Agency for Quality Assurance and Accreditation Austria

Review Report of the Expert Panel

International University of Sarajevo

Bachelor programme "Genetics and Bioengineering"
Master programme "Genetics and Bioengineering"

10 August 2016

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1 General information

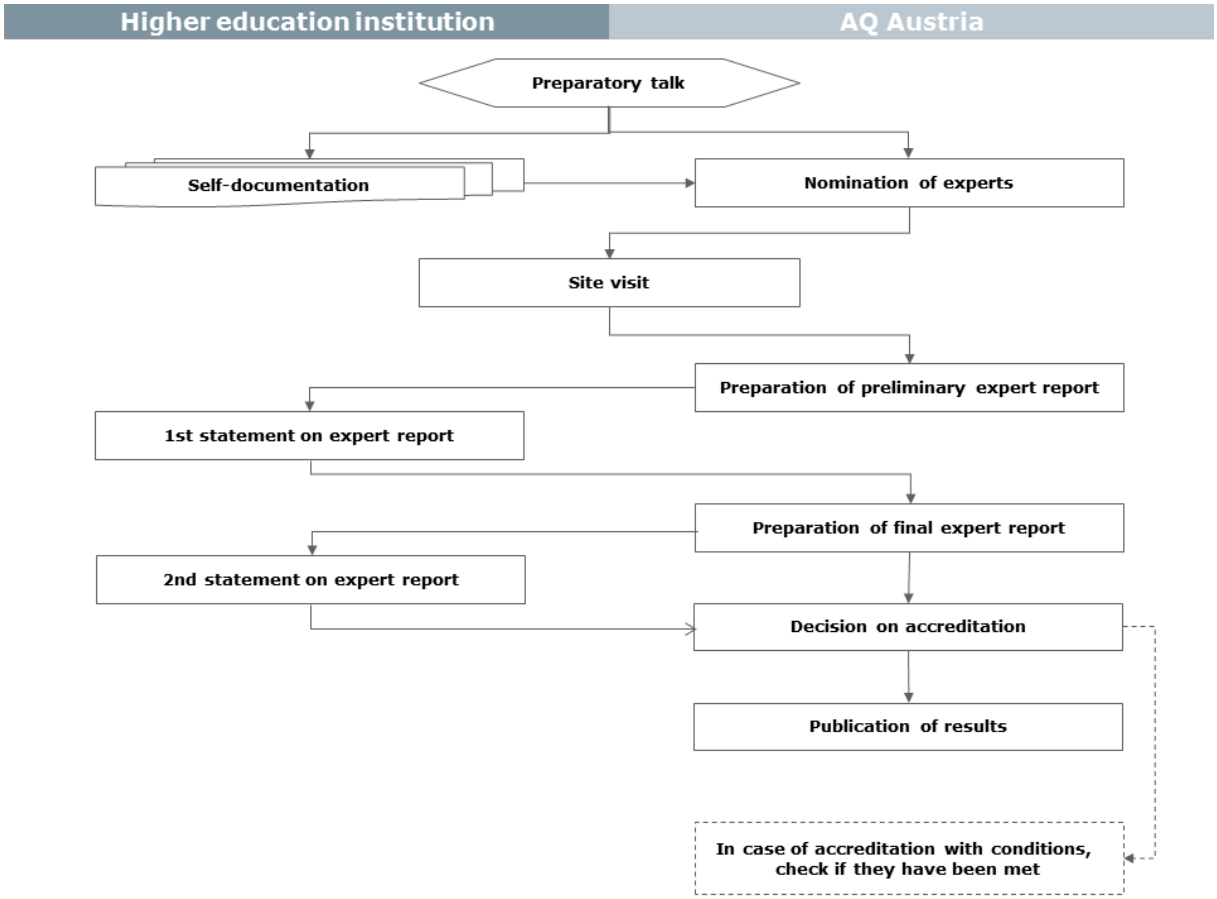
1.1 Basic principles of the procedure

AQ Austria is the Austrian agency for quality assurance and accreditation in higher education. The agency is operating in Austria and other countries of the European Higher Education Area (EHEA). It is committed to serving the common good and is based on the values of the EHEA, in particular the autonomy and diversity of higher education institutions and independent quality assurance.

By granting international accreditation to a study programme, AQ Austria confirms the compliance of the study programme with European quality standards. These standards are derived from the principles laid down in the Bologna Process and the Standards and Guidelines for Quality Assurance in Higher Education (ESG).

Standard 1 Study programme and programme management
Standard 2 Staff
Standard 3 Quality assurance
Standard 4 Funding and infrastructure
Standard 5 Research and development and appreciation of the arts
Standard 6 National and international cooperation

The accreditation pursues the principles of peer review and follows the procedural steps:



The accreditation report of the expert panel and the higher education institution's statement constitute the basis for the accreditation decision, which is taken by the 14-members-board of AQ Austria. There are three options for the decision:

Accreditation without conditions

The quality requirements are being met. Any recommendations given on the basis of expert opinion are supposed to help the higher education institution to continuously develop the study programme. The agency grants the accreditation for a period of six years.

Accreditation with conditions

Deficiencies have been detected which are likely to be corrected within nine months. The higher education institution proves that the conditions have been met, and this will be verified by AQ Austria.

Denial of accreditation

Serious deficiencies have been detected which are not likely to be corrected within nine months.

If the accreditation decision is positive, AQ Austria will issue a certificate to the higher education institution.

1.2 Accreditation procedure at the International University of Sarajevo

Timetable of the accreditation procedure

Procedural step	Date
Delivery of self-documentation by IUS	13 April 2016 14 June 2016 (revised) 22 June 2016 (amendment) 01 July 2016 (amendment)
Decision on expert panel members by the Board of AQ Austria	15 April 2016 02 June 2016
Preparatory virtual conference of the expert panel	22 June 2016
Site visit to IUS by the expert panel	13./14 July 2016
Review report of the expert panel	10 August 2016
Formal statement by IUS	
Final report of the expert panel	If necessary
Statement on the final report by IUS	If necessary
Accreditation decision by the Board of AQ Austria	20./21 September 2016 (expected)

1.3 Members of the Expert Panel

Name	Institution	Role
Alexandre Carmo	Institute for Research and Innovation in Health, University of Porto	Head of the expert panel Expert from academia
Matthias Mack	Institute for Technical Microbiology at Mannheim University of Applied Sciences	Expert from academia
Daniela Reinisch	Director of the Upstream Development Microbials, Boehringer Ingelheim, Vienna	Expert with professional practice
Andreas Weber	Student of Biotechnology at the University of Natural Resources and Life Sciences in Vienna	Student Expert

AQ Austria project coordinators

Agnes Witzani and Nina Fölhs-Königslehner

2 Higher education system

The adoption of the Framework Law on Higher Education in Bosnia and Herzegovina (FLHE, The Official Gazette of BiH, No. 59/07 and 59/09) in 2007 represents a key reform act for higher education in BiH. The FLHE allowed further necessary reforms in higher education in line with the European Higher Education Area (EHEA).

BiH has joined the Bologna Process in 2003 and committed itself to implement the principles of the EHEA. In this context, BiH is dedicated to set up a quality assurance system, as one of the primary goals defined by the Bologna Declaration (1999), and specified through the Standards and Guidelines for Quality Assurance in the European Higher Education Area (established at the European Education Ministerial Conference in Bergen in 2005 and revised by the Ministerial Conference in Yerevan in May 2015). As for BiH, the Ministry of Civil Affairs (MoCA) is representing the country in the Ministerial Conference.

Regulations and legislation regarding the higher education in BiH have to be in line with the Constitution of the country; therefore legislating is subject to the entity of the Republika Srpska (RS), 10 cantons in the Federation of BiH (FBiH) among which, one is the Canton Sarajevo, and the Brčko District of BiH (BiH BD).

Competent education authorities at this level, in case the Ministry for Education of the Canton Sarajevo, are held accountable for adopting laws in the area of (higher) education, determining budgets (for public higher education institutions), establishing education policies and having all other rights and obligations in their area of responsibility. According to the law (latest: Sarajevo Canton Law on Higher Education, SC OG No. 22/10) a higher education institution, either being a university or a college can be established as a public institution or as a private institution.

In line with the FLHE, universities are, as of its aims and objectives, obliged to undertake both education and research, to offer academic degrees in all three cycles. Accordingly the title university- only refers to higher education institution offering studies in at least five different subject groups in at least three scientific areas – natural sciences, technical sciences, biomedicine and health, biotechnical sciences, social sciences and humanities.

Besides being funded by tuition fees and funds provided by its founder the International University of Sarajevo (IUS) as, like all other public/private higher education institutions in the Canton Sarajevo operates according to the given legal framework. This in particular means e.g. organizational structure, appointment of rector, head of units, requirements for academic titles, teaching hours of academic staff, students assignment, grading system and scale, organization of study programmes etc. are determined and regulated according to the respective law.

The obligation, stipulated by the FLHE was to, within six months from its entering into force, harmonize the laws on (higher) education by competent education authorities. However, the legislative framework was only fully established in March 2013. At the same time, the number of licensed higher education institutions in BiH was rapidly growing. Licensing of new higher education authorities lies within the competence of the competent education authorities at entity level. For example:

- in the academic year 2009/10 33 Higher Education Institutions (HEIs)[1]
- in the academic year 2010/11, 37 HEIs
- in the academic year 2011/12 43 HEIs
- in the academic year 2014/15, 47 HEIs
- in the academic year 2015/16, 49 HEIs

According to the relevant legal regulations licensed higher education institutions are obliged to undergo an institutional accreditation process in a given period. As for the higher education institutions located within the Canton Sarajevo, out of the five licensed higher education institutions (as of the academic year 2015/16), four have received institutional accreditation decisions for a four-year period, as foreseen in the relevant regulations (Cantonal Law on higher education in line with the FLHE).

Licensed and institutional accredited higher education institutions are listed in the *National Register of Accredited higher education institutions* by September 2015:[2]

- University Sarajevo School of Science and Technology, Sarajevo Canton, 03/07/2014 (Private University)
- University of Sarajevo, Sarajevo Canton, 26/09/2014 (Public University)
- International University of Sarajevo, Sarajevo Canton, 26/09/2014 (Private University)
- International Burch University, Sarajevo Canton, 26/09/2014 (Private University)

All institutional accredited higher education institutions are obliged to apply for study programmes according to the relevant legal framework. The IUS has submitted relevant applications to the competent ministry; however the process of study programme accreditation has not started yet.

