



agency for science and higher education

**REPORT
OF THE EXPERT PANEL
ON THE
RE-ACCREDITATION OF
UNIVERSITY OF APPLIED SCIENCES VELIKA GORICA**

**Date of site visit:
1st-4th April 2019**

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INTRODUCTION

The Agency for Science and Higher Education (the Agency) is an independent legal entity with public authority, registered in the court register, and a full member of the European Quality Assurance Register for Higher Education (EQAR) and European Association for Quality Assurance in Higher Education (ENQA).

All public and private higher education institutions are subject to re-accreditation, which is conducted in five-year cycles by the Agency, in accordance with the Act on Quality Assurance in Science and Higher Education (Official Gazette 45/09) and subordinate regulations, and by following *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) and good international practice in quality assurance of higher education and science.

The Agency's Accreditation Council appointed an independent Expert Panel for the evaluation of the **University of Applied Sciences Velika Gorica**.

Members of the Expert Panel:

- Prof. Jürgen Nolting, Ph.D., Hochschule Aalen, Federal Republic of Germany, Panel chair,
- Prof. Miquel Angel Piera Eroles, Ph.D., Universitat Autònoma de Barcelona, Kingdom of Spain,
- Senior Lecturer Kaci Bourdache, Laurea University of Applied Sciences, Republic of Finland
- Prof. Zoran Lulić, Ph. D., Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb,
- College prof. Hrvoje Jerković, Ph.D., College Algebra, Republic of Croatia,
- Marko Čačić, Rochester Institute of Technology Croatia, Republic of Croatia, student,

During the site visit, the Expert Panel held meetings with the following stakeholders:

- Management,
- Students,

- Heads of study programmes,
- Full-time teaching staff,
- External lecturers
- Representatives of the Committee for Quality Assurance and Implementation and the Internal Audit Committee
- Head of the Centre for Career and Psychological Support
- Head of the Service for International Cooperation and Projects and Erasmus Coordinator
- Alumni
- Representatives of the business sector, potential employers.

The Expert Panel members had a tour of the work facilities, laboratories, library, IT classrooms, student administration office and classrooms, and attended sample lectures, where they held a brief Q&A session with students.

In accordance with the site visit protocol, the Expert Panel examined the available additional documents and study programme descriptions (learning outcomes).

The Expert Panel drafted this Report on the re-accreditation of University of Applied Sciences Velika Gorica on the basis of University of Applied Sciences Velika Gorica self-evaluation report, other relevant documents and site visit.

The Report contains the following elements:

- Short description of the evaluated higher education institution,
- Brief analysis of the institutional advantages and disadvantages,
- List of institutional good practices,
- Analysis of each assessment area, recommendations for improvement and quality grade for each assessment area,
- Detailed analysis of each standard, recommendations for improvement and quality grade for each standard,
- Appendices (quality assessment summary by each assessment area and standard, and site visit protocol),
- Summary.

In the analysis of the documentation, site visit to the University of Applied Sciences Velika Gorica and writing of the Report, the Expert Panel was supported by:

- Matan Čulo, coordinator, ASHE,
- Mia Đikić, assistant coordinator, ASHE,
- Goran Briški, interpreter at the site visit, ASHE,

On the basis of the re-accreditation procedure conducted, and with the prior opinion of the Accreditation Council, the Agency issues a following accreditation recommendation to the Minister for Higher Education and Science:

1. **issuance of a confirmation on compliance with the requirements** for performing the activities, or parts of the activities
2. **denial of license** for performing the activities, or parts of the activities
3. **issuance of a letter of expectation** with the deadline for resolving deficiencies of up to three years. A letter of expectation can include the suspension of student enrolment within a set period.

The accreditation recommendation also includes a quality grade of a higher education institution, and recommendations for quality improvement.

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION:

University of Applied Sciences Velika Gorica

ADDRESS:

Zagrebačka ul. 5, 10410, Velika Gorica

DEAN:

dr. sc. Ivan Toth, prof. v. š.

ORGANISATIONAL STRUCTURE:

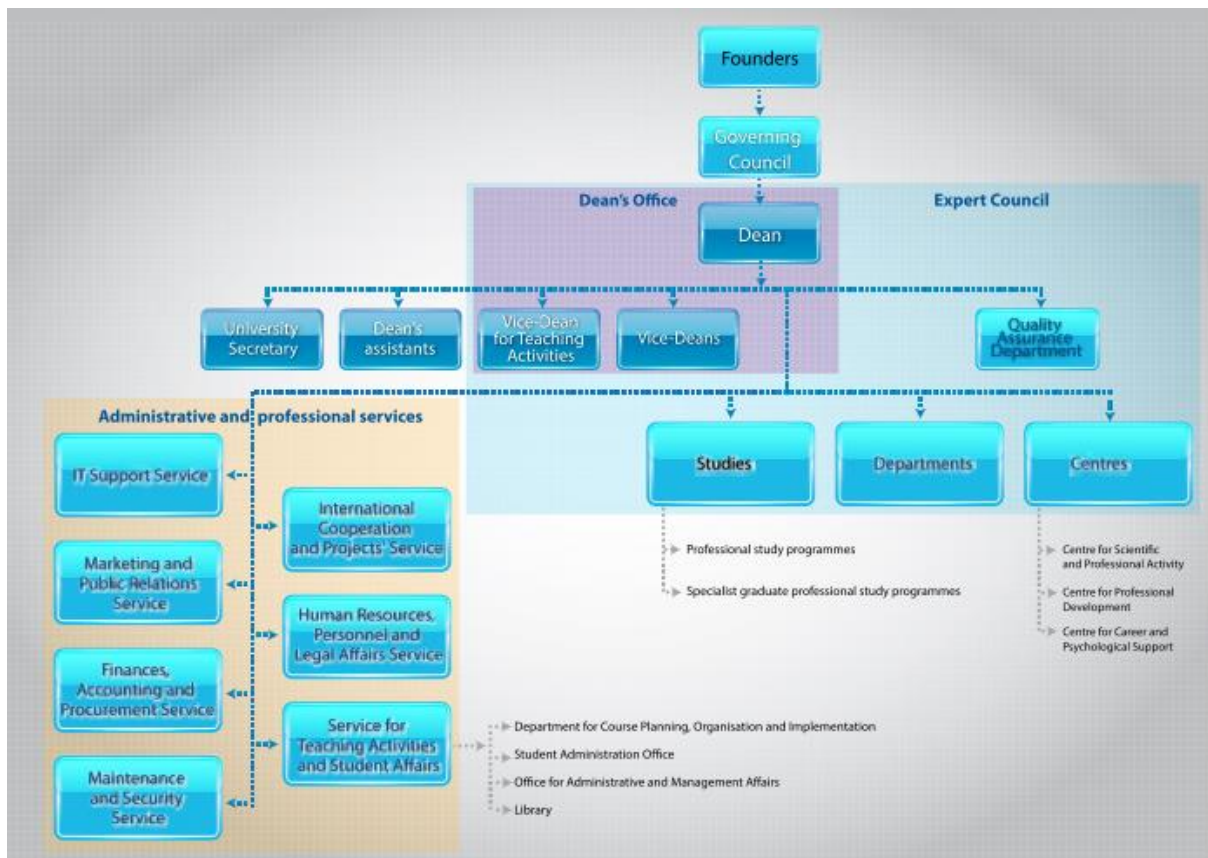


Figure 1. Organisational structure of the University of Applied Sciences Velika Gorica

STUDY PROGRAMMES:

- Undergraduate professional study programme of Aircraft Maintenance

- Undergraduate professional study programme of Computer Systems Maintenance
- Undergraduate professional study programme of Crisis Management
- Undergraduate professional study programme of Eye Optics
- Undergraduate professional study programme of Motor Vehicle Maintenance
- Specialist graduate professional study programme of Crisis Management
- Specialist graduate professional study programme of Information Systems
- Specialist graduate professional study programme of Logistics Systems and Processes Management

NUMBER OF STUDENTS: (Table 3.1. from the Self-evaluation report annex):

Table 3.1. Number of students per study programme for the current academic year

Study programme name	Full-time students	Part-time students
Computer Systems Maintenance (377)	273	265
Crisis Management (378)	158	314
Motor Vehicle Maintenance (379)	74	105
Aircraft Maintenance (380)	100	62
Eye Optics (383)	125	122
Crisis Management (385)	29	105
Logistics Systems and Processes Management (386)	38	74
Information Systems (387)	42	86
Total	839	1.133

NUMBER OF TEACHERS: (Table 4.1. b from the Self-evaluation report annex):

Table 4.1.b Structure of staff - for POLYTECHNICS AND COLLEGES in the current academic year

Staff	Full-time staff		Cumulative employment		External associates	
	Number	Average age	Number	Average age	Number	Average age
College professors	8	61,63	2	56	7	59,71
Senior lecturers	10	44,4	3	54,67	19	58,35
Lecturers	15	42,13	2	46	18	52,35
Lectors	-	-	-	-	-	-
Full professors with tenure	-	-	-	-	-	-
Full professors	-	-	1	54	6	66,83
Associate professors	1	57	1	55	3	61,67
Assistant professors	-	-	-	-	1	63
Expert assistants	2	26	-	-	-	-
Assistants	10	39,3	1	60	20	42,17
Technical staff	2	48	-	-	-	-
Administrative staff	21	35,55	-	-	-	-
Support staff	6	47,33	-	-	-	-

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

University of Applied Sciences Velika Gorica (hereinafter: University) started to operate in 2003, after having obtained a permit from the Ministry of Science, Education and Sports for the implementation of five professional three-year study programmes: Humanitarian demining, Pyrotechnology, Computer Systems Maintenance, Motor Vehicle Maintenance and Aircraft Maintenance. It was the first private university of applied sciences from the field of technical sciences in the Republic of Croatia. The founders of the University were the College of Occupational Safety and Health from Zagreb, Technology Transfer Centre of the Zagreb University's Faculty of Mechanical Engineering and Naval Architecture and the City of Velika Gorica.

The structure of the University is defined by the Statute and the Book of Regulations on the Internal Organisation.

