Approval of statute attached rules and regulations and organisational structure of the IBC-M
IBC-M Directorate	The overall development of teaching and learning, internal allocation of responsibilities, annual planning, coordination of activities with academic council
IBC-M Academic Director	Overall development and management of academic support units
IBC-M Academic Council	Opening and closing of study programs, the appointment of lecturers, semester planning, capacity and resources needs planning, planning of examinations, approval of study, internship and examination regulations, developing of study

	programs, appeals management, issuing of degree certificates
Coordinator of Applied IT study	Realization of teaching and learning for
programme	the respective study program or English
	courses, coordinating exams
IBC-M Quality Assurance Office	Organisational development, process development, planning and conducting of central student evaluations, developing and updating of a database of documents and forms, quality management, coordinating of accreditation, staff development, staff and process monitoring
IBC-M Student Service Department	Administrating of exams, internships, student file and record-keeping

The highest decision-making body is the Academic Council which is chaired by the Academic Director. All heads of programmes report to the Academic Director and Council on a regular basis, and the head of the new study programme will follow the same institutional umbrella. The direct responsibility for the implementation and the management of the study programme lies with a designated programme coordinator who will also be involved in lecturing.

#### Student workload

The allocation of credits at IBC-M for a study programme or educational component is carried out according to the estimated student workload needed to achieve the defined learning outcomes. The overall student workload consists of a time for attending lectures as well as the time for preparing and taking exams, thesis writing, seminars and semester assignments. An effort of 30 hours is taken as a basis to earn one credit point. One study year's effort equals 1,800 hours of work. Consequently, the whole programme corresponds to 6,300 hours of work.

#### Student life-cycle and student support system

IBC-M college aims to include diverse groups of students. In order to strengthen diversity, the college English programme continues to assist these students in meeting the entry-level requirements of the college. 12 six-week courses for approximately 25 prospective students per group are organised on an annual basis to prepare the new intake. The same approach will continue for the academic year 2020/2021, 2021/2022 and 2022/2023.

For students who do not meet the requirements for the more advanced English Academy, English Preparatory Courses will be offered, in which a local teacher leads English language course targeting the potentially socio-economically disadvantaged members of the wider community. To facilitate the entry of socio-economically deprived students, the IBC-M has a policy of reduced tuition fees for selected students. The same procedure will be followed in the upcoming years.

#### Cooperation with internal and external partners

According to the self-evaluation report and the online meetings, IBC-M is trying to arrange several cooperation agreements with a number of enterprises and organisations relevant to the scope of this study programme, in order to ensure practical learning and internships for them.

The university has started efforts to harmonise the new programme with a study programme in electronics and informatics at VIKO University of Applied Sciences as well as with a programme of applied information technology at University of Luxemburg (see above).

#### **Assessment**

### Entry qualifications

In the view of the experts, the entry qualification and regulations are appropriate and transparent. All information can be found on the university website. The criteria on which the entry interviews are based, were submitted after the online meetings and appear to be appropriate.

#### Regulations for the recognition of qualifications

Prior qualifications from other universities are recognised according to the Lisbon Convention. Corresponding regulations and a clear and transparent procedure exist. Recognition of prior professional work practice is not intended. The experts think that a strategy of a formal recognition could raise the attractiveness of the bachelor programme and strengthen the university on the long term, even in international competition.

#### Organisation of the study process and management of the study programme

The dedicated management of the study programme is clearly defined. Responsibilities are clear and transparent.

Each lecturer is responsible for his module. The programme is coordinated by one of the lecturers.

#### Student workload

Having heard the students, the expert panel assumes that the workload of the programmes is manageable. The university plans to observe the students' workload regularly.

#### Organisation of the student life cycle

The experts note that there is excellent communication between students and teachers: learning groups are small, there seem to be lots of formal as well as informal contacts between teachers and students. The students the expert panel could interview were very positive with regards to the good organisation and atmosphere of the study process.

#### Student support system

According to the interviews with students, university care services and student advisory services are highly developed and both known and favoured by the students. Web information and communication services offered by the university play an important role and are frequently used.