Notwithstanding the IUS has decided to seek for international accreditation with a number of representative study programmes.

3 International University of Sarajevo

The International University of Sarajevo (IUS) has been established in 2003. The founder of IUS is the Foundation for Education Development Sarajevo (*SEDEF – Sarajevo Education Development Foundation*). The Foundation was founded 2001 as a non-governmental organization with characteristic of endowment according to the relevant legal framework in BiH respective the Canton Sarajevo.

The foundation is registered as a legitimate institution whose purpose is to seek and create academic, material and legal conditions for the advancement of education in Bosnia and Herzegovina. Beside of IUS, the foundation also operates a kindergarten and a primary school.[3]

[1] Universities and colleges as of the FLHE.

[2] http://hea.gov.ba/akreditacija_vsu/Default.aspx

[3] www.sedef.ba and www.ius.edu.ba/foundation-education-development-sarajevo

IUS is, as mentioned before, licensed and as well institutional accredited according to the relevant legal frameworks in BiH by the competent ministry of the Canton Sarajevo. In addition IUS is also accredited by the Turkish Council for Higher Education (YÖK).

IUS offers, as of the academic year 2015/16, 53 study programmes in total in all cycles organized within five faculties:

- Faculty of Business and Administration
- Faculty of Engineering and Natural Sciences
- Faculty of Arts and Sciences
- Faculty of Law
- Faculty of Education

All study programmes are offered in English. IUS is open to students from all over the world; however the majority of students are from the Republic of Turkey. As of the academic year 2015/16 1931 students are enrolled. 1201 are foreign students and 730 from BiH. Out of the 1201 1053 are from the Republic of Turkey.

According to its own vision and mission IUS considers itself as one of the largest educational projects in the Balkan region and being a hub between east and west.

In the first twelve years since its establishment IUS was operating primarily as a teaching university. Available resources in terms of financial, material and human were spent on institution building processes. Only since the last years and with re-locating the campus from the center of Sarajevo to Illidza, where the new campus is located, IUS is strengthening all its efforts towards becoming a research university. As it is stated in its *Strategic Plan 2016-2020* the vision of IUS is to become an internationally recognized higher education and research institution and a center of excellence and quality through shared efforts of the founders, academic and administrative staff, students and all stakeholders.

IUS is an associate member of European University Association (EUA), and a full member of International Association of Universities (IAU) and European Consortium of Political Research (ECPR).

3.1 Profile and concept of the study programmes

Name of the programme	**Genetics and Bioengineering**
Academic degree awarded	Bachelor of Science (B.Sc) in Genetics and Bioengineering
Date of introduction	23 June, 2004/ Pursuant to the Article 14 of the Law on Higher Education (Official Gazettes of the Canton Sarajevo, issues 17/99, 14/00, 15/01, 13/02, 12/03 and 15/03)
Regular study period	8 semesters/ 4 years
Number of ECTS credits	240
Full time/Part time	Full time

Tuition fees	As per Semester in EUR for academic year 2016/17: **Foreign students:** First cycle: EUR 2,750/semester Second Cycle: EUR 1,250/ semester Third cycle: EUR 3,000/ semester **BiH citizen:** First Cycle: EUR 1,925/semester Second Cycle: EUR 1,250/ semester Third cycle: EUR 3,000/ semester
Name of the programme	**Genetics and Bioengineering**
Academic degree awarded	Master of Science (M.Sc) in Genetics and Bioengineering
Date of introduction	23 June, 2004/ Pursuant to the Article 14 of the Law on Higher Education (Official Gazettes of the Canton Sarajevo, issues 17/99, 14/00, 15/01, 13/02, 12/03 and 15/03)
Regular study period	2 semesters/ 1 year
Number of ECTS credits	60
Full time/Part time	Full time
Tuition fees	As per Semester in EUR for academic year 2016/17: **Foreign students:** First cycle: EUR 2,750/semester Second Cycle: EUR 1,250/ semester Third cycle: EUR 3,000/ semester **BiH citizen:** First Cycle: EUR 1,925/semester Second Cycle: EUR 1,250/ semester Third cycle: EUR 3,000/ semester

4 Statements and Assessments

4.1 Standard 1: Study programme and programme management

1.1 The study programme is aligned with the objectives of the institution and is logically connected with its strategies and goals.

Statement (including findings and analysis)
The Faculty of Engineering and Natural Sciences (FENS) states that (molecular) genetics and bioengineering are the fastest growing fields worldwide in science and also in the industries. For that reason, the faculty and IUS decided to set up a study programme at the Bachelor level (Bachelor of Science, BSc) and also at the Master level (Master of Science, MSc) in these areas to educate open minded and socially responsible individuals with a sound scientific education in genetics and bioengineering (GBE). The expert panel concurs with this strategy

and, moreover, thinks that the objectives are adequately explained in the study programmes, which contain the relevant courses in molecular biology, biochemistry, genetics and cell biology. In addition, the curricula include some engineering courses that enable the students to transfer engineering concepts to biological and also medical problems to generate products and goods.

The expert panel considers, on the other hand, that graduates will encounter some difficulties in finding adequate/qualified jobs in Sarajevo and in Bosnia and Herzegovina, since modern biotechnology or bioengineering-based industries are still underdeveloped in the country. An immediate consequence is that a significant proportion of students will venture their careers abroad, which is acceptable and plausible at the same time.

These are challenges that will have to be dealt with by the IUS, but can at the same time help to implement the development of this area of knowledge at a regional and national levels. The expert panel considers that IUS, in line with its goals, may have an important role in these developments on a long term basis in Bosnia and Herzegovina and agrees that it is important to boost these efforts by starting to educate students in the relevant fields. In addition, after having completed a first cycle degree at IUS, students become prepared for relevant MSc programmes abroad and will be fit to bring their acquired know-how back to the country.

As an international institution of higher learning, IUS cooperates with local industries and local academic institutions and also with international partners. One of the strategic goals of IUS is to become an internationally recognized university. This is reflected on the international faculty and their cooperation partners, especially in the development of research projects. In addition, IUS is well connected to institutions in, e.g., Europe.

Overall, the study programmes are in line with the strategy of IUS and FENS. The action plan and the objectives are well documented and can be followed.

Recommendation
The expert panel recommends further developing and diversifying internships outside the IUS, establishing more partnerships and obtaining additional offers associated with more practical experience.

The name of the study programmes (“genetics and bioengineering”) is relatively broad and carries with it possible ambiguities but also opportunities. While “genetics” is a purely biological discipline, “bioengineering” connotes with more diversified tools. There is an opportunity to evolve the course to tackle the variable societal challenges and hence, the name of the course may be adjusted to better fit the expectations of students but also the deliverables of the courses. Nevertheless, the expert panel recommends that the course description should be rigorous and adjusted to its reality, correctly informing the students on the nature and expected outcomes of the courses.

1.2 The qualification objectives of the study programme (learning outcomes of the study programme) have been clearly defined and meet the technical, scientific and professional requirements and are in accordance with the respective levels of the qualification framework of the European Higher Education Area.

Statement (including findings and analysis)
The qualification objectives of the study programme are clearly defined in the self-documentation and meet the requirements. The syllabi inform about the content of the study programme. However, the title of the programme can be somewhat misleading and we refer to the recommendations already made in 1.1. (above). As a peer group, we feel we should not impose a change of the title “genetics and bioengineering”, since these terms may be interpreted differently. Still, the term “genetics” does involve “genetic engineering” but is a lot broader and the course contents do not cover all the relevant matters for a genetics programme.

Recommendation
The syllabus describes the learning outcomes satisfactorily; however, for prospective and current students, a more detailed description should be used. The title of the course should be subjected to a comprehensive analysis and discussion, but of course one of the possibilities is to maintain as it currently stands.

1.3 The contents, structure and scope of and teaching methods applied to the curriculum and the modules meet the technical, scientific and professional requirements and are suited to achieve the intended learning outcomes.

Statement (including findings and analysis)
The contents, the structure and the scope of the teaching methods in the study programmes and the described modules meet the technical, scientific and professional requirements and are suited to achieve the intended learning outcomes. The teaching methods are well documented and described.

However, the expert panel learned from the syllabus (course description) that the practical education in the laboratory is relatively short when compared with other study programmes in the field. A stronger laboratory component is not absolutely necessary to achieve the intended learning outcomes, but is desirable. The internships help to fill the lack of practical experience, being very helpful to achieve the intended learning outcomes of the programme. Encouragingly, the expert panel learned from the many discussions during the visit that the proportion of laboratory experience has been significantly enhanced from the onset of the study programmes. Moreover, the faculty has demonstrated the wish to extend the laboratory times as well.

A new building is now available and laboratory space is devoted to teaching. Some instrumentation is rather old and requires replacement. Other instruments are very modern and it is expected that the faculty will develop the laboratories further in the near future. This aspect is especially important with regard to research and the theses (Bachelor and Master level) that will be carried out in the laboratories. Overall, the laboratories are sufficiently well-equipped; however, the expert panel considers that any prospective growth in the number of students should be accompanied by further investment in laboratory space and equipment.

Importantly, education in chemistry and physics do not seem to involve extensive laboratory work. Both topics are fundamental in the field of bioengineering and, although (theoretical) demonstrations are possible, laboratory work should help to reach the learning objectives.

The engineering courses are also underrepresented and practical training is not available as well. In comparison with other natural sciences study courses, a bioengineering programme should have a more specialized profile with engineering modules (Process Engineering, Measurement and Control, Bioreaction Engineering, Simulation and Bioprocess Engineering).

Another important issue concerns the BSc theses. The BSc theses described in the course programme (6 ECTS) correspond to a relatively short time period. Many of the BSc theses are mostly theoretical and do not involve laboratory experiments. The MSc theses are longer. The expert panel feels that the learning goals can be reached but more practical studies are recommended.

The internship is very important with regard to the employability of the graduates. The internships help to compensate lack of in-house laboratory experience. The Annex describes where the internships may be carried out. The expert panel acknowledges that the faculty is actively supporting the students in finding a place for their internship.

The expert panel noted that no specific course was devoted to bioethics. However, a matching course has just been designed and the description will be integrated into the syllabus.