Teaching, professional and scientific organisational units of the University, in accordance with the aforementioned regulations, are the Studies, the Department and the Centres. Business, legal and administrative organisational units comprises the Deanery with all its organisational units. The Studies are organisational units of the University, which implement and harmonize the teaching process of the professional and specialist graduate professional studies, tend to the promotion, development and quality of all forms of higher education teaching, election and promotion of teachers and teaching associates and perform other duties related to the teaching and higher education at the University. The basic function of the studies is to implement the teaching activities of the approved programme and to encourage the development of all scientific-professional teaching disciplines that are represented or ought to be represented on the study, based on the science and the profession, and with the intent to approach the level of standards worldwide. The bodies of the studies are the Study Programme Council and the Head of the Study Programme. The Department usually implements and harmonizes the teaching of professional and specialist graduate professional studies in the field for which they have been founded, they suggest the publication of teaching materials, course notes, handbooks and textbooks, they suggest modifications to the course programme in their field, they perform duties related to scientific and professional research and projects, reviews, consultations, analyses and expertises. They also cooperate with other higher education, professional and business institutions and other legal entities, they tend to the promotion of all forms of teaching and the election and promotion of persons who participate in the teaching process and other issues related to teaching.

The Centres are founded to implement individual scientific and professional activity of interest for the University. Several centres have been established at the University: Centre for Scientific and Professional Activity, the Centre for Professional Development and the Centre for Career and Psychological Support.

The Deanery is an organisational unit of the University which performs professional, administrative, statistical, accounting, bookkeeping, technical and other tasks that enable the successful operation of the University. The Deanery is managed by the Dean, and it consists of the following units: Dean's Office, Quality Assurance Department;

Human Resources, Personnel and Legal Affairs Service; International Cooperation and Projects' Service; Marketing and Public Relations Service; Teaching Activities and Student Affairs Service; Finances, Accounting and Procurement Service; IT Support Service and the Maintenance and Security Service. The Dean of the University represents the University and manages its affairs within the framework specified by the Statute and the legislation, the Dean is the head and leader of the University and has the rights and obligations of the director of the institution. In his work and management activities, the Dean is assisted by the: Vice-Dean for Teaching Activities, Vice-Dean for Quality Assurance, Vice-Dean for International Cooperation and Projects, heads of study programmes, head of the department, head of the centre and heads of services.

Organisational structure of the University is shown in Figure 1.

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

1. High commitment to quality
2. Good integration with local community and business
3. Flexibility for updates in technology
4. Organizational structures still young and thus open for optimizations

DISADVANTAGES OF THE INSTITUTION

1. Internationalization aspects still under-developed
2. Hands-on practical experience in several labs not really well established
3. Transfer of knowledge and technology to be improved
4. Scientific orientation is not in the focus of the institution

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE

1. Collection and analysis of quality-related data on all levels
2. Integration into the local community
3. Optometry programme is well adjusted to the needs of society

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA

I. Internal quality assurance and the social role of the higher education institution

Analysis

VVG is active and motivated in quality assurance. VVG has a quality policy and a vice-dean has been appointed for QA activities. VVG has conformed to the ISO 9001 standard through its establishment.

Most of the feedback on teaching is positive. However, a more effective control of quality of the practical aspects of several study programmes must be established (c.f. par. 2.6 of the detailed analysis).

The majority of recommendations from the previous accreditation period have been implemented by VVG. The recommendations of the previous period were handled responsibly.

VVG has policy and codes of ethics for both students and staff, as well as a book of regulations on the students' disciplinary responsibility. At present, plagiarism detection software is not applied. Students are well aware of the ethics and academic integrity. However, students are not fully familiar with the code of conduct and what is expected of them as far as unethical behaviour, intolerance and discrimination goes. Support service for victims of unethical behaviour are available. Teachers are aware of the code of conduct and proper ethics, and especially in academic integrity. The methods of confrontation and combatting unethical behaviour are for the most part up to the individual teachers, within the framework of the protocols. Teachers have not received general staff training on cheating or discrimination cases.

Information on the activities of VVG are available on its website in Croatian and English on a level that fulfils the elements of the standard very well. In addition, communication with stakeholders is upheld in various manners.

VVG apparently takes its social role seriously. There is evidence that the contribution of VVG to the local community is well-developped as the elements of the standard require.

VVG offers short courses such as summer and winter schools in various fields, as well as the Cisco Academy-courses for certification. VVG also sells its services to actors in the

field of crisis management. There are also professional seminars, conferences and training courses.

Each study programme can be followed full-time as well as on a part-time basis. Part-time studies require the same amount of presence at the university (i.e. contact sessions) as full-time study programmes.

There are worthy lifelong learning opportunities at VVG, though some are not immediately connected to the main study programmes. Specific course programmes to update one's expertise in new innovations, technologies etc. in the context of the main study programmes were not reported.

Recommendations for improvement

- The aspects of practical training, as detailed in par. 2.6, should be improved.
- The recommendations from the current accreditation report should be implemented more consistently, as compared to the recommendations from the previous reaccreditation periods.
- To ensure scientific integrity, plagiarism detection tools/software should be applied.
- Teachers' proper procedures for ethics violations should be updated, their implementation should be ensured.
- To further improve the interrelation between university and community, members of the community could act as clients for a student project.
- In order to reduce the workload for part-time students, blended learning-approaches should be considered to allow for flexible time schedules.
- Special studies focusing on modern and future knowledge areas and skills should be opened for both current students and outside experts needing updated knowledge.

Quality grade

Satisfactory level of quality.

II. Study programmes

Analysis

By analysis of the self evaluation report provided by VVG as well as by the discussions held during the site visit in April 2019, the panel members got a comprehensive overview of the current state of the university's study programmes.

In general, the five professional study programmes and the three specialist graduate professional study programmes are found to be in satisfactory alignment to the strategic goals of the university as well as to the needs of society and labor market.

During the discussions the panel members got the impression that scientific aspects are not in the prime focus of the university strategy. The panel members would like to emphasize that scientific aspects should well be included more widely, as the specialist graduate professional study programmes are at level 7 of the CroQF descriptors. Also aspects of internationalization and student mobility could further be improved by the implementation of English taught lectures.

Important aspects of the study programmes were found to be implemented at a high level of quality. Among these are:

- the achievement of the intended learning outcomes,
- the efficient and responsible utilization of feedback programmes on all levels,
- the implementation of the ECTS in terms of a common understanding of its meaning and relevance and of the proper attribution of credit points adjusted to the students' workload.

The intended learning outcomes of the study programmes are satisfactorily aligned with the level and profile of qualifications gained. The panel members found only some areas for further improvements, as outlined in the detailed analysis, par. II. Among these are the inclusion of aspects of industry 4.0, commonality, and multimodal transport in the logistics programme, of system administration and network technology in the computer systems maintenance programme, and of advanced software for aerodynamic and flight mechanics and for automatic control in the aircraft maintenance programme.

Each study programme comprises an extensive integral part of practical competences. The quality of the practical professional aspects turned out to be rather different in the study programmes. Whereas the practical aspects of the eye optics programme can be regarded as well-structured and comprehensive, in other programmes some room for

optimization could be identified. Especially the programmes dealing with maintenance (aircraft as well as motor vehicle) rely completely on practical courses provided by external partners. During these courses students work at the partners' premises. During the site visit to these premises the panel members got the impression that students mainly are in the role of observers and are not adequately involved in independent practical work to get hands-on experience.

Recommendations for improvement

The detailed recommendations for the improvement of study programmes are listed in par. II of the detailed analysis. The most important recommendations can be summarized:

- Increase of scientific activities
- Implementation of English taught lectures and courses
- Increase the scope of practical work for all programmes
- Reorganize the practical courses in the study programmes of aircraft maintenance and motor vehicle management, so that students can perform independent practical work

Quality grade

Satisfactory level of quality.

III. Teaching process and student support

Analysis

The panel members got a comprehensive overview of the current state of the university's teaching processes and student support by analyzing the self-evaluation report provided by the HEI as well as by the discussions held during the site visit in April 2019.

The five professional study programs and the three specialist graduate professional study programs were found to apply satisfactory teaching processes as well as sufficient overall student support.

The documentation on teaching processes and student support is detailed and extensive. Student services are present, psychological and other types of support are properly established. The HEI gathers and analyses information on student progress and utilizes it to ensure the continuity and completion of studies but there is still a problem of high drop-out rates. The panel members were informed about two main reasons:

- 1) Students sign up only to obtain students' rights
- 2) Students have lower grades on admission and poor foreknowledge.

The panel members got the impression, that the established admission criteria are too focused on admitting students regardless of their grades.

Student-centered learning emphasizes student participation, a variety of activities including online activities and also project/practical approaches in course studies. The panel member noted that many courses especially in the fields of the undergraduate programme of Eye Optics and the graduate programme of Information Science have successfully adopted some of these principles. In contrast, the study programmes of Aircraft Maintenance and of Computer Systems Maintenance lack in the proper implementation of these techniques and activities that could help students to get a better understanding. In the maintenance study programmes there is also insufficient control of the scope of knowledge (especially practical) the students have actually gained. During site visits the panel members got the impression, that the practical education, as supplied by external partner companies, is predominantly of a more observative nature. The students cannot get true hands-on experiences in the labs and workshops of the partner companies.

In practical work the students should be able to demonstrate the application of knowledge relevant to the business world. This is directly influencing students' employability. Therefore the HEI should establish full control over these processes and also should establish proper methods for the assessment of practical skills.

The Panel members did not find sufficient evidence for proper assessment methods for the practical application of knowledge. In many practically based courses the assessment methods are predominantly theoretical, which is regarded as unacceptable (and very often superficial) as students should learn and demonstrate practical knowledge.

The recognition of students in community should gain special emphasis by VVG. This is already achieved for the undergraduate study programme of Eye Optics. Here, alumni had a lot of positive comments in regard of the recognition of the optical/optometrical profession in society.

The panel members got the impression, that the focus of the study programme of Computer Systems Maintenance should be broadened. Knowledgeability in this area does not fully fit the needs of the labour market. In order to successfully enter a job, students have to broaden their knowledge in specifically relevant areas like programming and system administration.

Recommendations for improvement

- Better management of admission processes and a proper assessment of applicants and their competencies is highly advisable in order to increase the rate of successful completion of study programmes. The HEI could for example establish prerequisite courses before students sign up into a study programme. Completion of these courses could enable students with poor foreknowledge to obtain the minimal necessary competencies for a successful start of their studies. Without prerequisite courses the proper assessment of the applicants' knowledge level is crucial.
- Although final employability of students can be regarded as acceptable it is essential that students finish their studies with the practical skills needed for their intended profession. A more careful implementation and the proper assessment of practical activities is needed for all courses that require hands-on experience in learning new skills.

Quality grade

Satisfactory level of quality.

IV. Teaching and institutional capacities

Analysis

During the visit to VVG, the panel members had discussions with almost all groups of stakeholders, leading to a relatively good insight into structure, work and practice of the HEI.

According to the MOZVAG database of the Agency for Science and Higher Education the students-to-teachers ratio is 28.52, well below the allowable limit of 30. Therefore the panel members regard the number of qualified teaching personnel as sufficient to cover the five professional study programmes and the three specialist graduate study programmes of VVG.