#### Cooperation with external and internal partners

The internal cooperation with the involved departments seems to function well. Besides, contacts to external partners exists: some are personal contacts of individual teachers but the university is making efforts to intensify the connection to professional practice. There is no doubt for the experts that out of these activities their students will receive various opportunities, from internships to later starting points for their professional career.

The experts appreciate that IBC-M closely collaborates with partner universities since the programme opens a new field of study at the college.

#### Condition

All information on the new study programme must be published on the university's website.

#### 3.5 Resources

Central to the criterion "resources" is whether there are appropriate resource endowment and deployment in the involved faculties. The experts evaluate the existence of sustainable funding and financial management. They also evaluate whether the staff is adequately qualified and sufficient to ensure the intended learning outcomes and which strategies and processes for staff recruiting and staff development are used. The experts examine if the amount and quality of facilities and equipment (library, laboratories, teaching rooms, IT equipment, etc.) allow the provision of the programme and if the resources are adequate to reach the programme's objectives.

#### **Current status**

Financial management and funding

Since 2017, IBC-M is financed by the European Union Office in Kosovo. The funding is guaranteed until the end of 2022. Income from tuition fees paid by the increased number of students is hoped to provide increased revenue for IBC-M. The continued and growing income from private sector training and research projects through IBC-M Business and Consulting Services Department will continue to increase as IBC-Ms reputation for excellence continues to grow and follows the trend of the last few years.

#### Staff

It is planned that 13 members of academic staff persons will teach in the programme. The workload of a full-time position is 40 hours per week, which translates to a teaching load of 9 hours per week. In addition, IBC-M employs 17 administrative employees.

#### Staff recruiting process

Academic staff recruitment and selection for the bachelor programme follows a three-step procedure. Criteria for employment are a relevant university degree, relevant work experience in the private and/or public sector and fluency in English. Once the staff need is confirmed, the position is publicly advertised. The responsible head of department screens and preselects the applications according to a matrix with predefined criteria. Based on the rating score, the applicants are invited for a trial lecture with a succeeding question round, which is attended by the relevant head of department, teaching staff and students. The trial lecture is scored according to a predefined matrix. Based on the score candidates are invited for a second interview. Newly employed lecturers receive a peer class visit by another IBC-M lecturer.

IBC-M applies an evaluation and assessment system. The system includes a reflection meeting two months after an employee joined the institution. It also includes one annual evaluation meeting, which is a two-sided discussion with focus on the performance of an employee, and one annual assessment meeting, which is a one-sided feedback and assessment of an employee based on defined targets by his/her supervisor.

The IBC-M Staff Development Plan is a comprehensive and holistic approach to building strong, committed, accountable academic and administrative staff regulated through the IBC-M HR Manual. This includes: Accountability through Goal Setting, Measurement, and Performance Evaluation and Improved motivation through Financial (salary scales, bonuses) and Non-Financial Rewards, including professional development opportunities and capacity building.

Starting from the IBC-M's vision to become an internationally recognised centre of excellence for higher education, international experience is a crucial component of the IBC-M's operations. IBC-M takes an active part in Erasmus+ programmes for International Credit Mobility. All IBC-M staff, administrative and faculty, have access to international exchange opportunities. International exchanges for staff, which are awarded upon fulfilling certain criteria, are a key motivating factor and help to contribute to the international atmosphere of the college. IBC-M has inter-institutional agreements with different international partners in Europe: With regard to staff development, all staff members have one annual evaluation meeting and assessment meeting with the respective supervisor. Additionally, IBC-M provides administrative and faculty staff training with its international partners in Denmark, Finland and Portugal.

#### Facilities

IBC-M owns modern campuses one in the North and one in the South of Mitrovica. The two buildings are in walking distance to each other, located on both sides of the river lbar and shared facilities such as the library and cafeterias. IBC-M has a large auditorium, spacious and technical fully equipped classrooms (whiteboards, beamers and computers), modern offices, two IT labs, two canteens, study and recreational space and SRC office. Both campuses have Wi-Fi throughout and the classrooms are fully air-conditioned.