The prerequisites for the courses are not always consistent and this should be changed accordingly in the syllabus.

Recommendation
The expert panel feels that the learning goals can be attained with the present conditions but strongly recommends that further support for more practical studies should be considered/implemented. We also recommend that BSc thesis work should be carried out in the laboratories, with the proportion of theoretical studies of about 50% being too high for a BSc. Furthermore, we recommend improving the course descriptions with regard to the prerequisites and course names.

1.4 The application of the European Credit Transfer System (ECTS) is appropriate and plausible. It meets the recommendations of the European Commission[4].

Statement (including findings and analysis)
The IUS is bound to be in compliance with different national and cantonal legal acts ("Framework Law on Higher Education in Bosnia and Herzegovina" and "Law on Higher Education for the Sarajevo Canton"). Specific aspects of these laws define the implementation of the ECTS to universities in Bosnia and Herzegovina. The laws regulate the higher education model in Bosnia and Herzegovina according to the Bologna three-cycle-system. Undergraduate studies (Bachelor) range from 180 to 240 ECTS credit points and second cycle studies (Master) from 60 to 120 ECTS credit points. The total accumulated ECTS credit points of first and second study cycle programmes have to represent 300 ECTS credit points. It is defined by law that one semester of full-time study carries the workload of 30 ECTS credit

4 http://ec.europa.eu/education/lifelong-learning-policy/doc/ects/guide_en.pdf (ECTS Users' Guide)

points. One ECTS credit point is defined by the Bosnian and Herzegovinian law as 25 hours of total student workload.

Further regulation of how ECTS credit points are assigned to courses is done by the IUS statute. It is regulated by statute that the ECTS is applied to each course of each study programme. The number of ECTS credit points received after completion of each course is based upon the total student workload. This workload is split in different parts: attendance of learning activities, independent work, and preparation for assessments and other activities for particular subjects. Furthermore, the IUS uses the ECTS for evaluating courses passed by students at other higher education institutions who want to transfer to the IUS, for the evaluation of foreign qualifications as well as their recognition. Finally, the ECTS is used for the preparation of learning agreements for outgoing students.
The first and second cycle programmes of GBE consist of 240 and 60 ECTS credit points, respectively, adding up to a cumulative of 300 ECTS credit points. The learning outcomes and the subdivision of different workload activities are defined in the syllabi, which the students receive individually for each course at the beginning of the semester. The syllabi can also be found online.

All of the courses which are part of the first and second study cycle curricula consist of multiple parts, e.g., "Molecular Biology I BIO 301" consisting of 45 hours of lectures, 30 hours of journal club discussions and 75 hours of individual learning for the exams. When summed up, this leads to a total workload of 150 hours.

Most of the courses require 150 hours of total workload, which leads to the reception of 6 ECTS credit points after completion. The decision to design all courses with a similar total workload was done by the IUS consciously, applying a model of "standardized workload" described in the ECTS users guide issued by the European Commission in 2009. The aims of this approach, according to the IUS, are provision of general harmonization of scope and subjective "importance" of courses, standardization of subjective weight, more efficient mobility for students, simpler implementation of joint courses and easier transition as well as recognition.

The calculation of workload for almost all of the courses is done transparently and plausibly in each of the aligned syllabi. This applies as well to the calculation of ECTS credit points received after completion of courses.

However, the expert panel realized that there are some courses for which the application of the ECTS does not add up, which is in breach with the application of the European Credit Transfer System (ECTS). The total workloads defined in the syllabi were taken as a basis.

Taking from above, one ECTS represents 25 hours of total workload, and a workload of 150 hours should lead to the reception of 6 ECTS credit points after completion. For the following courses of the first cycle programme, non-matching ECTS credit values with respect to total student workload were found: for the courses "ENG111 Freshman English" and "MAN111 Communication and Reporting", with a total workload of 150 hours, an ECTS credit value of 4 ECTS is defined; for the courses "BOS111 Spoken Bosnian I", "TURK111 Spoken Turkish 1", "BOS112 Spoken Bosnian II" and "TURK112 Spoken Turkish II", with a total workload of 80 hours, an ECTS credit value of 2 ECTS is defined. All these courses are university level courses. For the course "ENS210 Computational Biology", a total workload of 100 hours is stated while an ECTS credit value of 6 ECTS credit points is defined.

For the second cycle study programme, for the course "BIO 590 Master Thesis", a total student workload of 450 hours is defined while an ECTS credit value of 24 ECTS credit points is set (should be 600). Additionally, for the courses "BIO501 Advanced Molecular Biology", "BIO513 Advanced Cell Biology", with a total workload of 140 hours an ECTS credit value of 6 ECTS credit points is defined.

A work placement/internship is defined as programme course in the first cycle study programme's curriculum with a reception of 6 ECTS credit points defined. There is no syllabus nor are there defined learning outcomes or learning agreement forms for this course. The duration of placements/internships is defined as at least 30 days. Students have to additionally prepare a work report. Further assessment of the work placement and its regulation is done in section 1.12. With respect to the ECTS credit points given after completion of the work placement, the expert panel assessed the ECTS value as reasonable, although no workload or learning outcomes are defined.

Recommendation
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1.5 The study programme is structured consistently with regard to formulated qualification objectives.

Statement (including findings and analysis)
The expert panel feels that the study programme is largely well-structured and consistent with regard to the goals of the faculty and the qualification profile. Upon interviewing the students, the expert panel received different opinions with regard to the university and faculty courses that teach, for e.g., English and Turkish and other subjects not directly linked to the profile of a scientist in the Bioengineering field.

Recommendation
The expert panel recommends the implementation of a survey addressing the possible replacement of some university and/or faculty courses by modules with a stronger emphasis on bioengineering or related subjects.

The expert panel acknowledges that important ties between the IUS and the Turkish nation are rooted in the genesis of IUS, that substantial IUS funding originates from Turkey and that many students from Turkey are attracted by this programme. It is important that these relations can be kept and further explored, and the funders have of course in mind that many graduates may proceed their studies in Turkey, which also fosters the internationalization of institutions of higher learning in Turkey. Nevertheless, the consultation to a large audience of students for matters that are of wide concern should be carried out.

1.6 The students' workload required for the study programme is devised in a way so as to allow them to reach the aspired qualification objectives in the study period specified.

Statement (including findings and analysis)
The students are able to cope with the workload, the goals are plausible and the aspired qualification objectives in the study period may be met. The workload is well described in the syllabi and the students know what to expect from their courses. Using the syllabi, students are able to prepare for the study programme which will help them to meet the objectives.

The BSc programme with 8 semesters is certainly long enough to meet the goals of the study programme. The MSc programme is just two semesters long, which is relatively short when looking at comparable degree programmes. The expert panel considers, nevertheless, that the programme still qualifies the graduates to enter PhD programmes at other institutions.

Recommendation
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1.7 The examination methods are suitable to assess whether the defined learning outcomes have been achieved.

Statement (including findings and analysis)
Examination and assessment of students and their knowledge is regulated by study rules of the IUS. Because of the nature of the courses, assessment is done as a continuous process. This includes written and oral exams, practical work, seminar papers, tests and projects. The assessment methods for each course, as well as their weighting, are declared at the beginning of each semester and are thoroughly clarified in the respective syllabi. The type of assessment and how (knowledge) “measurement” is done is linked to the type of learning objective. The learning objectives defined by IUS are: remembering, understanding, applying, analyzing, evaluating and creating. For each of the learning objectives, different defined types of assessment are used, e.g., multiple choice testing for remembering, summarization of reading for understanding, lab work and/or reports for applying, work and/or discussion on papers for analyzing and (independent) research for creating.

For most of the courses, sufficient attendance of the lectures is required to complete the courses. Additionally, the overall attendance of lectures per course is part of the assessment. Students have one midterm and one final exam per course as well as the possibility to attend two makeup exam dates.

For thesis writing, a faculty wide guideline has been established by FENS. It defines the procedure, main time schedule, consultations, responsibilities as well as the final assessment procedure for thesis writing. The assessment is split into two parts, one being the actual work on the thesis (theoretical, practical, writing) valued with 80% of the grade and the other an oral defense with the value of 20%.

Overall, the examination methods for courses as well as for the bachelor and master thesis are suitable to assess whether the defined learning outcomes have been achieved.

Recommendation
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1.8 Issuance of a diploma supplement is guaranteed.

Statement (including findings and analysis)
The automatic issuance of a diploma supplement in the English language upon finishing all courses is guaranteed.

Recommendation
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1.9 Admission requirements for the study programme are clearly defined, meet the statutory requirements and contribute to achieving the educational goals of the study programme. Recognition rules for external achievements pursuant to the Lisbon Recognition Convention[5] and achievements outside of higher education institutions have been defined.

Statement (including findings and analysis)

Different criteria have to be met by students to enroll in the first and second cycle study programmes. For the GBE bachelor programme, a completion of four years of secondary education is required as well as advanced knowledge of the English language. International certificates like TOEFL, IELTS and others can be used by prospective students to prove their language proficiency. If a candidate possesses no certificate, an English proficiency exam organized by the English Language School at IUS has to be passed. Furthermore, a ranking of candidates can be made on the basis of success achieved in high school, marks received at the application interview and points earned at the scholarship test. Additionally, performance of students during their secondary education in subjects relevant to GBE can be taken into account for ranking candidates. Applicants from Turkey have to pass the undergraduate studies entrance exam or have at least 1000 points on their SAT. The admission requirements are publicly announced before each academic year.

For enrollment in the second cycle study programme, completion of the GBE bachelor programme or another first cycle programme with 240 ECTS is mandatory. Similar to the admission for the bachelor programme, proficiency in English language has to be proven either via international certificates or successfully passing the proficiency test. Ranking of students is done based on their previous grades during the first cycle of study, their score at the application interview and other criteria determined in the public announcement of admission requirements.

Preference for admission is given to candidates who have achieved higher overall grades in high school/their bachelor programme and their score achieved at the interview, if the number of applicants exceeds the number of study places. This procedure is the same for both study programmes.

The application interview conducted for both study programmes is done without a standardized questionnaire and is set up individually for each of the applicants. The expert panel considers that this may lead to subjective assessments of applicants.