Besides their teaching activities, teachers of VVG only occasionally engage in scientific activities. As the three programmes for specialist graduate professional study are at level 7 of the CroQF descriptors, there must be a much stronger involvement of teachers in scientific activity. The panel members strongly believe that scientific activities are mandatory also for teachers of UAS's.

By analysis of the SER of VVG (Table 4.3) the Panel came to the conclusion that 26 out of 59 teachers (44% of all VVG teachers) have more than the allowable 360 hours of teaching workload. Moreover, Table 4.1.b indicates that the average age of teachers in the highest rank is relatively high. On the other hand, Table 4.2 indicates that in the last three years HEI has newly employed 11 teachers. This indicates that VVG is trying to actively improve this situation.

The panel members had the opportunity to review several final theses that had been supervised by external associates. There is strong evidence, that the inclusion of external associates in the supervision of final and graduation theses is a regular practice at VVG.

Although on several occasions it was stated that VVG's students have significant possibilities for practice, the panel members have found significant differences between study programmes. On the positive side stands the Eye Optics program with quite well-equipped laboratories and possibilities for practical work, while on the other side the aircraft and motor vehicles maintenance programmes rely completely on practical work performed at the premises of VVG's contracted external partners. During the discussions with students and alumni from both groups, the panel members could clearly identify the desire for a higher amount of practical tuition.

The procedure for recruitment of new teachers and external associates includes the assessment of candidates on several levels, but it is often burdened with a lack of well-trained specialists at the Croatian labour market. So, in some cases, VVG is not able to fully apply all criteria. VVG set up an action plan to raise a new generation of teachers which indicates that there is a strong will to improve the situation.

After the last reaccreditation VVG had organised a number of workshops for the improvement of teachers' competencies. Although these courses are not yet fully implemented on a regular base and not every teacher has taken part yet, the Panel can assess a positive development.

The VVG encourages and financially supports the attendance of professional and scientific congresses/conferences, but the participation of teachers in mobility programs is still at a very low level.

The library is one of the weak points of VVG. The panel members found a lot of outdated literature and insufficient working space for students within the library. According to VVG's SER, the financial status is stable for the last several years, but a little bit more transparency in financial reporting would be advisable.

Recommendations for improvement

The detailed recommendations for the improvement of teaching and institutional capacities are listed in the second part of this report. The most important recommendations can be summarised as:

- Teachers and external associates should include the latest research, trends and labour market findings to a higher extend in their teaching process.
- During the recruiting process of a teachers or external associates, VVG should strive to hire young professionals whose professional and scientific output indicates that they are following the world's leading trends.
- Improvement of teachers' pedagogical competencies should be made a part of regular institutional activities.
- VVG should encourage teachers and external associates to highly increase their outgoing mobility.

- VVG should try to equalise the level of equipment and laboratories for all study programs, i.e. to significantly improve the possibilities for laboratory practice for aircraft and automotive maintenance students.
- The services of the library should be improved through the replacement of outdated textbooks by current textbooks. Also, the working space for students within the library should be enlarged.

Quality grade

Satisfactory level of quality.

V. Professional and/or scientific activity

Analysis

By analysis of the self evaluation report and the data summarized in the analytic supplement provided by VVG complemented by the information collected during the meetings held during the site visit in April 2019, the panel members got a comprehensive overview of the current state of the university's professional and/or scientific activity.

In general, VVG recognizes the importance of organization and participation in professional events, mainly conferences, which provides an excellent opportunity to enhance networking with professional partners and to consolidate a leadership recognition in certain areas such as optometry and disaster risks.

Besides the dissemination actions in the professional area, the panel members got the impression that the dissemination of scientific activities is mainly concentrated in a small number of teachers. This leads to poor indicators when considering the full capacity of permanent and part-time teachers. VVG participants in the different meetings mentioned several times the fact that the university's profile is mainly educational and professional. However, the panel members would like to emphasize that the scientific area should not be neglected, and for VVG it should be more important to increase activities in scientific publications as a result of scientific collaborations solving applied problems. Furthermore, the close collaboration at educational level with local companies for educational purposes is an excellent enabler to foster students in the entrepreneur field with the support of mentors from the community of Velika Gorica.

Among the strengths identified during the meetings with external stakeholders and alumni that should allow VVG to improve its activities on knowledge transfer and innovation are:

- An important asset of VVG actions is its capacity to perform a market gap analysis to adapt up to 20% of the educational contents when new professional demands are identified.
- Good interaction between VVG and the Velika Gorica municipality that materialize in the engagement of students participating in start-up competitions.
- VVG members are quite active in the advisory board of professional committees

- VVG is quite active promoting its profile in different professional and educational events

The figures described in the self evaluation report and the discussions with the Service for International Cooperation and Projects confirm the lack of efficient mechanisms to increase the participation of VVG in research and innovation consortia at international level.

Recommendations for improvement

The detailed recommendations for the improvement of the professional and/or scientific activities are proposed in the detailed analysis. The most relevant recommendations can be summarized:

- Design reward policies to create awareness about scientific activities
- Plan the active participation in key H2020 events such as info days
- Co-develop a value network analysis model together with local companies to create a sustainable knowledge ecosystem.
- Identify one or two key outcomes of professional theses that could lead to a spin-off of VVG.

Quality grade

Minimum level of quality.

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD

I. Internal quality assurance and the social role of the higher education institution

1.1. The higher education institution has established a functional internal quality assurance system.

Analysis

The analysis of quality assurance (QA) shows that VVG is active and motivated in quality assurance. This is demonstrated especially in feedback and surveys, as VVG requests feedback from various stakeholders such as staff, students, partner organisations and companies as well as alumni. VVG has also demonstrated that they have a system for handling survey data in a goal-oriented manner; specifically for evaluating, analysing and reacting upon the outcomes of surveys.

On the administrative level, VVG has a quality policy document signed by the dean that sets up the goals for QA. An executive person (vice-dean) has been appointed responsible for QA activities. VVG has conformed to the ISO 9001 standard and is currently obtaining the latest ISO 9001:2015 final certificate.

Other evidence for commitment in quality includes an extensive QA section on VVG's website. This demonstrates openness and appreciation of QA issues. VVG has also completed a SWOT analysis for strategic development.

For the quality of teaching most of the feedback is positive, according to the surveys and interviews conducted. However, during the visits to various teaching locations it became obvious that a more effective control of quality of practical aspects of several study programmes must be established, considering that students really should obtain hands-on experience in the labs of external partner companies. This has a marked effect on the quality of expertise that the students gain and therefore is taken into account in the quality grade. Please refer to section 2.6 for a more detailed analysis of this subject.

Recommendations for improvement

- The recommendations for improvement of all matters related to practical training should be implemented, as detailed in par. 2.6.
- Though it was not in any question or doubt during the reaccreditation process of VVG, the board wishes to affirm the current decision to comply with the ISO 9001 quality standard for the foreseeable future.

Quality grade

Satisfactory level of quality.

1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.

Analysis

The panel members came to the conclusion that the majority of recommendations from the previous accreditation period have been implemented by VVG. Among these are:

- Setting up procedures for QA, analysis of the results, planning for continuous improvement
- Improvement of quality of teaching monitoring processes, including survey processes.
- Implementing a culture of quality, including all stakeholders.
- Continuous monitoring of learning outcomes, including quality of formulation and global consistency.
- Review of procedures to estimate true students' workload and proper ECTS attribution.
- Setting up and funding of a training programme for teachers.
- Clarifying the proper students' workload assignment, taking into account different teaching approaches and methods.

- Making teachers aware of alternative teaching strategies, including the periodic evaluation of the alignment of teaching methods and learning outcomes (ongoing process)
- Study of actual documentation needs of students and staff and organisation of the library to address these needs.
- The framework for international students exchange has been improved.
- Review of course syllabi in order to improve their quality and usefulness as an information tool.

On the other hand, a smaller number of recommendations of the previous accreditation phase has not yet been fully implemented:

- Setting up procedures for periodical assessment of the effectiveness of organizational structures. In this area a strategic plan indicating the time scale for staffing of important positions and the achievement of milestones has not been documented.
- Peer review of teaching quality has not been implemented.
- The relationship between course assessments and course learning outcomes has not consistently been made explicit for all courses.
- Research activities were not set into the strategic focus of VVG, priority research areas have not been defined, and research groups have not been established.
- Only slight improvement of students' and teachers' mobility has been documented.

In general the panel members got the impression that the recommendations of the previous period were handled responsibly.

Recommendations for improvement

The panel members recommend to implement the recommendations from the current accreditation report more consistently. The panel members recommend to further implement the most important recommendations from the previous report:

- Improvement of alignment of course assessments and course learning outcomes (esp. for courses on professional practice, c.f. assessment area 2.6 and summative analysis of assessment area 3)

- Improvement of conditions for students' mobility (cf. assessment areas 3.6 and 3.7).
- Improvement of scientific focus (c.f. assessment area 5.1)

Quality grade

Satisfactory level of quality.

1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.

Analysis

VVG has codes of ethics for both students and staff, as well as a book of regulations on the students' disciplinary responsibility. A systematic approach to academic integrity and ethics exists, and essential topics are covered in the documentation. The management has made good integrity and ethics a matter of policy. On the other hand, plagiarism detection software is not yet utilized.

In practice, students are well aware of the ethics and academic integrity. They are, quote, "constantly reminded" of these rules and any lapses are dealt with. However, students are not fully familiar with the existence of a code of conduct and what is expected of them as far as unethical behaviour, intolerance and discrimination goes. Some students have not thought about the possibility of this occurring. Fortunately, most students have a good sense on how to act in case they face these situations, and the general atmosphere feels safe. However, the panel members are well aware of the fact, that in the review situation of a reaccreditation procedure, individual cases of unethical behaviour probably will not surface due to their sensitive nature. Support services for victims of unethical behaviour (e.g. bullying) are available, most prominently individual psychological counselling.

Teachers are aware of the code of conduct and proper ethics, and especially in academic integrity. The general atmosphere among teachers apparently is not likely to tolerate violations in this area, exactly as VVG policies require. By our estimate, it seems that teachers are willing to confront these situations. The methods of confrontation and, if necessary, combatting e.g. unethical behaviour are mostly up to the individual teachers, within the framework of the protocols. Teachers have not received general staff training on dealing with cheating or discrimination cases.

