REPORT
OF THE EXPERT PANEL
ON THE
RE-ACCREDITATION OF
Polytechnic "Nikola Tesla" in Gospić

Date of site visit:
4th – 5th June 2019

June 2019

CONTENTS

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 Polytechnic "Nikola Tesla" in Gospić.

Members of the Expert Panel:

1. Prof. Sunčica Oberman Peterka, PhD, Faculty of Economics Josip Juraj Strossmayer University of Osijek, Republic of Croatia, Panel chair
2. Prof. Benjamin Heydecker, PhD, Faculty of Engineering Sciences, University College London, United Kingdom of Great Britain and Northern Ireland
3. Prof. Vedran Đulabić, PhD, Faculty of Law University of Zagreb, Republic of Croatia
4. Mr. sc. Nataša Trojak, senior lecturer, College Algebra, Republic of Croatia
5. Petra Polović, student, VERN Polytechnic, Republic of Croatia

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

- Management (Dean, Vice- deans) and Secretary,
- Self-evaluation Report Committee,
- Heads of the Departments of Business, Transport and Administrative Studies,
- Full-time teaching staff,
- External lecturers,
- Representatives of the business sector, potential employers.
- Students,
- Heads of doctoral programmes and leaders of research projects,
- Woman commissioner for Quality Assurance and Improvement
- ECTS Coordinator

- Leaders of internship
- Alumni

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 the Polytechnic "Nikola Tesla" in Gospić on the basis of the Polytechnic "Nikola Tesla" in Gospić self-evaluation report, other relevant documents and their site visit.

This 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 Polytechnic "Nikola Tesla" in Gospić and writing of the Report, the Expert Panel was supported by:

- Matan Čulo, coordinator, ASHE,
- Frano Pavić, assistant coordinator, ASHE,
- Igor Opić, 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.

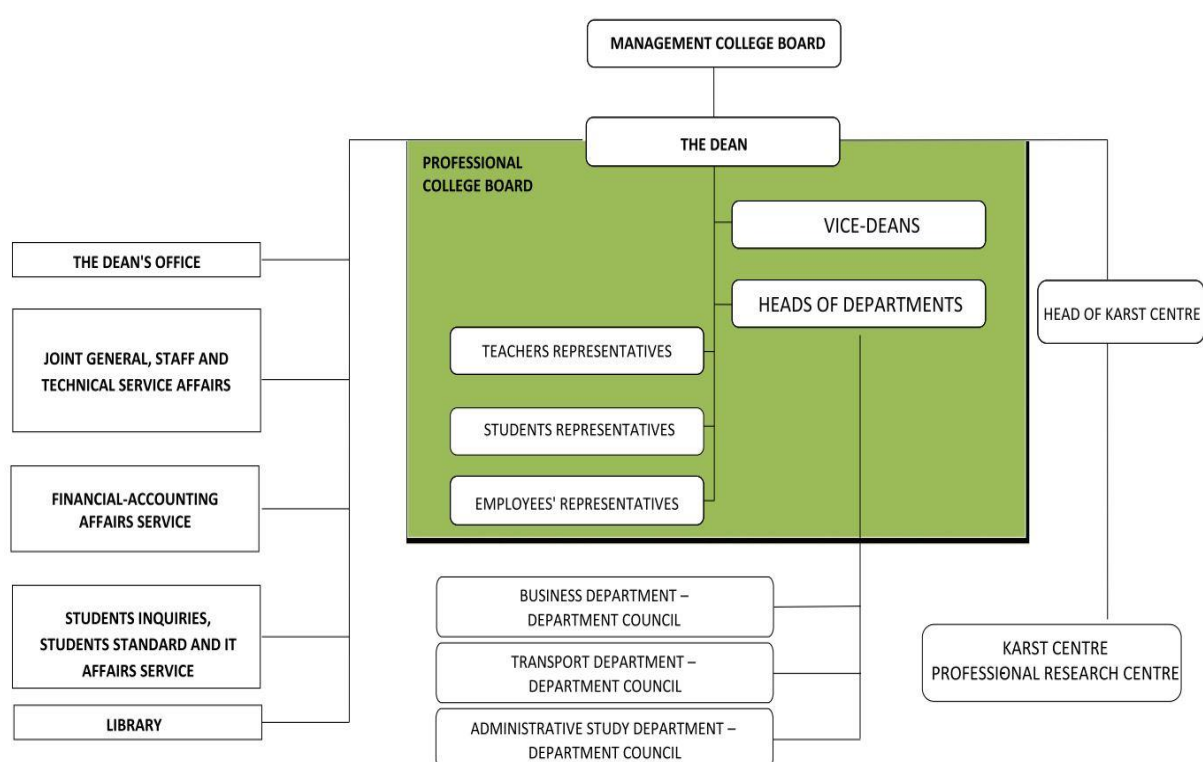# SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION: Polytechnic "Nikola Tesla" in Gospić