The IT labs are equipped with 50 computers in both computer labs (north and south campus, 25 in each of them) with following characteristics:

- processor Intel Core i5, 4 GB of RAM memory and more on some of them,
   500 GB HDD and more on some of them, integrated graphic card,
- all computers equipped with Windows 10 digital license,
- all computers equipped with Adobe Creative Cloud
- all computers equipped with Autodesk Maya

- all computers equipped with Autodesk 3D Max
- all computers equipped with Workstation Computers
- 1 projectors Acer X118H with max resolution 1920x1200 and brightness up to 3600 lm in each computer lab
- 1 Pegasus interactive smart boards in each computer lab
- 3 MikroTik Routerboard wireless routers in each campus
- 4 TPLink wireless routers in each campus
- 3 TPLink Gigabit switches in each campus
- all computers equipped with VMware Workstation 15 software for virtualization
- 1 Switch Ubiquiti UNIFI
- 1 Canon DSLR Camera Mark 3
- 1 Tripod
- 1 Camera Light
- 1 Green Screen

In order to reflect the needs of the new programme, IBC-M has already ordered a number of computers that would meet the needs of the programme. These computers will have the following technical specifications:

- Intel Core i7 (Gen 9)
- RAM 16GB
- 512 GB M.2 SSD
- Nvidia Geforce GTX 1660

IBC-M uses Google suite for education as its main communications and online learning management platform. This suite includes access to applications such as, Google Docs, Spreadsheets, Presentations and others for productivity. Other apps also include Google Classroom for the online learning management system.

All students are provided with their unique login access at the beginning of their enrolment, while the system is administrated and supported by the IT department for any issues.

#### Library

IBC-M has full membership in JSTOR,<sup>14</sup> a shared digital library created in 1995 that includes more than 2,000 academic journals. JSTOR was founded to help libraries and academic publishers transition their activities from print to digital operations, to expand access to scholarly content around the world and to preserve it for future generations. Every member of IBC-M staff can have access to JSTOR's collections by browsing for the needed content and can download several articles periodically.

All IBC-M students, including bachelor students and the university academic and administrative personnel are members of the library. They can borrow library materials in accordance with the rules.

#### **Assessment**

Financial management and funding

The experts appreciate, that the European Union ensures funding of the institution until the end of 2022. The EU funds cover most of the main operation cost of the college and allows the college to provide scholarships for less fortunate students. Furthermore, IBC-M aims to self-generate income from tuition fees, facility rentals and service

<sup>14</sup> https://www.jstor.org/ (accessed July 24, 2020)

training for external organisations. The college management is currently working on developing a perspective for the coming years with Government of Kosovo taking over parts of the financing. If these efforts are successful, the experts consider that the funding and the financial management of IBC-M is ensured and sustainable. However, the experts would like to emphasize that first-year students must be guaranteed the opportunity to obtain a regular degree after seven semesters.

#### Staff

From the point of view of the expert panel, the qualification of the teaching staff at IBC-M seems adequate for a bachelor programme. The experts assess the recruiting procedures of IBC-M as appropriate and in line with international academic practice. The current staff/student ratio allows the college to maintain relatively small groups and a close contact between teachers and students.

The relation between full-time and half-time staff seems appropriate. The experts note from the interview sessions that teaching is carried out by dynamic and motivated lecturers. Some of them have international working and educational experience which is appreciated by the expert panel.

Nevertheless, the lecturing seems to rest mainly on the shoulders of three lecturers who cover the main part of the teaching (from seven to ten courses each). The designated workload of these individuals seems very high. The experts would like to point out that IBC-M has to ensure that the workload of teaching staff is not at the expense of the assistance and supervision of students.

#### **Facilities**

The two modern campuses of IBC-M make a good impression and seem to provide enough space to accommodate the planned numbers of students. In the view of the experts, the technical equipment and IT infrastructure of the college is currently underequipped but the university has already ordered new equipment.

The students the experts talked to mentioned the library is in need for improvement with regard to the equipment with books and digital media. Although students can also use other libraries in Mitrovica or Pristina, with regard to the new bachelor programme and increasing university research, the library should be continuously expanded considering and evaluating requirements of students and staff.

The actual number of work places in the library and on the campus appear to be sufficient. The virtual campus tour gave the impression that there are somewhat few socket outlets in public areas.

#### **Conditions and recommendations**

First-year students must be guaranteed the opportunity to obtain a regular degree after seven semesters. Since financial sustainability is only guaranteed for the next two years IBC-M must prove by December 31, 2022 that the finances are secured at least for the full study period.