Recommendations for improvement

- The utilization of a plagiarism detection tool/software as a matter of policy is highly recommended.
- VVG should ensure that students are aware of correct conduct. Although students are informed of support services and policies, the general level of knowledge of unethical behaviour should be brought to the same high level as academic integrity.
- Updating and ensuring the teachers' proper procedures for ethics violations is recommended (e.g. simulated exercises, workshops etc.). The goal is to familiarize teachers without a doubt with the policies. Peer support should be organized for handling challenging situations. It should be ensured, that all teachers react equally, guaranteeing equal treatment of students.

Quality grade

Satisfactory level of quality.

1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, professional and/or scientific and social role).

Analysis

Information on the activities of VVG is available on its website in Croatian and English on a level that fulfils the elements of the standard very well. In addition, communication with stakeholders is maintained in various manners.

Recommendations for improvement

No recommendations for development; obviously upkeeping the relevance of the information (in both languages on e.g. website) is important.

Quality grade

High level of quality.

1.5. The higher education institution understands and encourages the development of its social role.

Analysis

VVG apparently takes its social role seriously. There is evidence of a sufficient contribution of VVG to the local community, following the requirements of the assessment standard 1.5. This evidence includes academic contributions as well as cooperations with public entities and non-governmental organisations, leading to the required positive effect on the local community. Contribution to the local economy is also evident.

Recommendations for improvement

Related to the development of the local community but even more for the benefit of teaching (not graded here), it is recommended to consider teaching methods where members of the community act as clients for a student project. This can well be possible in all teaching areas of VVG.

Quality grade

High level of quality.

1.6. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.

Analysis

VVG offers short courses such as summer and winter schools in various fields, as well as the Cisco Academy-courses for certification in the IT field. VVG also sells its services to actors in the field of crisis management in the areas of risk analysis, business continuity and ISO:31000. There are also professional seminars and conferences and training courses in e.g. private security.

Studying on a part-time basis requires the same amount of presence (i.e. contact sessions) at the university as compared to a full-time study. Our analysis is that there are worthy lifelong learning opportunities at VVG, although some are not immediately connected to the main study programmes. Specific course programmes to update one's expertise in new innovations, technologies etc. in the context of the main study programmes were not reported.

Recommendations for improvement

- The panel members recommend to increase the opportunities for blended learning for part-time students, allowing for more flexible time schedules. This would open the possibility to complete graduate or undergraduate studies for people that were previously unable to.
- Special studies (with proper attribution of ECTS credits) focusing on the most modern and future knowledge areas and skills could be opened for both current students and outside experts needing updated knowledge; students could work together with these experts as peers and learn a great deal. Finally, VVG could use academic contacts to universities that offer PhD programmes and recommend these to academically inclined masters' students in the graduation phase (for each programme); this could encourage lifelong learning in the academic sense.

Quality grade

Satisfactory level of quality.

II. Study programmes

2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the demands of the labour market.

Analysis

As an important part of its strategy VVG continuously monitors and revises all study programmes, as described in the SER, par. 2.1. To achieve a high degree of topicality, teachers are encouraged to implement new topics and to regularly update the learning outcomes of their courses.

The process of creation and revision of study programmes is carried out in close contact with external partners from the labour market and is taking into account the professional standards in the Croatian as well as in the European context. Especially for the optometry programme there is strong evidence for this aspect, as confirmed by the head of the Croatian Optometrists Association.

Contractual agreements are existing between university and partners from economy. The university emphasized repeatedly the strong focus on professional competences whereas scientific aspects are regarded as secondary. At least for the advanced programmes (leading to a master's degree) somewhat more emphasis should be posed upon scientific competences.

The labour market is in a dynamic process of international exchange. This aspect is at the current time not optimally supported. There are courses in English language in the study programmes, but on the other hand English taught lectures on professional and scientific themes are widely missing. Currently only a few foreign students can be supported. For them alternative learning activities and ad-hoc translations of materials in the scope of the standard classes were provided. The main teaching language remains Croatian, even when foreign students attend.

The study programmes of crisis management is at present not yet including aspects of cybersecurity management. The panel members regard this aspect as highly important for crises (possible cause), infrastructure and data security. University explained that the inclusion of cybersecurity related modules is planned for the near future in the scope of the next academic year. It is not yet clearly recognizable, how the practical training will be organized. Also the degree of cooperation and sharing of resources with the study programme of computer systems maintenance is still to be defined.

For the logistics programme the panel members found that specific training is provided, but the scope of professional education should be broadened in several areas.

Recommendations for improvement

- In regard of the high academic level of the advanced professional study programmes (leading to a master's degree) the emphasis on scientific activities should be increased.
- To support international exchange better English taught lectures and courses should be included in all study programmes. These lectures and courses should be defined as mandatory for all students, including also the Croatian students.
- Aspects of cybersecurity should be included in the study programmes of Crisis Management. Possible cooperations with other study programmes should be evaluated.
- The scope of the professional education in the logistics programme should be broadened.

Quality grade

Satisfactory level of quality.

2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.

Analysis

The panel members came to the conclusion, that in general teachers and lecturers are well aware of the current developments in technology and the current needs on the labour market in order to keep their courses at the required level of competence. This is reflected in the definition of learning outcomes well adapted to these needs.

In the areas of the maintenance and engineering programmes (motor vehicles, logistics) a certain lack has been observed by the panel members. Aspects such as industry 4.0, commonality, and multimodal transport have still to be addressed to a higher degree.

Also, the students during the site visit reported positive evidence for their competences gained in the individual programmes, as judged by their experiences in practical and professional areas.

The computer systems maintenance programme was judged by the panel members to be overly generic, lacking aspects of e.g. system administration and network technology. If these aspects could be properly addressed, the panel members strongly feel, that the course programme could be brought to the required level of competence. The panel members state that computer system maintenance as a profession appears insufficient to define a whole graduate study programme. The course topics appear too broad (from electrical engineering to programming) and a too high percentage of classes is assigned to general courses (math, English). This appears inappropriate for this type of professional study. The panel members would like to recommend to bring this study programme on the level of system administration (computer network), which seems appropriate.

The study programmes of crisis management is at present not yet including aspects of cybersecurity management (c.f. par. 2.1).

The study programme of eye optics has been found by the panel members to provide the required high level of professional competence. During the discussions several aspects were addressed that should be evaluated for future update cycles of the programme, in order to keep pace with the fast technological development and the increasing needs of society. Among these aspects are the inclusion of the inspection of the posterior eye, modern electronical aids for low-vision cases and a more in-depth knowledge of computer programming. During the site visit students expressed the wish to gain more experience with “real” patients, offering the possibility to investigate different sicknesses and malformations of the eye during lab work.

In the study programme of aircraft maintenance the modules on “Aerodynamics and Flight Mechanics” as well as “Automatic Control” should consider the utilization of advanced software to deepen and modernize the basic concepts of the field.

Recommendations for improvement

- In the study programmes of motor vehicle maintenance and of logistics the aspects of industry 4.0, commonality, and multimodal transport should be addressed to a higher degree.
- The study programme of computer systems maintenance should be enhanced by the inclusion of competence fields more specific for the envisaged profile, e.g. system administration and network technology.
- For the future development of the study programme of eye optics the inclusion of the inspection of the posterior eye, modern electronical aids for low-vision, and computer programming should be taken into account.
- For the study programme of aircraft maintenance the utilization of advanced software in the fields of aerodynamic and flight mechanics as well as in automatic control should be implemented into these courses.
- Cybersecurity management, threats and protection methods should be included in all Crisis Management studies. Cooperation with computer science studies is recommended.

Quality grade

Satisfactory level of quality.

2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.

Analysis

The correlation between the intended learning outcomes and the specific courses has been well documented in the SER. Moreover there is positive evidence from the alumni, indicating the high level of professional applicability of their competences as gained in the study programmes.

The topics covered in theses, as checked by the panel members, represent a wide area of contemporary areas of knowledge and development, thus indicating the achievement of the required learning outcomes.

Recommendations for improvement

none

Quality grade

High level of quality.

2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.

Analysis

The HEI reported upon the extensive utilization of feedback processes for their activities in the processes of planning and optimization of study programmes. They verbally gave information on positive and negative feedback and on their appropriate reaction upon.

In the self evaluation report the efforts of the HEI to optimize the existing study programmes with respect to the needs of markets and society are described in detail. Feedback from relevant stakeholders with special emphasis on professional organisations plays an important role in this process.

In the SER the current developments and planned revisions of each study programme are described in detail. The most important topics include:

- Undergraduate professional study of Motor Vehicle Management (OMV)
Improvement and modernization of the OMV study programme is currently being analysed by a working group of the expert council, taking into account feedback from teachers, mentors, and key employers. The inclusion of innovative subjects has been proposed (e.g. electrical vehicles, innovative design technologies). Also a change of the name of the programme to “Motor Vehicles” has been proposed.
- Specialist graduate professional study of Management of Logistics Systems and Processes (ULS)
For the ULS programme a change of the name towards “Logistics Management” is currently being discussed. Also the inclusion of innovative courses (e.g. entrepreneurship, E-logistics) is under discussion. The feedback of key employers and professional societies plays an important role in this process.

- Undergraduate professional study of Eye Optics
This programme is continuously evaluated by cooperation partners as the Faculty of Medicine in Brno. Feedback from professional partners (e.g. leading ophthalmologists, professors at the faculty of medicine in Zagreb and Rijeka) lead to the introduction of new subjects like Health Care, Neurology and Occupational Medicine.
- A novel study programme Management in Crisis Conditions and Crisis Management is currently under discussion. This development is mainly driven by feedback from CONRIS (cooperation network for risk, safety and security studies), a professional international association. VVG actively participates in the work of this association.
- Undergraduate and specialist graduate professional study programmes of Crisis Management
Curricular changes triggered by EU legislation, scientific and professional developments and national strategies will be initiated, triggered by ongoing contacts with the Civil Protection Directorate and several crisis management institutions in the Republic of Croatia.
- The undergraduate professional study of Computer Systems Maintenance is currently under revision by a working team, taking into account feedback from all teachers. A discussion group is set up within the e-learning system Gaudeamus.

The expert panel is convinced of the validity and effectiveness of the processes of maintaining or defining study programmes at a high degree of applicability, taking into account all relevant feedback sources.

Recommendations for improvement

none

Quality grade

High level of quality.

2.5. The higher education institution ensures that ECTS allocation is adequate.

Analysis

The expert group interviewed every group (department heads, teachers, students, external partners) about the meaning and relevance of the ECTS system. Consistently all stakeholders know the meaning, definition and importance of the credit point system. The teaching personnel (as well employed as external) follows a consistent approach, thus guaranteeing that every aspect of student workload is well covered in the process of ECTS credit point attribution.