Recognition rules according to the Lisbon Recognition Conventions have been defined. In Bosnia and Herzegovina there is an independent administrative organization called “Centre for Information and Recognition of Qualifications in Higher Education”. This centre is responsible for information and recognition in higher education, coordination of exchange (students, academia) and national information. They provide higher education institutions with information about foreign study programmes. Under the Cantonal Law on Higher Education, the IUS has the authority to validate and carry out procedures of recognition of university degrees from abroad. Further rules for recognition have been defined in the “Book of Rules on Recognition of Foreign Educational Qualifications” introduced by the IUS senate. The procedure of recognition is carried out by an individually set-up committee formed at the IUS preparing a report. The decision of recognition is then done by the faculty council and the

[5] Applicable to states that have ratified the Lisbon Recognition Convention and where it has come into force. See: http://conventions.coe.int/Treaty/Commun/ChercheSig.asp?NT=165&CM=1&DF=07/10/2009&CL=ENG

faculty's dean. Evaluation of foreign qualifications is based solely on acquired knowledge, skills and competences. No rules for the recognition of prior non-formal and informal learning outside of the higher education sector are defined.

Overall, the admission requirements for both study programmes are clearly defined and contribute to successful education in this field of study. The sole exception of this assessment is that the application interviews are not conducted with standard questionnaires. The procedures and regulations set-up for administration of recognition of foreign qualifications achieved in foreign higher education institutions are sufficiently defined and pursuant to the Lisbon Recognition Convention. However, no rules for recognition of non-formal qualifications are defined.

Recommendation
The expert panel recommends the implementation of standardized questionnaires for the application interviews to achieve objective assessment of candidates.

The expert panel also recommends that rules for validation and recognition of prior non-formal and informal learning be clearly defined.

1.10 *Not applicable:* If e-learning, blended learning and distance learning are part of the programme, suitable didactic, technical, organisational and financial preconditions have been created to ensure the achievement of the study programme's qualification objectives.

1.11 *Not applicable:* The organisation of the study programme and the workload of a part-time study programme can be reconciled with a regular job.

1.12 Placements form an educationally relevant part of the curriculum. The job profile, the selection, support and assessment of placements contribute to achieving the study programme's qualification objectives.

Statement (including findings and analysis)
A work placement is part of the first cycle study programme. The duration of the work placement is set to at least 30 days with the ECTS credit point value set to 6 ECTS credit points. It can be done in companies or research institutions in relevant fields of the study programme. After completion of the internship, the students have to write a report about their work. The aim is to provide practical training for the students. Further aims of the internship are to develop the student's ability for reasoning, to improve their ability to process information and critical thinking, to increase their ability to apply gained knowledge and to develop their problem solving abilities. According to the self-evaluation report, the content of the practical training is course specific and is prepared according to the verified course syllabi. However, those syllabi are nowhere to be found in the self-evaluation report or the various annexes.

Overall, the work placements are regulated by the IUS document "procedures and rules for work placement/internship". It is stated in this document that the internship period can be divided in multiple sessions. After completion of the work placement, the trainee evaluation form, the report evaluation form and the internship report has to be handed in by the student.

It occurs that no learning outcomes and no total workloads are defined for the placements, although they are an educationally relevant part of the curriculum. Additionally, no learning agreements regarding the individual internships are filled out. The issuance of learning agreements is a crucial part of support and assessments of placements as well as defining the learning outcomes and tasks the students have to complete. Without learning agreements and therefore outcomes, the quality of the work placements as well as their relevance to the qualification objectives defined in the curriculum cannot be assured.

In summary, placements form a vital part of the GBE first cycle study programme, helping students to better grasp the skills and knowledge necessary to later work in the field of study. Additionally, they help the students gaining essential experience in practical and hands-on work. The obvious lack of a syllabus, defined learning outcomes and workloads as well as the absence of learning agreements decrease the quality of education gained by the students through work placements. Therefore, these omissions need to be repaired.

Recommendation

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1.13 *Not applicable:* Criteria for PhD Programmes
1.14 *Not applicable:* Criteria for Joint Programmes

4.1.1 Bachelor Programme

(a) Summary Statement

Overall, the Bachelor Programme "Genetics and Bioengineering" is well designed to equip the students with the tools and knowledge they need in their future field of work or research. The emphasis of the programme lies on the use of biological, chemical and physical knowledge to better understand biological processes and to later on engineer them in a way that goods and products helping humanity and society are generated. The approach of "standardized workload" used for the design of the curriculum leads to a very broad education for the students while at the same time still enables specialization. The theoretical part of the education is well divided into the different fields of natural sciences and is supported by lab and practical work as well as internships. To further ensure the development of the study programme as well as to provide the students with better education, investments into laboratory equipment have to be made. This will allow for more practical work performed by the students as well as more research opportunities, possibly providing cornerstones for building up biotechnology and bioengineering-related industry in the region in the foreseeable future.

(b) Assessment

The expert panel has assessed the standard as "partially met" under the following **conditions**:

1. Assure the thorough use of the European Credit Transfer System for all courses and correct the courses listed in this report by either changing the workload/learning outcomes or the ECTS credit points received after course completion.
2. Define learning outcomes and workload for the work placement/internship. Assure issuance of individual learning agreements for every internship taken.

4.1.2 Master Programme

(a) Summary Statement

As is true for the Bachelor Programme, the corresponding Master Programme "Genetics and Bioengineering" will also equip the students with the tools and knowledge they need in their future field of work or research. The programme is relatively short compared with most other programmes in the field that cover three or four semesters.

(b) Assessment

The expert panel has assessed the standard as "partially met" under the following **condition**:

1. Assure the thorough use of the European Credit Transfer System for all courses and correct the courses listed in this report by either changing the workload/learning outcomes or the ECTS credit points received after course completion.

4.2 Standard 2: Staff

2.1 A sufficient number of scientific or artistic teaching and research staff is available for the study programme, who are scientifically qualified, have adequate vocational experience and are qualified in terms of their teaching methods.

Statement (including findings and analysis)

During the site visit, the expert panel met with a very enthusiastic group of professors and assistants, all appearing to be genuinely committed with the development and progress of the GBE programmes.

According to the self-documentation, the teaching staff fully associated with the GBE is composed of 4 full-time professors, 4 senior assistants, 1 assistant and 1 student-demonstrator. While there are some minor inconsistencies in the documentation provided (…), the number and qualifications of the staff are sufficient to support the teaching load at the GBE courses. More so if one considers that many University, faculty and some elective courses are given by other IUS Professors or by qualified personnel from outside, as 30% are external lecturers. External professors are hired as part-time lecturers, must have a PhD, and are paid according to the appropriate salary scale.

All teaching assignments comply with Articles 27 and 28 of the Framework Law on Higher Education in Bosnia and Herzegovina and from the interviews and documentation analysis, the expert panel acknowledges the excellent qualification and skills of staff members. The teaching load of the full-time professors is considerable, although it was confirmed in the interviews that it is contained within the 9-hours/week limit of teaching duties. Nevertheless, although every professor acknowledged the specialization in at least 2 disciplines, (e.g., Plant sciences and Bioinformatics; Microbiology and Neurobiology; Veterinary Medicine and Immunology; Pharmacology and Gene Therapy), each is responsible for a larger number of topics/courses ranging from 3 to 6 full disciplines plus shared ones. Although this diversification means that there is a wide range of topics covered in the GBE courses, it also imposes a heavy burden and much longer time spent in class preparation than the 9-hour schedule suggests. This situation is also limiting the time available for other activities such as research.

A consensual opinion of the faculty is that more time for research is desirable, and it is both hoped and expected, pending the recruitment of additional staff. The expectation is that

within 5 years, 2 or 3 new professors should be assigned to the GBE courses. The expert panel sees this expansion as inevitable if the GBE courses are expected to continue to attract more students in the near future.

Recommendation
The expert panel recommends the recruitment of additional professors, not to replace the classes given by external lecturers, but to reduce the current teaching burden of the existing professors. This hiring can be progressive, also to meet with the predictable increase in the number of student in the near future.

2.2 The composition of the faculty meets the requirements of a profound scientific and artistic education and ensures adequate student support.

Statement (including findings and analysis)
The expert panel considers that the number, qualification, and specialization of the teaching staff, including external lecturers, is adequate to cover for all courses and classes. However, the panel was surprised to hear that none of the GBE professors is at the level of Full-Professor. A strong leadership is generally considered to be a pre-requisite to direct and develop specialization courses such are the cases of the GBE courses.

It was understood that a Full-Professorship existed previously but due to family/health-related matters the holder of the position left the programme. It was also perceived that there are plans to nominate a new Full-Professor, but the indications provided were that this would result from the promotion of (…) who is not currently the programme coordinator. While the expert panel has no objections to these developments and the ultimate decisions are laid upon the IUS direction, the procedures were not clearly explained, (…) A clarification of the situation is due in the shortest time-frame possible, as the future developments and planning of the courses should be conducted by a widely recognized and reputed professional whose leadership cannot put into question.

The expert panel has also found that at the moment teaching is not driven by research, at least not substantially. A deeper involvement of the teaching staff in research activities is desirable, which can in the future reorient the direction of a significant part of the studies, also to tighten the connections with the Master's theses on offer. Again, this aspect is strongly linked with the future leadership of the GBE programmes.

Recommendation
The expert panel recommends that the question of leadership and coordination should be solved in the shortest time-frame possible.

2.3 Teaching and research staff have access to human resource development and further education measures.

Statement (including findings and analysis)
Human resource development and career progression are defined in Article 28 of the Framework Law on Higher Education in Bosnia and Herzegovina and on IUS regulations, where Assistant Professors may progress to an Associate position after 5 years of teaching and having published at least 3 ISI-linked publications. Further progression to Full-Professorship requires the equivalent of additional 5 years teaching, at least 2 books and 8 ISI publications, among other more specific conditions. At IUS the application for progression

is fully open, with the best candidate being selected for the position, provided he/she complies with the requirements for the job.

However, a strong obstacle for a completely fair peer competition process arises from the fact that foreign professionals have only one year as the guaranteed duration of contracts, with possible yearly renewals. This arises from the limitations imposed by Bosnia and Herzegovina law.