The individual workload of the designated lecturers should be monitored when the programme has been started to ensure that the high workload of teaching staff is not at the expense of assistance and supervision of students.

The IT equipment must be updated in the near future to ensure adequate working conditions for students.

The library should be continuously expanded and access to digital media should be successively increased.

# 3.6 Quality assurance

The criterion "quality assurance" focuses on the internal and external mechanisms used by the institution to monitor and improve the quality of the study programme: how the study programme is designed and implemented and how its improvement is organised.

The experts evaluate the existing quality assurance concept of the programme and what kind of quality assurance processes and instruments are implemented, which indicators are used for monitoring the achievement of the programme's objectives and how the institution and the persons responsible for the programme collect, analyse and use relevant information about their activities. Moreover, the experts examine whether quality assurance is used regularly, systematically and effectively for quality enhancement and if quality feedback loops are closed. It is also evaluated how stakeholders (students, teachers, administration, employers) are involved in quality assurance and whether relevant programme information for students and prospective students is provided.

#### **Current status**

Quality assurance concept of IBC-M

IBC-M is in general committed to use quality management tools to continuously improve its services and refines:

- · Clear policies, procedures and responsibilities
- Carefully planned, monitored and regularly reviewed study programmes
- Transparent assessments, reflecting the knowledge, skills and competences of students
- Highly motivated, student-oriented lecturers
- · High-quality facilities and resources
- Transparent and well-structured information, that will allow internal collective reflection on the college's institutional performance and its capacities as a higher education institution
- Transparent information, which will allow internal and external stakeholders to assess both capacities and performance<sup>15</sup>

Quality development is a common obligation, which involves all members as well as internal and external stakeholders of IBC-M. The final responsibility for the quality management of the IBC-M is with the IBC-M director. In general, quality management at the IBC-M is organised, following a quality cycle approach. Strategic non-academic decisions, made by the IBC-M board of directors, are translated to annual plans by the IBC-M directorate and implemented annually by IBC-M staff. Academic decisions are taken by the Academic Council. The implementation is monitored by the IBC-M college director, the academic director and the heads of the IBC-M departments. The results of the regular plan implementation evaluations are reported to the IBC-M board of directors and considered in the recalibration of strategic planning.

Quality assurance processes and instruments

<sup>&</sup>lt;sup>15</sup> See also self-report, p.36

Quality assurance at IBC-M is designed according to the PDCA<sup>16</sup> cycle. To assure and enhance its quality IBC-M uses internal and external quality assurance instruments which are coordinated by the quality assurance officer, but are in the responsibility of all members as well as internal and external stakeholders of IBC-M. The quality assurance instruments and processes are implemented and described in the IBC-M Quality Manual.

In order to implement its strategy, IBC-M defines annual goals for the college and departments, which are discussed in the academic council and on the next level in the departments. After internal agreement, the director compiles the goals and discusses them with the board of directors before they come into force.

IBC-M has a bi-annual staff assessment between the staff members and her/his supervisor following a formalised process. One of the meetings focuses on evaluating the performance of the employee, the other focuses on the assessment and the definition of targets and training needs. Additionally, IBC-M has implemented a complaint procedure for students and staff, which is laid out in the IBC-M Internal Policy-Complaint Procedure and accessible via the website and the IBC-M learning platform Google Classroom.

#### Involvement of stakeholders

In order to achieve high quality in the core activity of teaching and learning, IBC-M regularly carries out student evaluations with standardised questionnaires on satisfaction with individual courses, teachers, studies in general as well as the facilities and services of IBC-M. In addition to that, they carry out separate evaluation questionnaires on internships and dropout rates and also conduct freshman and graduates' surveys. The evaluations are summarised and analysed in reports including recommendations for actions. A variety of reports is published anonymously online on the IBC-M website. The reports are internally discussed with the appropriate stakeholders (e.g. director, administration, departments, management, academic staff and board of directors).

Externally, IBC-M regularly seeks external advice on quality matters. This includes systematic feedback from companies that employed IBC-M interns. The companies are asked about the quality of information available from IBC-M as well as about their satisfaction with the employed intern. The feedback is reflected in the IBC-M internship report, which is issued every two semesters.