The students gave positive feedback that the allocation of ECTS credits is reflecting the actual amount of workload required in each subject. They also gave evidence, that some inconsistencies in the past could be quickly resolved by means of feedback processes.

Recommendations for improvement

None

Quality grade

High level of quality.

2.6. Student practice is an integral part of the study programmes.

Analysis

The expert panel got the impression, that practical competences form an integral part of every programme.

For the optometry department it can be stated, that the laboratory equipment is state-of-the-art. Also additional clinical expertise is achieved by the inclusion of students' training in an optometry clinic with real patients.

For the aircraft maintenance as well as the automotive maintenance programmes the university completely relies on external partners from the professional field (e.g.

Croatian Airlines) for carrying out the professional practical aspects of student education. During the site surveys certain doubts aroused among the panel members, whether students always have the chance to really do individual and independent practical work.

Students from all study programmes also indicated the wish to increase the scope of practical exercises and to be more integrated into practical work.

Recommendations for improvement

- For the study programmes of aircraft maintenance and motor systems maintenance the courses of professional practice supplied by external partners should be reorganized in a way that enables the students to obtain own experiences in individual and independent practical work.
- Course assessments for courses in professional practice should be centered mainly on practical competences.
- For all study programmes an increase in the scope of practical work is advisable.

Quality grade

Minimum level of quality.

III. Teaching process and student support

3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.

Analysis

Panel members analyzed all documents which are clearly explaining admission criteria as well as criteria for continuation of studies and found that they are in line with all requirements of the study programmes. Evidence for that are present and defined in form of decision-making procedures regarding the admission criteria (evaluation of high school GPA, State Matura level, elective exams, additional assessments of knowledge and skills).

The criteria for admission or continuation of studies are published and consistently applied but admission procedure and enrolment quotas for the enrolment of students in the first semester of undergraduate professional studies are same for all undergraduate studies which are quite different in content.

In regard with that comments of previous accreditation were following:

“VVG uses criteria to determine enrollment quota [...], but relies on diplomas acquired during previous studies for individual admission. It is difficult to know whether this results in alignment with future careers: the Panel believes that predicting student success in their careers based on admission criteria is not readily achievable.”

Panel members of this accreditation cycle have to conclude that recommendation from previous committee were not met.

VVG established defined recognition procedures of recognition of Croatian and foreign higher education qualifications in form of conditions for continuation of studies for students transferring from other study programmes outside the University and other study programmes within the University which are determined by the Decision on transition requirements for undergraduate professional and specialized diploma professional studies which is provided by the Expert Council of the University, which is also published on the web pages.

Enrolment of foreign nationals is defined by an admission procedure as well. Foreign students are obligated to apply for recognition of foreign educational qualifications to

the Education Agency or to the Agency for Vocational Education and Training and Adult Education depending on the type of completed secondary education. Instructions for initiating the recognition process are announced on the web site of the University. Panel members didn't have chance to speak with several foreign students who are currently enrolled on studies at VVG.

Unfortunately, panel members are not assured that criteria for admission or continuation of studies ensure the selection of candidates with appropriate prior knowledge, which supposed to be aligned with the requirements of the study programme.

Recommendations for improvement

Better management of admission processes and a proper assessment of applicants and their competencies is highly advisable in order to increase the rate of successful completion of study programmes.

Different admission criteria and different admission evaluations are necessary for different graduate studies since content of studies greatly differ one from another.

The HEI could for example establish prerequisite courses before students sign up into a study programme. Completion of these courses could enable students with poor foreknowledge to obtain the minimal necessary competencies for a successful start of their studies. Without prerequisite courses the proper assessment of the applicants' knowledge level is crucial.

There are no evidences that VVG is doing analysis of student performance on the study programme, depending on the admission criteria or criteria for the continuation of studies, and there are no examples of improvement to the admission criteria/criteria for the continuation of studies based on the obtained results.

Quality grade

High level of quality.

3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.

Analysis

VVG board members informed Panel that student's progress is carefully collected and analyzed and faculty is trying to maximize retention policy effects. In self-evaluation report VVG states that data on student success and progress during the course of the study are regularly collected and analyzed.

VVG states that apart from analyzing the passing rate and student success, the data on student dropout are regularly collected and analyzed. The reasons for the dropout are monitored and analyzed, and as one of the most common reasons for dropout, students have stated financial reasons, that is, the inability to pay tuition fees, and family or private problems that prevented them from continuing their studies.

Regardless of efforts drop-out rates are very high, around 50% for majority of studies and in some cases even more. For example, on Aircraft maintenance in 2013, 20 students enrolled, out of which 17 lost right to study and only 3 graduated. On same year, on Motor Vehicle Maintenance study 64% of students lost right to study. Situation is somewhat better on Computer Systems Maintenance (44% drop-out students), and situation is best on Eye Optics (15% drop-out students). Other studies are on around 50% drop-out rate.

In case of individual student's problems, support services are provided (e.g. psychological support). Students are regularly encouraged to give specific feedback on teaching processes and teaching quality. If during this process problems were discovered for individual courses, mechanisms for improvement are put into action (e.g. pedagogical training courses for teachers as reported by several teachers). Also students reported their teachers typically to be highly supportive in case of problems. Mentorship program and additional examination period are also tools established by VVG to ensure the continuity and completion of study. Procedures for monitoring student progress are clearly defined and available, information on student progress in the study programme is regularly collected and analyzed

VVG ensures adequate mechanisms for analyzing student performance and pass rates, and initiates necessary actions accordingly.

Recommendations for improvement

It is recommended to actively reduce the number of students that only sign up in order to obtain students' status and rights.

Drop-out rate is seriously high on all study programs except few and it's signaling that something needs to be changed with admission criteria procedures as well since low grades and low success on entry exams (and therefore probably low learning capacity) is directly influencing drop-out rate.

Quality grade

Satisfactory level of quality.

3.3. The higher education institution ensures student-centered learning.

Analysis

VVG is trying to ensuring that all activities and materials presented to students during courses are up to date and in most cases relevant. However, the main objection of the panel members in this area is that not for all courses the online materials are up to date. Also many courses utilize the e-learning platform just as a repository.

The panel members analyzed the general feedback from students (surveys as well as alumni's statements) which shows that students are mostly satisfied with learning activities. Live talks with students which were present seemed somewhat staged and panel members got impression that only positive views were being represented. In same manner discussions with alumni differ significantly from survey results with alumni which showed that student actually had number of objections towards usual flow of teaching activities. Some students complained that they didn't get enough time or materials for actively following classes. Board members stated that they changed schedule several times to accompany needs of working students which in the end didn't resulted in lower drop-out rate. It seems that VVG has good intentions in satisfying student's desires which are not same as student's needs. It might be beneficial to work on improving of e-learning activities for working students, additional lectures and rescheduling might just not be enough.

Although VVG reports that it uses various teaching methods that encourage interactive and research-based learning panel members didn't get full impression of such learning activities from field visits to prominent sites where practical student's work should be going on like car maintenance facilities and aircraft maintenance workshops.

Students activities in those places were dominantly observatory and interaction with objects, environment, tools and tutors is limited and more in ex-cathedra style of teaching although it should be more of interactive nature.

VVG in report mentions surveys on the assessment of the quality of teachers work and the teaching process (which are regularly carried out) but there is no mention of conducted assessments of teaching methods used.

Also students on Eye optics study laboratory complained about lab works where students do lab on each other's heathy eyes which beats the purpose of the lab where students, among other things, should be able to learn about eye's anomalies which is more suitable to real-life situations.

Panel members are not assured that problem solving and creative and critical thinking are properly represented as teaching methods except for several cases reported in some studies like Crisis Management.

Current and alumni students where mostly concerned with the lack of actual practical work which in their opinion could be more carefully implemented, allowing students more frequent and more hands-on experiences.

Recommendations for improvement

It is recommended to improve e-learning possibilities for regular students and especially for part-time and full-time working students. It's not enough to work on rescheduling of classes which will not clearly help overburdened students to finish study. What might help them is better e-learning activities such as (video lectures, streaming lectures, online assignments, graded discussion groups, etc.)

Esp. the latter groups need a better setup of e-learning activities, helping them towards a better integration in course learning activities.

Students need more practical activities and more hands on approach while learning practical methodology. Present practical work needs better assessment; VVG have to establish full control of what students are actually doing on practical work. Student-

centered practical learning assumes that student is in center of learning activity and is guided towards goal of gaining practical knowledge based on facts that he/she has already learned. Panel members noted that such guidance is clearly missing while analyzing practical work especially regarding studies like (Motor Vehicle Maintenance and Aircraft Maintenance)

Quality grade

Minimum level of quality.

3.4. The higher education institution ensures adequate student support.

Analysis

The HEI provides adequate student support on various student's needs. There is psychological support and facilities for disabled students. Pregnant and women with child have the ability to regulate their attendance and study obligations according to their status. Students as well as student support offices are reporting that there are no significant incidents of violations of students' rights.

Consultation hours of teaching staff are regularly provided to students. Students feedback with professional support provided by HEI is dominantly positive which could be concluded from students and alumni surveys.

Feedback on student satisfaction with counselling services is not so much mentioned in surveys which might indicate that students might not be aware of those services or they are rarely using them.

VVG provides guidance on studying and career opportunities to students. Mentors and other advisers as a support in student learning and progress are readily provided when needed. Regulations on studying and regulations on internal organization are well defined.

Previous accreditation committee concluded that:

“VVG has introduced a system in which a teacher is assigned as a mentor for a single class

during a semester. The mentor is there to help students with whatever problems they may encounter and with their professional orientation. Both students and teachers confirm that the system works very well (even though there are apparently few

problems which need solving).”

Recommendations for improvement

Student support is maybe not fully tailored to a diverse student population (part-time students, mature students, students from abroad, students from under-represented and vulnerable groups, students with learning difficulties and disabilities, etc.) since VVG doesn't differentiate support for various groups in their acts.

VVG should work on motivating Student Counselling Centre and Student Affairs Service in having more prominent role in resolving problem of high drop-out rate as well.

Students should be regularly informed about activities and available services of all students related offices. Therefore, they will be more inclined to use them in time of need.

Quality grade

High level of quality.

3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.

Analysis

As mentioned in the previous paragraph there is psychological support and facilities for disabled students and other vulnerable and under-represented groups.

VVG reports on reducing the tuition fee by 60% for students with disabilities. It's also stated in VVG report that financial assistance is also reflected in decisions on postponement of payments, or payment of fees in several instalments, especially for students with low socioeconomic status, as well as for students with financial difficulties.

Some facilities don't have support for disabled students although it's clear that HEI invests resources in the support to such students.

Teaching process is adjusted to the individual needs of students from vulnerable and under-represented groups.