Additional professional support is ensured by the IUS in the form of financial support for scientific publications, research activities, and the obvious continuous feeding of Master students to the research laboratories headed by GBE professors. Professors also receive support to attend international conferences, workshops and seminars. The conditions for funding and the criteria for selecting which applications are supported are defined in the Book of Rule on Incentives Policy and Financial Support for Book Publishing, Conference Participation and Professional Development. However, during the site visit and individual interviews the expert panel realized that not all staff were familiarized with these simple premises. The relevant information should therefore be compiled and simplified into a resource of easy access, e.g., an intranet page on regulations for human resource development.

Recommendation
The expert panel recommends that all important information on human resource development and further education support be made available in a simplified and accessible form for fast consultation.

4.2.1 Bachelor Programme

(a) Summary Statement
The human resources are possibly the most valuable assets of any academic programme and the decisive condition to guarantee the ultimate success of the student's education. The teaching staff of the GBE Bachelor course at the IUS is composed of a very competent and enthusiastic group of professionals, that have the knowledge and skills to educate the students in all the areas of knowledge covered by the curricula, with partial coverage provided by external teaching staff. The professors have at their disposal a number of measures and support, provided by the IUS, to further increase their professional development.

(b) Assessment
The panel has assessed the standard as "met".

4.2.2 Master Programme

(a) Summary Statement
The teaching staff of the GBE Master programme at the IUS is composed of a very competent and enthusiastic group of professionals, that have the knowledge and skills to educate the students in all the areas of knowledge covered by the curricula, with partial coverage provided by external teaching staff. They also provide opportunities for the students to develop their scientific competences through internships in their research laboratories. The professors have at their disposal a number of measures and support, provided by the IUS, to further increase their professional development, and benefit from the availability of GBE Master students to contribute to their research projects.

(b) Assessment

The expert panel has assessed the standard as “met”.

4.3 Standard 3: Quality assurance

3.1 The study programme is supported by the institution’s quality management system.

Statement (including findings and analysis)

The IUS introduced its internal quality assurance system in 2011. The system consists of different parts defined by the respective documents.

The overall quality culture and QA system backbone is defined by the IUS statute, its strategic plan until 2020, the regulation on QA, the QA office policy and the internal QA procedure rulebook. In the first three mentioned documents, the commitment of senior leadership towards a developing quality culture is defined. The regulation on QA defines the internal QA system, its structure, responsibilities, activities, the culture itself, the students' role in QA and different procedures. It establishes the IUS QA bodies, QA office and faculty quality assurance team. The QA office is established as an autonomous body of the IUS within the rector's office.

With respect to QA in curricula development and design, the documents "Book of Rules on Accepting and Monitoring Study Programmes at IUS" and "Book of Rules on the Work of the Curriculum Committee" were established. The first defines the content, methods of proposing, accepting, monitoring and realization of study programmes. Additionally, it defines procedures for the development of curricula as well as their cancellation. For the development of curricula, a curriculum committee is introduced. Finally, this rulebook defines the form of syllabi and the forms for different types of changes of curricula.

For continuous evaluation of academic staff, an assessment of the staff is done by using results of yearly student surveys. This is regulated in the "Book of Rules on Evaluation of the Academic Staff". Additionally, there is a part of the evaluation taken into account done by the university itself.

After national institutional accreditation, the IUS was obliged to produce an Action Plan on Quality System improvement. This action plan includes the list of activities addressing the recommendations stipulated in the institutional accreditation report, a timeline for implementation activities and the defined persons in charge.

Additional documents were issued by the IUS defined procedures of monitoring and recording the fulfilling of teaching obligations and the role of different QA teams. Furthermore, the documents which are part of the QA policy but contribute to the QA system as well are mentioned as "Code of Ethics", "Decisions on procedures for Developing, Adopting and Implementation of IUS strategy" and "Regulation on Student Organization and Student Rules at IUS".

The study programme is therefore supported by the institutions quality management system in various ways and levels. The two QA bodies, "QA Office" and "Faculty QA Team", play a

major role in the IUS' QA system. Below, further elaboration on their role in supporting the study programme is done.

The QA office is established as an independent unit within the university whose manager is directly responsible to the rector. Its various activities range, e.g., from development of regulation on QA, to the preparation of various templates and form, to providing support and guidance for the processes of self-evaluation and external evaluation. A distinctive part of the work is the cooperation with the faculty QA teams. Additionally, internal stakeholders such as students or academic staff are involved in the IUS' QA system in a systemic manner. Within each faculty, a faculty QA team consisting of 5 members, with one being a student, is established.

In summary, it can be said that over time the IUS has established a well-balanced QA system with distinctive defined scope of functions for the different QA bodies. Ranging from general QA regulations to specific defined forms and evaluation of teaching staff, the system is well set to support both GBE study programmes right now and in future developments.

Recommendation

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3.2 The study programme is part of a regular quality assurance and enhancement process which takes into account the curriculum, the study conditions and the programme organisation, and which involves all relevant groups as well as external experts.

Statement (including findings and analysis)

The quality of the first and second cycle study programmes is assured through continuous monitoring and verification of different study programme specific parameters. This is done by gathering information from students and lectures as well as other stakeholders. Course evaluation is done once a year at the end of each academic year by the QA office. The analysis includes different factors as well as the student's evaluation of the courses. The data collected annually via the online student survey system includes, but is not limited to, student progression and success rate, profile of the student population, number of students that graduate, average grades in each study programme, drop-outs, student's status and percentage of graduates of each generation. In addition to the data collected by the programme automatically, other data sets and types of information are collected with various surveys, including but again not limited to students' satisfaction with courses, evaluation of teachers and teaching methods (every semester), satisfaction with available resources, alumni/employment satisfactory surveys and others.

Academic staff at the IUS is evaluated according to the "Book of Rules on Evaluation of the Academic Staff Members Procedures". The evaluation procedure integrates evaluation of the staff by the IUS itself and the students (in form of the before mentioned online survey). The evaluation areas include the scientific research-related work, teaching work with students and other activities. Development of the quality of the study programmes is assured via various tools for implementation of improvement measures and activities.
A positive example for a QA accompanied process in the development of the study programmes is the introduction of a study programme course for the work placement/internship after both students and the academic staff agreed on this being important for the study programme’s integrity.

Although stated on the previous substandard and on this one as well as the IUS' QA system being well established and equipped to meet present and future challenges, there is always room for improvement. For the two GBE study programmes, some inconsistencies were found regarding the pre-requisite for courses as well as their names and the course numbers.

Some of the pre-requisites defined in the curricula do not match up with the pre-requisites defined in the respective syllabus. Some examples are given here but it has to be stated that the pre-requisites do not match for at least one third of the courses. For the course "BIO320 Introduction to Forensic Sciences", the pre-requisites defined in the syllabus are the courses NS101 and NS209, in the curriculum there are no pre-requisites defined. For the course "BIO306 General Microbiology", the pre-requisites defined in the syllabi are the courses NS202 and NS205 while in the curriculum it is only indicated NS204. For the students, it is therefore unclear which pre-requisites are specific to the courses. Another example given is the Course "BIO307 Bioengineering principles", that has itself as a pre-requisite according to the syllabus. A different problem is the differing names of courses, an example given is the course BIO306 which is called "Microbiology" in the curriculum and "General Microbiology" in the syllabus. An additional problem is that there seems to be no standardized way established in defining pre-requisites - in the syllabi there are different methods used (course number, or course number plus name, or only course name). Because of the problems with the differing names, this can lead to misunderstandings. During the site visit, the IUS made clear that this problem currently arises from the implementation of the new online study management tool.

Overall, the IUS takes sufficient and effective measures with respect to QA and both study programmes are part of a regular quality assurance and enhancement process. The development of the study programmes themselves is accompanied by effective QA tools.

Recommendation
The expert panel suggests that the way pre-requisites are written down should be clearly defined, and to implement one standardized nomenclature for all pre-requisites.

3.3 The participation of students in reflections on the study programme, the study conditions and the programme organisation has been institutionalised.

Statement (including findings and analysis)
As mentioned in the section above, there are annual student surveys conducted at the end of the semester. The different types of data collected were already mentioned above. The QA office collects and processes the data, preparing three different types of reports: a University wide report to inform leadership and governance structures; a faculty level report; and an individual report for academic staff members for each of their courses taught. Those reports are further discussed and used in different decision making groups like the faculty committee. Additionally, they are used by the senior leadership as an indicator of progress, taken into consideration the staff assessment (as described in section above) and are used as input data for self-evaluation processes.

4.3.1 Bachelor Programme

(a) Summary Statement
The Quality Assurance system set up by the IUS and faculty-wide is suited to support the Genetics and Bioengineering bachelor programme as it currently stands and in future developments. Detailed documentation and regulation of different levels of QA is done at the

IUS providing the tools fit for study programme development. All internal (especially students and teachers) and external stakeholders are involved in institutionalized QA processes. The different QA competences are well defined and meet the standards.

(b) Assessment
The expert panel has assessed the standard as "met".

4.3.2 Master Programme

(a) Summary statement
The Quality Assurance system set up by the IUS and faculty-wide is suited to support the Genetics and Bioengineering master programme as it currently stands and in future developments. Detailed documentation and regulation of different levels of QA is done at the IUS providing the tools fit for study programme development. All internal (especially students and teachers) and external stakeholders are involved in institutionalized QA processes. The different QA competences are well defined and meet the standards.

(b) Assessment
The expert panel has assessed the standard as "met".

4.4 Standard 4: Funding and infrastructure

4.1 Transparent documentation of the funding of the study programme is available.

Statement (including findings and analysis)
The self-documentation gives information on funding as a brief text statement as well as a more detailed budget plan in Annex 15.

The income is mainly acquired from the Foundation, tuition fees and donations. During the site visit, the IUS management explained that in the starting years, 100% of financing were sourced by the Foundation. Presently, the ratio has turned in such way that the financing is largely sourced out of tuition fees.

During the GBE lab visit, the expert panel got acquainted with the laboratory equipment and realized that in addition to the basic equipment, some state-of-the-art modern and expensive equipment is present in the laboratories, and which could not be expected to be purchased solely from the budget plan. The IUS management explained that this equipment was obtained, at least in part, from donations made recently to the IUS (i.e., in addition to the budgeted sums).

Based on the evidence given in the self-documentation and the fact that donations are not objectively projectable, the expert panel came to the conclusion that transparent documentation of the calculable funding is in place, and considers the matter as justified.

Recommendation
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4.2 Adequate rooms and technical facilities required for the study programme are available.