The college regularly discusses the results of internal and external quality assurance instruments in order to reflect its activities and develop improvements where necessary. Due to the recent independences and transformation phase of IBC-M, the college will review its whole quality assurance system and will update and adapt it according to the new IBC-M governance structure.

IBC-M employs a full-time quality assurance and accreditation officer that deals with both internal and external quality assurance matters.

<sup>16</sup> Plan-do-check-act

#### **Assessment**

The experts observe a well-developed quality assurance system based on formal and informal processes. The academic and administrative staff, especially the assistant director/administration, quality assurance officer and head of student services, are very dedicated, act professionally and ambitiously and demonstrated that they have internalised the PDCA cycle.

The experts assess the instruments employed as well adapted for a small institution as IBC-M, professionally designed and coordinated by its quality assurance officer.

The college uses internal and external instruments in a professional way in order to assess their activities from different point of views and to get external feedback and expertise where necessary. They use the external support systematically to improve the internal capacities of the college, and further to manage its quality independently.

The quality assurance activities focus mostly on teaching and learning, which is the primary focus of IBC-M, and administrative processes related to the well-being of students. During the online meetings the students confirmed that they are very satisfied with the education and the student services at IBC-M. Students receive a feedback on the views they express in the student evaluation surveys.

The quality assurance concept used by IBC-M seems to be appropriate to assure and improve the quality of teaching and learning at the college. Moreover, the quality assurance instruments, which are currently in place, seem to be accepted and implemented throughout the institution and are used for further improvement.

Nevertheless, critical aspects must also be addressed. For example, the focus of the concept is on the examination of quality and one could certainly wish for further statements on how to make quality possible. This is also a matter of enabling lecturers to do more research and further education.

#### Recommendations

There are no recommendations from the experts.

#### 4. Final Assessment

After the discussions during the online meetings, IBC-M fundamentally updated the concept of the study programme. In its present form the programme well fits the IBC-M's study portfolio. By and large, it is elaborated enough for a start, provided that the university monitors the process during the first semesters and – if necessary – makes modifications. It is obvious that the university is breaking new ground in terms of content, but due to its long teaching experience, the experts are confident that the new programme will be successfully implemented.

At the time of the online meetings the experts had the impression that the programme had too much of a draft status. However, the documents submitted subsequently by IBC-M were able to dispel these fears.

Therefore, the experts see a basis for accreditation, provided that the university regularly evaluates what works and what does not.

# Results of the assessment

# Assessment grades

No	Assessment criteria	Assessment
1	Programme profile	В
	Condition:  After the first three semesters IBC-M must evaluate the programme and report the experiences gained so far to evalag.	
2	Curriculum	А
3	Student assessment	А
4	Organisation of the study programme	В
	Condition:  All information on the new study programme must be published on the university's website.	
5	Resources	В
	Conditions  First-year students must be guaranteed the opportunity to obtain a regular degree after seven semesters. Since financial sustainability is only guar-anteed for the next two years IBC-M must prove by December 31, 2022 that the finances are secured at least for the full study period.	
	The IT equipment must be updated in the near future to ensure adequate working conditions for students.	
6	Quality assurance	Α

# Assessment levels

Level	Assessment	Description	
A	Passed.	The programme fulfils or exceeds all criteria. All activities are in line with the profile and objectives of the programme and provided at a high academic level.	
В	Passed subject to conditions	The programme does not fulfil some relevant criteria. However, the institution should be able to remedy the shortcomings within nine months after the assessment.	
С	Suspension of the accreditation procedure	The programme does not fulfil relevant criteria, but it is likely, that it will be able to remedy the shortcomings within 18 months after the assessment. The HEI may apply for a resumption of the accreditation procedure.	
D	Failed	The programme does not fulfil relevant criteria, and is not expected to be able to meet all assessment criteria within 18 months' time.	

# 5. Accreditation recommendation of the expert panel to the evalag Accreditation Commission

According to the expert panel, the study programme meets **evalag**'s criteria for international programme accreditation. Therefore, the panel recommends the programme "Applied Information Technology (Bachelor)" for accreditation and awarding the **evalag** label for international programme accreditation.