HEI reports that information on admission, and application and admission procedures are adjusted to students from under-represented and vulnerable groups and also in agreement with the course teachers, when necessary and according to the student's request, the teaching methods are adjusted as well as the methods of assessment of student work.

All student's services are readily available for all groups of students.

Recommendations for improvement

VVG should continually inform all student groups about student's services it offers. Extra effort needs to be put in place to ensure that same support is offered to students from all vulnerable and under-represented groups; as in previous case – talks with students indicate that students might not be aware of those services or they are rarely using them.

There is no mention about fact that data on vulnerable and under-represented groups using the support provided needs to be collected and administered in accordance with the Personal Data Protection Act.

Quality grade

High level of quality.

3.6. The higher education institution allows students to gain international experience.

Analysis

The HEI allows students to gain international experience although the full development of international student services is an ongoing task.

Previous committee concluded that:

“A small number of students have taken advantage of the opportunity to study abroad within the ERASMUS programme in the first year of its implementation at VVG.”

Panel members of this committee found out that for the time being, there is not a single case of a student exchange for at least one regular semester. The panel members received information from students that one student is planning to go to Malta for summer internship.

Currently there are only a few foreign students enrolled at VVG. In fact, there is no presence of foreign (English-speaking) students in the faculty, nor any of them has been present at talks with students.

The presence of larger groups of foreign students would also be problematic since current study programs do not support English. Present support is available on “on demand basis” – meaning that materials, tests and other learning activities are translated as needed.

VVG states under future development plans that it plans development of e-learning and implementation of study programmes in Croatian and English. So there is clear confirmation that course materials so far are only focused on Croatian population of students. As work to be done, VVG mentions need to make its study programmes more accessible to foreign students and students from other higher education institutions in Croatia.

VVG also reports that for Undergraduate Professional Studies of Motor Vehicle Maintenance and Logistics Systems and Processes Management programs are outdated

and that for the sake of continuity of sustainability and attractiveness of the studies it is necessary to carry out their modernization in the near future.

VVG also states that it carried out research on related study programmes in the countries of the region and the EU member states for purpose of comparing the studies and that it has been established that there is a need for the introduction of innovative subjects which will increase their competitiveness, and hence, the recognition on the market. Unfortunately, existing study programmes are not recognizable to foreign students within the Erasmus programme.

VVG states that recognition of all passed exams for students who participated in international mobility programmes is ensured. Courses students take in a foreign institution are agreed upon in advance with students and the head of the study to ensure recognition of passed exams.

Recommendations for improvement

It is recommended, that sufficiently large parts of the study programs should be organized in English language, in order to be better suited for foreign students.

It is recommended to organize student mentorships where local students would help foreign students in various ways during classes and other activities

Its recommended that students should be better informed about the opportunities for completing part of their study abroad. Much work needs to be done on improving awareness and popularity of ERASMUS and other programmes of outgoing mobility. Currently students are barely aware that such services exist and dominantly they are totally uninterested in such possibilities

VVG is missing influence from foreign language teaching and international dimension of the programmes in general: some feeble evidences of such activities exists but students need stronger exposure to foreign literature, foreign experiences and practices and work with foreign professors and colleagues

Much work is needed on recognition of existing study programmes in scope of ERASMUS programme.

Quality grade

Minimum level of quality.

3.7. The higher education institution ensures adequate study conditions for foreign students.

Analysis

VVG reports that enrolment of foreign nationals is defined by an admission procedure. Also that foreign students are obligated to apply for recognition of foreign educational qualifications to the Education Agency or to the Agency for Vocational Education and Training and Adult Education depending on the type of completed secondary education.

Unfortunately for only a few courses there is partial support for English speaking students as elaborated previously. It's reported that foreign students attended the lecture together with domestic students who provides translations – which is not acceptable form of studying.

VVG reports that it participates in the Erasmus programme since 2011 when it received the Erasmus Charter within the Lifelong Learning Programme (LLP). It's reported that since 2014, the University has participated in the Erasmus + programme. International student exchange includes mobility programmes for study purposes and for the purpose of student practice.

VVG reports that number of students in international exchange that have spent more than 3 months as part of outgoing mobility is 37. While talking with present student body panel members didn't met single student which studied abroad for one or more full semesters.

Many examples of evidence that higher education institution ensures adequate study conditions for foreign students are on extreme minimum, totally missing out or defined “pro forma”. Number of students involved in incoming mobility is close to zero. Number of foreign students spending the entire study cycle at the higher education institution is zero.

Recommendations for improvement

As mentioned previously, it is recommended that study programs should be organized to a significantly larger extend in English if they are offered to foreign students. This is key point and since this is not satisfied panel members had to conclude that VVG didn't ensure adequate study conditions for foreign students.

Study programmes should be aligned with similar study programmes abroad since many study programmes are currently outdated and not recognized by other/foreign institutions.

Quality grade

Unsatisfactory level of quality.

3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.

Analysis

VVG reports established procedures for consistent evaluation and assessment of students' work. The panel members noticed, that the time slot for appealing and reviewing tests is much too short.

Also students' tests are kept for too short an interval in the archives: It has been reported to the panel members that the time interval for keeping students' tests is only one week.

VVG reports that it aims to develop and improve the teaching skills related to assessment and testing methods by organizing workshops on defining learning outcomes, constructive alignment, student-centered teaching, evaluation and grading methods at University. It's reported that five workshops have been held in the last five years out of which only one was on the subject of competency approach to planning and study design.

It's reported that in 2018, fourteen assistants and teachers were sent to education Active Learning and Critical Thinking in Higher Education. Teachers are also encouraged to attend workshops on learning outcomes and ways of evaluating student work.

Previous accreditation committee conclude that students confirmed that they receive adequate and timely feedback on their tests and examinations. The Panel found, however, that many syllabi contain only cursory information about the assessment methods and procedures.

Present committee concluded that syllabi information's are dominantly very well explained but some information's are missing proper alignment of course objectives with students assessment / achievements.

Panel members conclude from the report and talks with students that criteria and methods for evaluation and grading are clear and published before the beginning of a course but that criteria and methods for evaluation and grading are not always aligned with the teaching methods used.

Since much of practical work is purely observatory instead of hands-on experience there is no assessment of what students have really done at students practice – they just submit students practice log which they supposed to fill upon completion of

practice. Universal assessment of practical student knowledge is prerequisite and it's either completely or partially missing out from many studies.

Panel members didn't receive evidence of functional student appeals procedure (the examples of appeals procedures and decisions thereof) and there are no examples of support provided to the assessors in the development of skills related to testing and assessment methods. There are also no mentions of conducted meta-evaluations of assessment methods in cases when there is objectionable need for such analysis.

Recommendations for improvement

It is recommended to establish procedures for documenting students' objections on exams. By this, a valuable assessment tool for testing activities would become available, discovering whether irregularities are occurring repeatedly for the testing procedures of individual courses.

It is recommended to establish procedures for keeping students' exams for at least one year.

VVG should define assessment procedures which should ensure that students actually gained practical knowledge during practical work.

VVG should establish procedures of evaluation of assessment methods implementation and their appropriateness on individual courses.

VVG should establish functional student appeals procedure and archiving system of storing such appeals.

VVG should establish procedures of implementation and continuous improvement of new assessment methods as outcomes of various workshops held at VVG.

Quality grade

Minimum level of quality.

3.9. The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.

Analysis

Diploma and Diploma Supplements are issued in accordance with the relevant regulations. Diploma Supplement contains all prescribed information.

Diploma printing is mentioned as an additional expense (2100 Kunas) besides mentorship and thesis defenses. This is usually supposed to be included in the tuition fee.

Recommendations for improvement

It is recommended to revise the fee allocations in a more transparent and consistent manner. It would be advisable to increase the tuition fees (including mentorship and thesis defense) in compensation for a significant reduction of the abnormally high price for diploma printing.

Quality grade

Minimum level of quality.

3.10. The higher education institution is committed to the employability of graduates.

Analysis

The panel members didn't find any objections regarding this standard. From testimonies of alumni students and statistics on employability of students, as reported by the HEI, the majority of students apparently doesn't have problems in finding jobs on the labor market. In fact, some alumni students who are employers testified that they have an unsatisfied demand for workers in the fields of expertise of institutions study programs.

VVG reported that it's regularly analyzing the employability of its graduates. Admission quotas are aligned with social and labor market needs and available

resources but unfortunately not a lot of student's finish studies and end on labor market in places of professions in demand.

VVG informs prospective students about the opportunities to continue education or find employment after graduation. VVG reports also that it regularly publishes ads for employment for part-time student jobs, as well as for graduates, on its official website, social networks and the internal information system Pretinac.

Also support for students in planning future careers is provided through the Career and Psychological Support Centre of the University, which hosted a large number of guest lectures and presentations by potential employers with the goal of creating and maintaining a network which proved to be a key to the labor market.

Panel members talked with alumni representatives and it's under impression that it has strong cooperation with current student body and local community as well. VVG reports that Alumni Club greatly helps graduated students to connect to each other or to employers and to ensure the transfer and exchange of knowledge.

Recommendations for improvement

None

Quality grade

High level of quality.

IV. Teaching and institutional capacities

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

During the visit to VVG and discussions with students and teachers, the panel members found no evidence for the number of teachers being insufficient. Moreover, the panel members found no evidence that shows that the qualifications of VVG's teachers would not adequately cover all study programmes.

Although, there are enough teachers who could and should be included in scientific activities their involvement in this area is very weak. According to table 4.3. of the SER (Teachers and assistants at the HEI in the current academic year) there are 59 teachers, but for 38 teachers there is no link to the CROSBID database. For those whose scientific output is mentioned, it must be stated that it is at a very low level. It is obvious that such a situation is a result of the misinterpretation of whether UAS's scientific activity is mandatory or not. The Panel strongly believes that scientific activities are a must also for UAS.

According to the MOZVAG database of the Agency for Science and Higher Education the student-to-teacher ratio is 28.52, well below the allowable limit of 30.

During the discussions with teaching personnel, the panel members raised the question of significantly overloaded teachers with a workload of more than 300 hours of teaching (the allowable limit is $300 \pm 20\% = 360$ hours of teaching). The teachers are convinced that extreme overload is limited to only a few individual cases. On the other hand, by analysis of the SER (Table 4.3. - Teachers and assistants at the HEI in the current academic year) it can be concluded that 26 out of 59 teachers (44%) have more than 360 hours of teaching workload. VVG is well aware of these cases and struggles to improve the situation.

Recommendations for improvement

The VVG should prepare and maintain an easily accessible list of professional and scientific activities in last five to ten years for every teacher or external associate, indicating that teachers or external associates are well qualified for the course/courses they deliver.