Detailed information on the laboratories and equipment is provided in the report, in a four-page description. There are four laboratories with a focus on student tutorials, cell culture, molecular biology and freezing/storage, respectively.

During the site visit, the presented laboratories were shown to be equipped with simple yet functional basic equipment (shake flasks, laminar flow cabin, microscope) as well as with some very newly acquired high-end equipment (PCR thermal cycler, digital gel scanner, fluorescent digital microscope). The GBE clarified that these laboratories are also used for permanent research activities, thus being shared with the student classes. The chemicals, e.g., salts and enzymes, were present in the laboratories in rather low amounts for the expected constant operating procedures.

The IUS management added that there are plans to invest in new facilities (e.g., cold room, additional laboratory space by extending the current premises), which are nevertheless not yet represented in the budget plan.

Taken into account that biotechnology is an expensive field and the GBE programme is still in its initial launching phase having a seemingly limited budget, the expert panel highly appreciates the efforts being made for the improvement of the hands-on training in the laboratories.

Recommendation
The expert panel views the rooms and technical facilities as adequate for the programme at this stage; however, it encourages the IUS to consider further investments in laboratories and equipment to improve the level of permanent research and training.

4.4.1 Bachelor Programme

(a) Summary Statement
Based on the evidence out of the self-documentation report and the site visit in the labs, and given the still developing and fast-expanding state of the GBE programme the panel finds the rooms and technical facilities as adequate for the programme at this moment.

(b) Assessment
The expert panel has assessed the standard as “met”.

4.4.2 Master Programme

(a) Summary Statement
Based on the evidence out of the self-documentation report and the site visit in the labs, and given the still developing and fast-expanding state of the GBE programme the panel finds the rooms and technical facilities as adequate for the programme at this moment.

(b) Assessment
The expert panel has assessed the standard as “met”.

4.5 Standard 5: Research and development and appreciation of the arts

5.1 The objectives and perspectives for research and development defined for the study programme are consistent with the strategic orientation of the institution.

Statement (including findings and analysis)
The expert panel learnt that the engagement in research activities is more driven, and rightly so, by enthusiasm and self-interest on career and personal development than by legal obligations. All GBE Professors are engaged in research, with each staff member having his/her own research goals and investing on the development of research careers. In strictu senso, these goals are also in compliance with the the IUS strategic plan on research and development, except that the IUS objectives are very broad.

Regretfully, the expert panel has not identified, within the framework of the GBE courses and activities, a solid plan for integrated research in the GBE area. GBE Professors have established international collaborations and are part of networks in the field. They are genuinely investing their time on research, attracting GBE students to support scientific activities and, conversely, helping the students to attain their objectives. But there is no evidence of a structured research plan transversal to all the GBE disciplines that can be developed and presented as the forefront of the FENS and GBE to attract institutional, and therefore national and international, support and funding.

Objective 1.4 of the IUS strategic plan on research and development establishes that at least one IUS programme is to be invested into position of leadership in the area. This represents a good opportunity for uplifting a research plan to a position of being identified for excellence and be eligible for IUS support.

Recommendation
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5.2 The scientific and/or artistic staff is involved in the institution's research activities and/or activities regarding the development and appreciation of the arts. The interaction between research and teaching is ensured.

Statement (including findings and analysis)
GBE full-time Professors are engaged in research activities in their respective areas. (…) Their research is intimately connected with the courses they teach in the Bachelor and Master courses.

The expert panel acknowledges the efforts that GBE Professors make to raise the level of scientific research in the context of the Sarajevo canton and in Bosnia and Herzegovina. They have all had PhD or post-doctoral training abroad in very reputed European or American Universities and research centers, and have left their mark, ones more than others, in their respective fields. The conditions to produce high quality research in Bosnia and Herzegovina are still not optimal, regarding sources of funding, state-of-the-art equipment, and also support staff such as research assistants and technicians. The shortage of supporting human resources is partly compensated by the engagement of very enthusiastic PhD and master students that make a significant proportion of each research group.

All these efforts are seriously undermined by the uncertainty that the Bosnian law imposes of the contracts of foreign staff, as mentioned in Standard 2, above. Not only this limits the capacity to solidify the existing commitment with leading professors/researchers but also precludes in a way the attractiveness of Bosnian Universities for qualified staff from abroad. These uncertainties surely justify a detected drop in the quality of publications of the GBE Professors comparing their previous assignments abroad with the current placement. Nevertheless, given all the obstacles, the expert panel commends the effort of the GBE Professors and their commitment in maintaining a certain level of quality in their published work.

In autumn 2016, it is predicted that 3 new Master students will be employed and reinforce the GBE laboratory population, but it is also expected this to be partly counterbalanced by the departure of current students when they finish their degrees.

As mentioned above in Standard 2, the IUS rewards the scientific performance of GBE Professors with financial support for scientific publications, attendance to international conferences, workshops and seminars, as defined in the Book of Rule on Incentives Policy and Financial Support for Book Publishing, Conference Participation and Professional Development.

Recommendation
The expert panel recommends that the scientific activity be monitored for pre-determined timeframes of, for example, 5 years. GBE Professors and the IUS management should determine specific goals for research, followed by an evaluation of performance. The analysis needs not to be necessarily punitive but as a form of assessing the needs for research and the balance with the teaching load, to optimize the human resources and identify further needs.

5.3 To the extent required by the type of study programme, students will be integrated into research projects and/or projects regarding the development and appreciation of the arts.

Statement (including findings and analysis)
The self-documentation report states that in the GBE programme, students are actively engaged to learn and appreciate scientific research. The areas of research include Plant Proteomics & Bioinformatics, Molecular Biomedicine, and Biomedical Genomics and Personalized Medicine. In all of these groups, three to four students are working as PhD or MSc candidates, and 2-3 first cycle graduation projects are running. At the site visit, the expert panel was shown that scientific works of group leader and students are submitted for publication.

Based on the information given in the self-documentation report and obtained at the site visit, the expert panel concluded that the cooperation between leading staff and the student population is working effectively and that students are integrated in the research activities adequately.

In the course “graduation project” there is a special focus on scientific writing and it is a topic/integral part in some other programme courses.

Recommendation
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5.4 The (*planned*) organisational and structural framework conditions are sufficient and suitable to implement the scheduled research activities and/or activities regarding the development and appreciation of the arts.

Statement (including findings and analysis)
The self-documentation report provides a short chapter on organizational structure, the programme coordinator and his tasks. In addition to coordinating the teaching process, the coordinator monitors the scientific research activities and professional development of academic staff.

The GBE laboratories are located in the IUS Research and Development Center (RCD) with the responsible manager being (…). He is assisted by vice manager (…) to e.g. "manage the activities related to scientific research" and "distributing tasks in the department".

During the site visit, the expert panel found that the GBE management (programme coordinator Assoc. Prof. Mohamed Ragab Abdel Gawwad and his 7 supporting staff) consists of researchers trained in a rich international environment. The complete staff and also the students are highly motivated to create knowledge and progress for the University, the whole region, as well as for their personal advancement.

From September 2016 on, the position of a Full Professor will presumably be filled again, after the previous holder had left recently. It is also planned to increase the staff by two additional Assoc. Professors that recently earned their PhDs at the IUS. Based on the expert panel member's personal experience of conducting scientific programmes and heading research groups, this is highly recommendable. From our analysis, the total workload of the GBE Professors is obviously rather high and all small steps taken to lighten the personnel's burden can be crucial to the success of research while achieving academic excellence.

Nonetheless, the expert panel considers that a strategic plan for research at the GBE level is missing and its absence will preclude the future success of all research efforts. A joint research plan congregating the existing teams and connected to the strategic plan of IUS, and also to the development goals for the region or industry, could not be found in the documentation provided. It is not evident for the expert panel what is the global GBE research strategy and how the wide background of scientific know-how will integrate in a clear path-forward for the research activities of the whole GBE programme, or which are the scheduled activities for future years.

In the present situation, with a still fragile system where funding seems not to be assured beyond the foreseeable future, there are decisions that need to be carefully planned, such as what type of auxiliary staff is needed, which pieces of equipment will be crucial, having joint collaborative projects, how to attract the best local, national and international students, etc., if the GBE together with the IUS wishes to attain its goals and convert the institution as an international reference in the field. What is more, the expert panel does not understand how any plans for future research will be accomplished without basic tools such as an itemized budget for investigation.

Recommendation
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4.5.1 Bachelor Programme

(a) Summary Statement

Given the available information, the expert panel came to the conclusion that excellent and international scientific knowledge is present at the GBE, and that staff and students are highly motivated. However, to implement the scheduled research activities it is necessary to provide a structured plan stating which activities are strategically and jointly planned for the following years.

(b) Assessment

The expert panel has assessed the standard as "partially met" under the following **condition**:

1. The GBE programme shall provide a strategic research plan (define objectives for research and development) with schedules for implementation in the following years and elaborate a budget to support the proposed activities. On this basis, a suitable organizational and structural framework can be assessed.

4.5.2 Master Programme

(a) Summary Statement

The expert panel concluded that excellent and international scientific knowledge is present at the GBE, that staff and students are highly motivated, and thus the potential to success is at reach. However, to implement the scheduled research activities, it is necessary to provide a structured strategic research plan within the GBE framework, elect which activities are strategic and formulate a budget that will sustain the jointly planned activities for the following years.

(b) Assessment

The expert panel has assessed the standard as "partially met" under the following **condition**:

1. The GBE programme shall provide a strategic research plan (define objectives for research and development) with schedules for implementation in the following years and elaborate a budget to support the proposed activities. On this basis, a suitable organizational and structural framework can be assessed.

4.6 Standard 6: National and international co-operations

6.1 In line with the study programme's profile, national and/or international co-operation projects with higher education institutions or institutions outside the higher education sector have been established.

Statement (including findings and analysis)

The report states that IUS is committed to support national and international cooperation with higher education institutions in Turkey, the Balkans and in Europe. There are aspirations to extend cooperation to USA, Middle East and Asia. The cooperation is managed through the International Relations Office and Project Management Office and contains four categories: exchange programmes, national cooperation in BiH, international cooperation, and projects supported by European and international organizations.