The experts recommend IBC-M to consider and implement the following conditions (C) and recommendations (R):

#### Programme profile

- **R 1** Once the programme has started, IBC-M should use the experience to further work on the programme's profile in all aspects, especially in the description of the learning outcomes and competences of the graduates.
- **C 1** After the first three semesters IBC-M must evaluate the programme and report the experiences gained so far to **evalag.**
- **R 2** The university should formally involve stakeholders, esp. from the labour market and international partner universities, in programme development, e.g., by instalment of an advisory board with both internal and external members.

#### Curriculum

- R 3 Broad mechanisms for keeping the programme up-to-date should be developed with participation of stakeholders from industry practice in the IT profession as well as benchmarked against IBC-M partner universities with similar study programmes.
- R 4 Information on admission requirements and recommended previous knowledge is currently not provided in the module descriptions and should be added.

#### Student assessment

**R 5** The ECTS grading scale is deprecated since 2005 and the ECTS grade distribution should be used instead.

#### Organisation of the study programme

**C 2** All information on the new study programme must be published on the university's website.

#### Resources

C 3 First-year students must be guaranteed the opportunity to obtain a regular degree after seven semesters. Since financial sustainability is only guaranteed for the next two years IBC-M must prove by December 31, 2022 that the finances are secured at least for the full study period.

- R 6 The individual workload of the designated lecturers should be monitored when the programme has started to ensure that the high workload of teaching staff is not at the expense of assistance and supervision of students.
- C 4 The IT equipment must be updated in the near future to ensure adequate working conditions for students.
- R 7 The library should be continuously expanded and access to digital media should be successively increased.

#### **Quality assurance**

None

# Accreditation decision of the evalag Accreditation Commission

#### 6.1 Decision

At its meeting on October 9, 2020, the **evalag** Accreditation Commission decides unanimously to accredit the programme "Applied Information Technology (Bachelor)" at the International Business College Mitrovica (IBC-M) with the conditions (C) and recommendations (R) mentioned in Chapter 5.

#### 6.2 Compliance with the conditions

On July 31, 2021, the International Business College Mitrovica (IBC-M) EPOKA University submitted a report that addressed the conditions. Evidence was provided that all relevant information on the programme is published online (C2). In addition, the IT equipment of the college was significantly expanded (C4).

At its meeting on September 24, 2021, the **evalag** Accreditation Commission unanimously decides that the conditions C2 and C4 pronounced during the accreditation of the Bachelor's degree programme "Applied Information Technology (B.A.)" at the International Business College Mitrovica (IBC-M), Kosovo are to be regarded as fulfilled.

Conditions C1 and C3 remain in place.

# **Annex: Assessment schedule**

# Wednesday, July 15, 2020 - Preparation of online meetings

18:00-18:15	Welcome address meeting with College Director Virtual campus visit
18:15-20:00	Internal meeting of expert panel (video conference), discussion of self-evaluation report, review of site visit plan

# Monday, July 20, 2020 - Online meetings

09:00-09:30	Internal meeting of expert panel
09:30-10:15	Meeting with
	<ul> <li>College leadership</li> </ul>
	<ul> <li>Head of the study programme</li> </ul>
	<ul> <li>Heads of the involved departments</li> </ul>
	<ul> <li>Representative of KAA (guest)</li> </ul>
10:15-10:30	Brief internal meeting of expert panel
10:30-12:00	Meeting with academic staff (teachers)
12:00-13:15	Internal meeting of expert panel, break
13:15-14:00	Meeting with students and alumni
14:00-15:00	Meeting with registrar, technical staff and quality management
15:00-16:00	Break
16:00-17:30	Internal meeting of expert panel: review of the sessions
17:30-18:00	Closing meeting with representatives of IBC-M and of the study programme

# Thursday, July 30, 2020 - Debriefing

12:00-14:00	Internal meeting of expert panel (video conference), review
	of the online meetings, assessment, preparation of the as-
	sessment report

# Tuesday, August 18, 2020 - Finalisation of the report

15:00-17:00	Internal meeting of expert panel (video conference), finalisa-
	tion of the assessment report to send to IBC-M

# Wednesday, September 16, 2020 - Reassessment and update of the report

16:00-19:00	Internal meeting of expert panel (video conference), discus-
	sion on the updated programme concept, update of the as-
	sessment report, recommendations and conditions