Quality grade

High level of quality.

4.2. The higher education institution ensures appropriate quality of external associates.

Analysis

The panel members found that the external associates have relevant work experience, but it is apparent that in some fields they are not included in research activities and they are not including latest trends in their lectures (for example during the discussion with teachers there were a many insecurities regarding the industry 4.0, internet of things etc.).

The MOZVAG database Table 4.1.b indicates that the average age of teachers in the highest rank is relatively high. On the other hand Table 4.2 indicates that in the last three years HEI has newly employed 11 teachers. This leads to the conclusion that VVG is well aware of the problem and strives to improve the situation.

VVG does not need to encourage the external associates to supervise final and graduation theses, because this is a regular practice. The panel members had the opportunity to review several final theses where the external associates were supervisors.

On several occasions VVG stated that their students have significant possibilities for practice at the premises of their contracted external partners. In contradiction to this, the panel members got the strong impression during discussions with students and alumni that the students need much more professional experience especially in the fields of aircraft and motor vehicles maintenance. This finding was confirmed during the panel's visit to the ZTC Velika Gorica and CVH, Velika Gorica where students only performed observatory work.

Recommendations for improvement

External associates should include the latest research, trends and labour market findings to a higher extend in the teaching process.

Quality grade

Satisfactory level of quality.

4.3. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures which include the evaluation of excellence.

Analysis

During the meeting with teachers, the panel members interviewed one of the teachers about his experiences with the procedure of recruitment. According to his experience, there was the following sequence:

1. The announcement of the vacant teaching position was made via publication in official channels
2. He submitted his application
3. He had to undergo several assessment interviews.
4. Also, he had to undergo a psychological assessment.
5. He was appointed.

This can be regarded as a structured and satisfactory approach, as the candidate has been assessed on several levels.

During the crosscheck of collected information, the vice dean of VVG confirmed the described procedure. During the visit the panel members were informed, that VVG always strives to apply the required conditions but that there are at the present moment not enough well-trained specialists at the Croatian labour market, making it difficult to always fully apply all criteria.

Recommendations for improvement

During the recruiting process for teachers or external associates, candidate's minimum qualification should not be enough for employment, but the VVG should strive to hire young professionals whose professional and scientific output indicates that they are following the world's leading trends.

Quality grade

High level of quality.

4.4. The higher education institution provides support to teachers in their professional development.

Analysis

The Panel found that VVG after the last reaccreditation had organised several opportunities (workshops) for improvement of teachers' pedagogical competencies. Although these courses are not yet implemented on a regular basis and not every teacher has taken part, the Panel can assess a positive development. But at present there a systematic policy for the continuous improvement of teachers' pedagogical competencies is still missing.

VVG has a well-organised system of surveying, and according to discussions with students a few teachers who were low graded were excluded from lecturing.

The panel members found that VVG encourages and financially supports the attendance of professional and scientific congresses/conferences, which is regarded as positive. However, on the other hand, the participation of VVG's teachers in mobility programs is extremely low and it can be concluded that mobility is more an exception than a rule.

Recommendations for improvement

- It is recommendable that that the improvement of teachers' pedagogical competencies should become a part of regular institutional activities.
- VVG should encourage teachers and external associates to largely increase their outgoing mobility.

Quality grade

Satisfactory level of quality.

4.5. The space, equipment and the entire infrastructure (laboratories, IT service, work facilities etc.) are adequate for the delivery of the study programmes and ensure the achievement of intended learning outcomes and the implementation of professional and/or scientific activity.

Analysis

The overall space can be regarded as sufficient for teaching purposes, but there is a significant difference of infrastructure between certain studies. For example, the Eye Optics and computer-based study programmes are much better equipped than the maintenance studies. At present, there are no labs for aircraft / motor vehicle maintenance.

During the discussions with students it was voiced that the equipment in the computer labs in several instances is outdated.

Recommendations for improvement

VVG should try to equalise the level of equipment and laboratories for all study programs, i.e. to significantly improve the possibilities for laboratory practice for aircraft and automotive maintenance students. As this could be rather expensive as a short-term measure, a cooperation with other HEIs might be advisable.

Quality grade

Satisfactory level of quality.

4.6. The library and library equipment, as well as access to additional resources ensure the literature necessary for ensuring high-quality of study and scientific and teaching activity.

Analysis

To the panel members it appears that the library is one of the weak points of VVG. There is only an insufficient number of current textbooks. Most of the literature is outdated and there is insufficient working space for students within the library rooms. On the other hand, teachers of VVG have prepared a significant number of textbooks which are available in the library for sale as well as in electronic format.

As the students utilize practically almost all textbooks in electronic form, they did not develop habits to use the library.

Recommendations for improvement

It is recommended to replace outdated textbooks (e.g. IT books from the '90s) by current textbooks for all study programmes. Also, the working space for students should be enlarged.

Quality grade

Minimum level of quality.

4.7. The higher education institution rationally manages its financial resources.

Analysis

During the discussions with VVG, financial operations were briefly presented. Ad hoc analysis shows that the tuition fees amount to about 16 million HRK (approx. 2.13 Mio. EUR). The difference to the reported 28 million HRK (approx. 3.73 Mio. EUR) as reported in the SER is realised through the organisation of international conferences and projects.

The panel members did not get the impression that the financial business was reported in the SER in a fully transparent manner.

VVG will in a few months start with the implementation of the significant project KOZMOK in value of 4 Mio. HRK, financed from ESI funds.

Recommendations for improvement

VVG should provide a more transparent financial analysis. That means that in the Table 4.11 Financial evaluation – income the rows: 4.1. to 4.6. and 5.1. to 5.6. should be elaborated in more details, as foreseen by the table design.

Quality grade

Minimum level of quality.

V. Professional and/or scientific activity

5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of professional and/or scientific research.

Analysis

Few teachers concentrate on an acceptable rate of professional papers: The amount of teachers with at least an average of 3 scientific or professional publications per year is less than 10% of the full-time employees. This denotes either a poor mechanism to encourage teachers to publish the results of their professional or research activities, or a generally low level of professional or research activities.

The efforts of VVG focus mainly on the economic support for attending conferences: There is no evidence of an active policy of the university to encourage teachers to broaden the transfer of knowledge or technology that could improve the rate of professional publications in relevant international journals or relevant multi-author books.

VVG keeps record of published material on scientific databases: The CROSBI database allows for different filter functions to browse institutional publications of its employees.

There is no evidence for pro-active mechanisms to incentivate scientific publications: In fact, the amount of publications on indexed JCR journals is really low. There are no scientific publications categorized as “Publications of the highest category according to the Ordinance on Appointment to Scientific Grades”, as well as in “Other publications according to the Ordinance on Appointment to Scientific Grades”

The participation in professional and scientific conferences is acceptable but still rather low, with an average of 20 conferences per year (some of them local) among 135 teachers.

Recommendations for improvement

It is highly recommended to elaborate a dissemination plan identifying the right mechanisms to:

- Continuously create awareness and understanding of the professional advancements as reflected by the results achieved during the mentoring tasks of final theses and/or diploma specialist theses.
- Spread the technical results and generated knowledge within scientific and research communities of interest, in order to promote the professional outcomes and align the work with the external environment.
- Generate expectations towards the research capacity of the university, in order to prepare for scientific exploitation. Identify additional potential application fields, customers and business opportunities based on the feedback upon dissemination activities.

Quality grade

Minimum level of quality.

5.2. The higher education institution proves the social relevance of its professional and/or scientific research and transfer of knowledge.

Analysis

There is no evidence of significant technology transfer: Despite the considerable amount of collaborations with local companies for educational purposes, there is a lack of initiatives to strengthen collaborations for the solution of applied problems that could spark research collaborations.

It is recognized that effective knowledge transfer mainly relies on the constant analysis of market needs to adapt educational contents. However, there is a lack of similar studies in the universities located in the area. In consequence, knowledge transfer is mainly limited to company training targets.

There is no evidence for innovations or patents: As the success rate of industrial patent exploitations is rather low, research groups are prevented to spend their efforts in protecting their intellectual property. There is no evidence of a policy to support the exploitation of innovations.

A good interaction with the Velika Gorica municipality is reported, as students regularly participate in start-up competitions. VVG members are quite active in:

- Advisory boards of professional committees
- Promoting university's profile in different professional and educational events

Recommendations for improvement

- The panel members would like to recommend the consideration of external expert support to create innolabs in key strategic VVG areas (ie. aircraft maintenance, eye optics, vehicle maintenance) as a proven mechanism to uncover potential synergies between industrial needs and VVG research potential.
- It is also recommendable to extend the present knowledge ecosystem (university – industry) with governmental stakeholders in order to create sustainable collaboration mechanisms in which VVG could lead applied research projects for the benefit of local industries.

Quality grade

Satisfactory level of quality.

5.3. Professional and/or scientific achievements of the higher education institution have been recognized in the regional, national and international context.

Analysis

Most professional awards are concentrated on part-time teachers, giving a good measure for their professional achievements. However it cannot be assumed that the awards have been achieved by the work performed at VVG institutional level.

The participation in international projects is quite low considering the VVG's capacity and industrial networking. It is recognized that private universities do not have the same funding rates as public universities in Horizon 2020 projects, however, partnership mechanisms with local companies could help to improve the benefits of participating in H2020 projects.

VVG members are very active in the organization and participation in national and international conferences. They show an important presence in national professional organizations and are members of several international scientific societies.

Recommendations for improvement

- Attendance at info days organized by project officers could help teachers to identify potential participations in tenders while at the same time provides an excellent opportunity to start networking tasks to consolidate a consortium.
- It is recommended to elaborate a reward mechanism to encourage full-time teachers to contribute as reviewers for relevant scientific journals as an enabler to future participation in the editorial board.

Quality grade

Satisfactory level of quality.

5.4. Professional and/or scientific activities and achievements of the higher education institution improve teaching.

Analysis

Horizon 2020 research collaborations have a positive impact on teaching at graduate level, however there is no evidence of acquired scientific equipment that could be used by students during lab exercises.

External mentors contribute to guide final theses: The panel members acknowledge the diversity of theses topics as a good indicator for the interest of students and mentors to work on new topics related to current market trends.

Some professional papers are co-authored by students: The engagement of students in professional conference papers is an excellent win-win opportunity to improve the dissemination of results while at the same time students get an opportunity to better understand the professional market.

Teachers are self-motivated to improve their communication skills: There is an economic incentive (max. 20% increment in salary) for employees who achieve a positive students feedback and for the application of new teaching methods.