The GBE is involved in exchange programmes composed of Erasmus Bilateral Agreements and the Mevlana Exchange Programme (Turkish exchange programme in higher education). In the Erasmus+ Cooperation, understanding agreements with 52 international universities are

present. Currently, the GBE is involved in Erasmus+ programmes with three universities in Romania (biological and related studies) and one MSc/six BSc students in Mevlana Exchange programme. The national cooperation in BiH is focused on the Sarajevo University. Agreements with the Faculties of Agriculture, Pharmacy and the Institute for Genetic Engineering and Biotechnology are signed to ensure cooperation and exchange of researchers and students.

Through the information referred above, it is evident that the GBE programme is part of existing exchange programmes and is seeking to extend the international cooperation constantly.

While there is still room for improvement, the expert panel concluded that the standard is satisfactorily met.

Recommendation
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6.2 The co-operation projects encourage and support the advancement of the study programme and the mobility of students and staff.

Statement (including findings and analysis)
At the site visit, the expert panel encountered a GBE management and scientific staff with high international background. The GBE programme researchers seek to advance the studies of their students also by exchange with their former groups and laboratories, as well as joint publications with former colleagues. The accreditation procedure itself is also seen as a valuable tool to receive feedback on the strengths and fields of improvement of the study programmme.

Exchange programmes such as Erasmus and Mevlana (see above) are in place. The expert panel had the opportunity to conduct skype teleconferences with two students: one PhD student currently in Ankara and one MSc student studying in Germany. They summarized that their studies at the IUS gave them a good knowledge basis and scientific background to conduct their studies abroad successfully.

Through the information given above, it is evident that the GBE programme seeks to encourage and support the advancement of the study programme and the mobility of students and staff.

While there is still area of improvement, the expert panel concluded that the standard is met.

Recommendation
-

4.6.1 Bachelor Programme

(a) Summary Statement
The GBE Scientific staff as well as students show mobility in the international research community. Through the information given, it is evident that the GBE programme seeks to encourage and support the advancement of the study programme and the mobility of students and staff.

(b) Assessment

The expert panel has assessed the standard as “met”

4.6.2 Master Programme

(a) Summary Statement

The GBE Scientific staff as well as students show mobility in the international research community. Through the information given, it is evident that the GBE programme seeks to encourage and support the advancement of the study programme and the mobility of students and staff.

(b) Assessment

The expert panel has assessed the standard as “met”

5 Summary and Final Assessment

Overall Statement

The Genetics and Bioengineering Bachelor and Master programmes of the International University of Sarajevo have filed a submission for international accreditation for both courses to AQ Austria, the Austrian agency for quality assurance and accreditation in higher education. The process was evaluated through the analysis of documentation, profound discussions, and a site visit observed by an expert panel composed of a group of European academics having strong links to University education, scientific research, and industry/commercial exploitation, and also by a student representative. The views of the panel of experts were taken with objectivity and independence, and having in consideration the national and regional context of the GBE programmes. The mission of the expert panel was not to define absolute targets of excellence or impose the personal views or opinions of its members based on each one's ideal of what a university course should be or which paths should be defined, but rather to assess whether the international standards defined by reputed agencies together with the philosophy and self-objectives defined by the IUS were met.

The expert panel observed an enormous will of all the players involved in the GBE programmes, namely the IUS direction, the teaching body, administrative and supporting staff, and students, former and present, to contribute to the progress and development of the courses, aiming for educational and research excellence. The panel acknowledges the good quality of the work performed thusfar, the high level of professionalism and the human potential of all involved, and above all the genuine enthusiasm of the ensemble of the concerned population to drive for progress and success of the GBE and IUS.

The six standards analyzed, namely 1) Study programme and programme management, 2) Staff, 3) Quality assurance, 4) Funding and infrastructure, 5) Research and development and appreciation of the arts, and 6) National and international co-operations, were evaluated for the Bachelor and Master courses globally but with particular appreciations for the diverse specificities of each programme. Overall, the Bachelor and Master Programmes "Genetics and Bioengineering" were found by the expert panel to be designed and equipped with the conditions to meet the expectations of the students and also of the teaching and research staff, and having the necessary infrastructures and societal conditions to support the balanced development of the studies and prepare students and staff for their future endeavors in work and research. Nevertheless, not all Standards were considered to be fully met, as the expert panel detected at this time some deficiencies that will preclude the full attainment of the goals set by the IUS/GBE and the supervisory role of AQ Austria.

While Standards 2, 3, 4 and 6 were considered as fully met, there were found some inadequacies regarding Standard 1 considered as partially met, in the application of the European Credit Transfer System for some courses. These should be thoroughly checked for consistency and corrected either by changing the workload/learning outcomes or by amending the ECTS credit points for the courses at fault, both regarding the Bachelor as well as the Master Programmes. Specifically for the the Bachelor Programme, learning outcomes and workload for the work placement/internship should be clearly defined, and the issuance of individual learning agreements for every internship taken should be assured.

Standard 5 was also considered as partially met, as although the present quality of the research conducted at GBE is not put into question, there is a worrying and critical absence of a structured strategic research plan within the GBE framework. This deficiency should be tackled with the conception, formulation and establishment of a set of rules and development plans to support a GBE integrated research vision to build and strengthen GBE collaborative research in the medium term.

Final Assessment
The expert panel recommends the accreditation of the Bachelor programme with conditions.
The expert panel recommends the accreditation of the Master programme with conditions.

Bachelor programme

Standard	Assessment	Conditions
Standard 1 - Study programme and programme management	partially met under the following conditions	2. Assure the thorough use of the European Credit Transfer System for all courses and correct the courses listed in this report by either changing the workload/learning outcomes or the ECTS credit points received after course completion. 3. Define learning outcomes and workload for the work placement/internship. Assure issuance of individual learning agreements for every internship taken.
Standard 2 - Staff	met	
Standard 3 - Quality assurance	met	
Standard 4 - Funding and infrastructure	met	
Standard 5 - Research and development and appreciation of the arts	partially met under the following conditions	2. The GBE programme shall provide a strategic research plan (define objectives for research and development) with schedules for implementation in the following years and elaborate a budget to support the proposed activities. On this basis, a suitable organizational

		and structural framework can be assessed.
Standard 6 - National and international co-operations	met	

Master programme

Standard	Assessment	Conditions
Standard 1 - Study programme and programme management	partially met under the following conditions	1. Assure the thorough use of the European Credit Transfer System for all courses and correct the courses listed in this report by either changing the workload/learning outcomes or the ECTS credit points received after course completion.
Standard 2 - Staff	met	
Standard 3 - Quality assurance	met	
Standard 4 - Funding and infrastructure	met	
Standard 5 - Research and development and appreciation of the arts	partially met under the following conditions	2. The GBE programme shall provide a strategic research plan (define objectives for research and development) with schedules for implementation in the following years and elaborate a budget to support the proposed activities. On this basis, a suitable organizational and structural framework can be assessed.
Standard 6 - National and international co-operations	met	

Recommendations of the panel

Bachelor and Master programme

Standard	Recommendations
Standard 1 - Study programme and programme management	• The expert panel recommends further developing and diversifying internships outside the IUS, establishing more partnerships and obtaining additional offers associated with more practical experience. • The name of the study programmes ("genetics and bioengineering") is relatively broad and carries with it possible ambiguities but also opportunities. While "genetics" is a purely biological discipline, "bioengineering" connotes with more diversified tools. There is an opportunity to evolve the course to tackle the variable societal challenges and hence, the name of the course may be adjusted to better fit the expectations of students but also the deliverables of the courses. Nevertheless, the expert panel recommends that the course description should be rigorous and adjusted to its reality, correctly informing the students on the nature and expected outcomes of the courses. • The syllabus describes the learning outcomes satisfactorily; however, for prospective and current students, a more detailed description should be used. The title of the course should be subjected to a comprehensive analysis and discussion, but of course one of the possibilities is to maintain as it currently stands. • The expert panel feels that the learning goals can be attained with the present conditions but strongly recommends that further support for more practical studies should be considered/implemented. We also recommend that BSc thesis work should be carried out in the laboratories, with the proportion of theoretical studies of about 50% being too high for a BSc. Furthermore, we recommend improving the course descriptions with regard to the prerequisites and course names. • The expert panel recommends the implementation of a survey addressing the possible replacement of some university and/or faculty courses by modules with a stronger emphasis on bioengineering or related subjects. • The expert panel acknowledges that important ties between the IUS and the Turkish nation are rooted in the genesis of IUS, that substantial IUS funding originates from Turkey and that many students from Turkey are attracted by this programme. It is important that these relations can be kept and further explored, and the funders have of course in mind that many graduates may proceed their studies in Turkey, which also

	fosters the internationalization of institutions of higher learning in Turkey. Nevertheless, the consultation to a large audience of students for matters that are of wide concern should be carried out. • The expert panel recommends the implementation of standardized questionnaires for the application interviews to achieve objective assessment of candidates. • The expert panel also recommends that rules for validation and recognition of prior non-formal and informal learning be clearly defined.
Standard 2 - Staff	• The expert panel recommends the recruitment of additional professors, not to replace the classes given by external lecturers, but to reduce the current teaching burden of the existing professors. This hiring can be progressive, also to meet with the predictable increase in the number of student in the near future. • The expert panel recommends that the question of leadership and coordination should be solved in the shortest time-frame possible. • The expert panel recommends that all important information on human resource development and further education support be made available in a simplified and accessible form for fast consultation.
Standard 3 - Quality assurance	• The expert panel suggests that the way pre-requisites are written down should be clearly defined, and to implement one standardized nomenclature for all pre-requisites.
Standard 4 - Funding and infrastructure	• The expert panel views the rooms and technical facilities as adequate for the programme at this stage; however, it encourages the IUS to consider further investments in laboratories and equipment to improve the level of permanent research and training.
Standard 5 - Research and development and appreciation of the arts	• The expert panel recommends that the scientific activity be monitored for pre-determined timeframes of, for example, 5 years. GBE Professors and the IUS management should determine specific goals for research, followed by an evaluation of performance. The analysis needs not to be necessarily punitive but as a form of assessing the needs for research and the balance with the teaching load, to optimize the human resources and identify further needs.
Standard 6 - National and international co-operations	

6 Annex: Documents to support the review report

- List item 1
- List item 2

7 Annex: Glossary

BiH	Bosnia and Herzegovina
BiH BD	Brčko District of BiH
BHQF	BIH Qualification Framework ()
BA	Bachelor
CEFR	Common European Framework of Reference for Languages: Learning, teaching, assessment
GBE	Genetics and Bioengineering
FENS	Faculty of Engineering and Natural Sciences
FBiH	Federation of BiH
FLHE	Framework Law on Higher Education
ECTS	European Credit Transfer System
ECPR	European Consortium of Political Research
EHEA	European Higher Education Area
ESG	Standards and Guidelines for Quality Assurance in Higher Education
EUA	European University Association
EQF	European Qualification Framework
HE	higher education
HEI	higher education institution
IAU	International Association of Universities
IUS	International University of Sarajevo
IR	International Relation
Jstor	Journal Storage
MA	Master
MoCA	Ministry of Civil Affairs
QA	quality assurance
RS	Republika Srpska
SC	Sarajevo Canton
SD	Self-documentation
SEDEF	Sarajevo Education Development Foundation
UNIPA	student information system

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Site visit: accreditation of Bachelor and Master study programmes “Genetics and Bioengineering”

Expert Panel

Name	Institution	Role
Alexandre Carmo	Institute for Research and Innovation in Health, University of Porto	Head of the expert panel Expert from academia
Matthias Mack	Institute for Technical Microbiology at Mannheim University of Applied Sciences	Expert from academia
Daniela Reinisch	Director at the Upstream Development Microbials, Boehringer Ingelheim, Vienna	Expert with professional practice
Andreas Weber	Student of Biotechnology at the University of Natural Resources and Life Sciences in Vienna	Student Expert

AQ Austria project coordinators

Agnes Witzani and Nina Fölhs-Königslehner

Agenda

Wednesday, 13 July 2016

Hotel Hollywood
Dr. Mustafe Pintola 23
Ilidža, Sarajevo 71000, BH

The preparatory meeting will be at Hotel Hollywood, Conference Room 14 D ground floor.

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Top	Time	Topic(s) inter alia	Participants / Interview partner(s)
1	15:00-19:00	Preparatory meeting	Expert Panel and AQ Austria coordinators
2	19:30	Dinner (Hotel)	Expert Panel and AQ Austria coordinators

Thursday, 14 July 2016

International University of Sarajevo (IUS)
15 Hrasnička Cesta
Sarajevo 71000, BH

Meeting 1 until the end of the site-visit will be held in the Senate Room, Building A, Ground Floor G-30

Top	Time	Topic(s) inter alia	Participants / Interview partner(s)
1	09:00-09:15	Short welcome and presentation of IUS	Prof. Dr. Yücel Oğurlu, Rector Assoc. Prof. Dr. Ali Gürsel, Vice-Rector for Int. Cooperation & Research Assist. Prof. Dr. Mirsad Karic, Vice-Rector for Academic & Student Affairs
2	09:15-10:00	Standards to be discussed: Organisation, strategy, funding of IUS (alignment of study programmes to strategical framework of IUS)	Assist. Prof. Dr. Muhamed Ali, Vice-Rector for General Affairs Prof. Dr. Fuat Gurcan, FENS Dean Assoc. Prof. Dr. Mohamed Ragab, Programme Coordinator Edina Hadziahmetovic, QA Office Manager Ibrahim Inal, Finance Manager
3	10:00-10:15	Internal discussion	Expert Panel and AQ Austria coordinators
4	10:15-12:00	Standards to be discussed: Study programme and programme management (inter alia: staff, national and international co-operation)	Prof. Dr. Fuat Gurcan Assoc. Prof. Dr. Mohamed Ragab Assoc. Prof. Dr. Sabina Semiz Assoc. Prof. Dr. Ayla Arslan Assist. Prof. Dr. Mirza Suljagic Senior Assist Faruk Berat Akcesme Assist. Prof. Dr. Muhamed Hadziabdic Adnan Beganovic, Legal Advisor
5	12:00-13:00	Lunch break, IUS Canteen	Expert Panel and AQ Austria coordinators
6	13:00-14:00	Visitation of GBE Labs: Lab 1 : Student tutorial Lab 2 : Cell culture lab Lab 3 : MSc, PhD research Lab 4 : Research results analysis lab Lab, IT rooms in Building	Assoc. Prof. Dr. Ali Gürsel, Vice-Rector for Int. Cooperation & Research Assoc. Prof. Dr. Mohamed Ragab Assist. Prof. Dr. Mirza Suljagic Senior Assist Faruk Berat Akcesme Sen. Assist. Jasmin Sutkovic, Vice Manager of Research and Development Center

		A F1, IUS library and Classrooms in Building A F1 relevant for the study programmes	Merima Arslankadic, Library Manager
7	14:00-14:45	Standards to be discussed: Research and development (inter alia: national and international cooperation)	Prof. Dr. Fuat Gurcan Prof. Dr. Ali Gürsel Assoc. Prof. Dr. Mohamed Ragab Assoc. Prof. Dr. Sabina Semiz Assoc. Prof. Dr. Ayla Arslan Assist. Prof. Dr. Mirza Suljagic Sen. Assist. Jasmin Sutkovic, Vice Manager of Research and Development Center Edina Hadziahmetovic, QA Office Manager
8	14:45-15:30	Standards to be discussed: Quality assurance	Members of Faculty QA Team: Assoc. Prof. Dr. Mohamed Ragab Assist. Prof. Dr. Sadina Gagula - Palalic Sen. Assist. Jasmin Sutkovic, Vice Manager of Research and Development Center
9	15:30-16:00	Coffee break / Internal discussion	Expert Panel and AQ Austria coordinators
10	16:00-16:45	Standards to be discussed: Study programme and programme management (inter alia: national and international co-operation/mobility)	**Bachelor level:** Abdussamed Podojak Ahmed Adzemovic Amina Agovic Fatima Alihodzic Maida Ljubljankic Seid Malanovic **Master Level:** Aida Maric Ensar Mahmutovic Lejla Halilovic Muhamed Adilovic **Alumnae:** Ena Secic Jasminka Mujic Tea Becirevic
11	16:45-17:15	Standards to be discussed: Relevance of the study programme for the job market (inter alia: national and international co-operation/mobility)	**Employers/ Internship providers**: Mr. Kasim Bajrovic, Scientific Advisor Institute for Genetic Engineering and Biotechnology http://www.ingeb.unsa.ba/eng/ Mr Sukrija Huseinovic, General Manager, EUROFARM http://www.eurofarmcentar.ba/#

			Ph.D. Daria Ler, Head of the Laboratory, MOJA KLINIKA (supervising intern Tea Becirevic) http://mojaklinika.ba/en/ **Alumnae**: Amar Cemanovic (skype from Ankara) Habibe Ücpunar (skype from Germany)
11a	17:15-17:30		
12	17:30-18:45	Internal discussion	Expert Panel and AQ Austria coordinators
14	18:45-19:00	Final meeting with IUS management	Prof. Dr. Yücel Oğurlu, Rector Assoc. Prof. Dr. Ali Gürsel, Vice-Rector for Int. Cooperation & Research Assist. Prof. Dr. Mirsad Karic, Vice-Rector for Academic & Student Affairs Assist. Prof. Dr. Muhamed Ali, Vice-Rector for General Affairs Prof. Dr. Fuat Gurcan, FENS Dean Assoc. Prof. Dr. Mohamed Ragab, Programme Coordinator Edina Hadziahmetovic, QA Office Manager
16	20:00	Dinner (Park Princeva Restaurant)	Expert Panel and AQ Austria coordinators

Friday, 15 July 2016

An *optional working meeting* of the expert panel can be held at Hotel Hollywood.

Departure of expert panel and AQ Austria project coordinators

INTERVIEW PARTNERS	
Name	**Position**
IUS Staff	
Prof. Dr. Yücel Oğurlu	Rector
Assoc. Prof. Dr. Ali Gürsel	Vice-Rector for Int. Cooperation & Research
Assist. Prof. Dr. Mirsad Karic	Vice-Rector for Academic and Student Affairs
Assist. Prof. Dr. Muhamed Ali	Vice-Rector for General Affairs
Prof. Dr. Fuat Gurcan	Dean, Faculty of Engineering and Natural Sciences (FENS)
Assoc. Prof. Dr. Mohamed Ragab	Programme Coordinator
Assoc. Prof. Dr. Ayla Arslan	Academic staff member
Assoc. Prof. Dr. Sabina Semiz	Academic staff member
Assist. Prof. Dr. Sadina Gagula - Palalic	Academic staff member
Assist. Prof. Dr. Muhamed Hadziabdic	Academic staff member (Engineering)
Sen. Assist Jasmin Sutkovic	Academic staff member/Senior Assistant, Vice Manager of Research and Development Center (also Alumna)
Assist. Prof. Dr. Mirza Suljagic	Academic staff member
Senior Assist Faruk Berat Akcesme	Academic staff member
Edina Hadziahmetovic	QA Office Manager
Ibrahim Inal	Finance Manager
Merima Arslankadic	Library Manager
Adnan Beganovic	Legal Advisor
Bachelor cycle students	
Abdussamed Podojak	3rd year, 5th sem
Ahmed Adzemovic	2nd year, 4th sem
Amina Agovic	2nd year, 3rd sem
Fatima Alihodzic	3rd year, 6th sem
Maida Ljubljankic	4th year, 8th sem
Seid Malanovic	4th year, 7th sem
MA cycle students:	
Aida Maric	1st year, 1st sem
Ensar Mahmutovic	1st year, 1st sem
Lejla Halilovic	1st year, 1st sem
Muhamed Adilovic	1st year, 1st sem
Alumnae:	

Amar Cemanovic	PhD student / Istanbul Technical University
Ena Secic	Student, Justus Liebig Universität Gießen
Habibe Ücpunar	PhD student, Fast Track, Max Planck Institute of Neurobiology
Jasminka Mujic	Professional Associate in Clinical Chemistry and Hematology Lab/ Eurofarm Center
Tea Becirevic	Lab Assistant, Moja Klinika
Employer/Intership providers	
Mr Kasim Bajrovic	Scientific Advisor Institute for Genetic Engineering and Biotechnology http://www.ingeb.unsa.ba/eng/
Mr Sukrija Huseinovic	General Manager EUROFARM http://www.eurofarmcentar.ba/#
Ph.D. Daria Ler	Head of Laboratory MOJA KLINIKA http://mojaklinika.ba/en/