Recommendations for improvement

- It is recommended to increase VVG's participation in industrial and international projects, generating the opportunity to acquire new equipment (both HW and SW) for the implementation of new ideas to solve realistic problems.
- It is recommended to focus on European RIA and IA projects in collaboration with local companies.

Quality grade

Minimum level of quality.

APPENDICES

1. Quality assessment summary - tables

2. Site visit protocol

Quality grade by assessment area

<i>Assessment area</i>	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
<i>I. Internal quality assurance and the social role of the higher education institution</i>			X	
<i>II. Study programmes</i>			X	
<i>III. Teaching process and student support</i>			X	
<i>IV. Teaching and institutional capacities</i>			X	
<i>V. Professional and/or scientific activity</i>		X		

Quality grade by standard

<i>I. Internal quality assurance and the social role of the higher education institution</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
1.1. The higher education institution has established a functional internal quality assurance system.			X	
1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.			X	
1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.			X	
1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, professional and/or scientific and social role).				X
1.5. The higher education institution understands and encourages the development of its social role.				X
1.6. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.			X	

Quality grade by standard

<i>II. Study programmes</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the demands of the labour market.			X	
2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.			X	
2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.				X
2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.				X
2.5. The higher education institution ensures that ECTS allocation is adequate.				X
2.6. Student practice is an integral part of the study programmes.		X		

Quality grade by standard

<i>III. Teaching process and student support</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.				X
3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.			X	
3.3. The higher education institution ensures student-centred learning.		X		
3.4. The higher education institution ensures adequate student support.				X
3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.				X
3.6. The higher education institution allows students to gain international experience.		X		
3.7. The higher education institution ensures adequate study conditions for foreign students.	X			
3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.		X		
3.9. The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.		X		
3.10. The higher education institution is committed to the employability of graduates.				X

Quality grade by standard

<i>IV. Teaching and institutional capacities</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
4.1. The higher education institution ensures adequate teaching capacities.				X
4.2. The higher education institution ensures appropriate quality of external associates.			X	
4.3. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures which include the evaluation of excellence				X
4.4. The higher education institution provides support to teachers in their professional development.			X	
4.5. The space, equipment and the entire infrastructure (laboratories, IT service, work facilities etc.) are adequate for the delivery of the study programmes and ensure the achievement of intended learning outcomes and the implementation of professional and/or scientific activity.			X	
4.6. The library and library equipment, as well as access to additional resources ensure the literature necessary for ensuring high-quality of study and scientific and teaching activity.		X		
4.7. The higher education institution rationally manages its financial resources.		X		

Quality grade by standard

<i>V. Professional and/or scientific activity</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of professional and/or scientific research.		X		
5.2. The higher education institution proves the social relevance of its professional and/or scientific research and transfer of knowledge.			X	
5.3. Professional and/or scientific achievements of the higher education institution have been recognized in the regional, national and international context.			X	
5.4. Professional and/or scientific activities and achievements of the higher education institution improve teaching.		X		

**Reakreditacija
Veleučilišta Velika Gorica**

**Re-accreditation of the
University of Applied Sciences Velika
Gorica**

**Edukacija Stručnog
povjerenstva**

**Training of Panel
members**

Mjesto događanja:
**Agencija za znanost i visoko
obrazovanje**

Venue:
**Agency for science and higher education
in Zagreb**

Donje Svetice 38/5, Zagreb

	Ponedjeljak, 1. travnja 2019.	Monday, 1st April 2019
10:00 – 12:00	Edukacija članova Stručnog povjerenstva (kratko predstavljanje rada Agencije, upoznavanje sa sustavom visokog obrazovanja u Republici Hrvatskoj, upoznavanje s Postupkom reakreditacije, Standardima za vrednovanje kvalitete i načinom pisanja završnog izvješća)	Training for the expert panel members (short presentation of ASHE, introduction to the higher education system in Croatia, introduction to the re-accreditation procedure, standards for the evaluation of quality and writing the final report)
12:00 – 12:30	<i>Snack</i> ručak	Snack lunch
12:30 – 19:00	Priprema Stručnog povjerenstva za posjet Veleučilištu Velika Gorica (rad na Samoanalizi) Pitanja za posjet	Preparation of the expert panel members for the site visit (working on the Self-evaluation) Questions for the site visit

Reakreditacija
Veleučilište Velika Gorica

Re-accreditation of the
University of Applied Sciences Velika
Gorica

PROTOKOL POSJETA

Utorak, 2. travnja 2019

Mjesto događanja:

Zagrebačka ulica 5, 10410 Velika Gorica

VISIT PROTOCOL

Tuesday, 2 April 2019

Venue:

Zagrebačka ulica 5, 10410 Velika Gorica

	Utorak, 2. travnja 2019.	Tuesday, 2 April 2019
9:00 – 10:00	Sastanak s dekanom i prodekanima	Meeting with the dean and vice-deans
10:00 – 11:00	<i>Sastanak članova Stručnog povjerenstva (Analiza dokumenata)</i>	<i>Internal meeting of the panel members (Document analysis)</i>
11:00 – 11.45	Sastanak s pročelnicima studijskih programa	Meeting with heads of study programmes
11:45 – 12:00	<i>Interni sastanak članova Stručnog povjerenstva</i>	<i>Internal meeting of the panel members</i>
12:00 – 13:00	Sastanak s nastavnicima (u stalnom radnom odnosu, nisu na rukovodećim mjestima)	Meeting with full-time employed teachers who do not have managerial positions (open meeting)
13:00 – 14:30	<i>Radni ručak Stručnog povjerenstva</i>	<i>Working lunch</i>
14:30 – 15:30	Sastanak sa studentima (otvoreni sastanak za sve studente)	Meeting with the students (open meeting for all students)
15:30 – 16:15	Sastanak s vanjskim dionicima - predstavnicima strukovnih i profesionalnih udruženja, poslovna zajednica, poslodavci, stručnjaci iz prakse	Meeting with external stakeholders - representatives of professional organisations, business sector/industry sector, employers, professional experts
16:15 – 16:30	<i>Interni sastanak članova Stručnog povjerenstva</i>	<i>Internal meeting of the panel members</i>
16:30 – 17:15	Sastanak s vanjskim predavačima	Meeting with external lecturers
17:15 – 18:00	Organizacija dodatnog sastanka o otvorenim pitanjima, prema	Organisation of additional meeting on open questions, if needed

	potrebi	
18:00 - 20:00	Sastanak Stručnog povjerenstva – pisanje nacрта završnog izvješća	Joint meeting of the expert panel members – drafting the final report

	Srijeda, 3. travnja 2019.	Wednesday, 3 April 2019
9:00 - 10:00	<i>Sastanak članova Stručnog povjerenstva (Analiza dokumenata)</i>	<i>Internal meeting of the panel members (Document analysis)</i>
10:00 - 11:00	Sastanak članova Stručnog povjerenstva s: -Predstavnicima Povjerenstva za osiguravanje i provođenje sustava kvalitete i Povjerenstva za unutarnju prosudbu -Voditeljem Centra za karijernu i psihološku pomoć -Voditeljem Službe za međunarodnu suradnju i projekte i Erasmus koordinatorom	Meeting with: -Representatives of the Committee for Quality Assurance and Implementation and the Internal Audit Committee -Head of the Centre for Career and Psychological Support - Head of the Service for International Cooperation and Projects and Erasmus Coordinator
11:00 - 13:00	Obilazak visokog učilišta (knjižnica, informatička služba, učionice, studentska referada, laboratoriji) i prisustvovanje nastavi, obilazak poduzeća/mjesta u kojima studenti obavljaju praksu	Tour of the HEI (library, IT services, classrooms, student office, laboratories) and participation in teaching classes, tour of companies in which students do student practice
13:00 - 14.30	Radni ručak Stručnog povjerenstva	<i>Working lunch</i>
14:30 - 15:15	Sastanak s alumnijima (koji nisu zaposlenici Veleučilišta)	Meeting with the alumni (which are not employees of the HEI)
15:15 - 15.30	<i>Interni sastanak članova Stručnog povjerenstva</i>	<i>Internal meeting of the panel members</i>

15:30 - 16:00	Organizacija dodatnog sastanka o otvorenim pitanjima, prema potrebi	Organisation of additional meeting on open questions, if needed
16:00- 16:15	Završni sastanak s dekanom i prodekanima	Exit meeting with the dean and vice-deans
16:30 - 21:00	Sastanak Stručnog povjerenstva – pisanje nacрта završnog izvješća	Joint meeting of the expert panel members – drafting the final report

	Četvrtak, 4. travnja 2019.	Thursday, 4 th April 2019.
9:00 - 12:00	Sastanak Stručnog povjerenstva – Izrada nacрта završnog izvješća	Drafting the final report
12:00 - 13:00	<i>Snack</i> ručak	Snack lunch
13:00 - 16:00	Izrada nacрта završnog izvješća	Drafting the final report

SUMMARY

During the site visit of the panel members to the HEI, 8 highly informative meetings were conducted with all levels of stakeholders (dean, vice-deans, coordinators of study programmes, teachers, external associates, alumni, students, heads of several university services, members of industry and local government and administration). The panel members enjoyed the open and informative atmosphere during each of these meetings and would like to express their thanks to all participants answering all questions.

VVG's personnel (as well teaching as supportive) made a highly motivated impression and VVG continually strives to improve the working conditions, to reduce the overload by the recruitment of new personnel. In addition, a new programme is about to be set up to provide pedagogical training for teaching personnel.

VVG fosters a culture of quality at all levels of its operations. Quality data on all processes are gathered regularly. The results of these surveys are evaluated and taken into account for continuous improvement in a structured and effective manner.

The equipment of VVG's labs was found to be not equally distributed among the study programmes. Whereas Eye Optics and computer-related programmes are well supported, the aircraft and motor vehicle maintenance programmes completely rely on lab premises at external partner sites. This was found to be problematic, as students at these external sites often can only perform observatory work, whereas hands-on practical experiences would be required.

VVG decided to mainly concentrate on professional activities, neglecting the scientific side. This is found to be problematic, as a provider of professional graduate study programmes (there are three of these) at the CroQF level 7 is supposed to enable its students for scientific work and career paths in science.

International mobility of students and teaching personnel is still at a very low level. There are no explicit mobility windows in the study programmes that would allow for a complete semester abroad. Also English-taught courses for local and incoming students could not be identified.

VVG is well aware of its shortcomings, and in comparison to the situation at the time of the previous reaccreditation significant improvements have been achieved, although not all recommendations could be implemented since then. The panel members would like to encourage VVG to further follow their open-minded and goal-oriented approach towards continuous improvements, as they did during the last years.