ADDRESS: Bana Ivana Karlovića 16, 53000 Gospić

DEAN: Dr. sc. Vlatka Ružić, college professor

ORGANISATIONAL STRUCTURE:
was based on the Self-evaluation document (page 7)

STUDY PROGRAMMES:

Based on MOZVAG database

No.	Name of the study program	Type of program	Education provider	No. ECTS credits	HKO **Level
1.	Administrative Studies	Undergraduate professional study programme	Polytechnic "Nikola Tesla" in Gospić	180	6.
2.	Economics of Entrepreneurship	Undergraduate professional study programme	Polytechnic "Nikola Tesla" in Gospić	180	6.
3.	Road Transport	Undergraduate professional study programme	Polytechnic "Nikola Tesla" in Gospić	180	6.

** Croatian Qualification Framework
Source: Data generated from the Mozvag Module Browser

NUMBER OF STUDENTS:

The number of students per study programme for the current academic year is given in Table 3.1 in the Analytic supplement to the Self-evaluation

Study programme name	Full-time students	Part-time students
Administrative Studies (422)	27	71
Road Transport (421)	53	53
Economics of Entrepreneurship (420)	70	62
Total number for undergraduate level	**150**	**186**
Total number of students	**336**	

NUMBER OF TEACHERS:

The structure of teachers is given in Table 4.1.b in the Analytic supplement to the Self-evaluation report

Staff	Full-time staff	Cumulative employment	External associates
College professors	3	-	-
Senior lecturers	4	-	4
Lecturers	7	-	5
Lectors	-	-	-
Full professors with tenure	-	-	-
Full professors	-	-	5
Associate professors	-	-	4
Assistant professors	-	-	8
Expert assistants	1	-	-
Assistants	-	-	-
Technical staff	-	-	-
Administrative staff	11	-	-
Support staff	4	-	-

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION
Short description was based on the Self-evaluation document (pages 2 and 8)

The Polytechnic started work in the academic year 2006/2007 and is, like other polytechnics in the Republic of Croatia, organized on a departmental basis. Since the founding of the Polytechnic, teaching is conducted in Gospić, at the address of Ban Ivan Karlović 16 and Otočac, at the address Trg dr. Franje Tuđmana 5.

As part of the Polytechnic since 30 November 2010, there is also a professional-research centre - Karst Centre as a non-teaching department. The task of the Karst Centre within the Polytechnic is to carry out professional advancement activities, performing professional, research and development projects, organization of public lectures and forums, interinstitutional and international cooperation, and publishing activities related to the development, promotion and preservation of the karst area of the Republic of Croatia in alliance with general activities and business of the Polytechnic.

Since the academic year 2018/2019 there have been no employees in the Karst Centre, the reason being is that the Head of the Karst Centre is no longer an employee of the Polytechnic, while an associate in the system of science and higher education has been re-appointed and appointed to the position of a graduate librarian at the Polytechnic's Library.

At the Polytechnic, undergraduate professional studies are organized within the Business, Transport and Administrative Departments as its units, in accordance with the permissions issued by the Ministry of Science and Education.

The Mission of the Polytechnic

The core task of the Polytechnic is to educate young people for the acquisition of professional knowledge through well-structured professional studies. The study programmes aim to meet the needs for professional staff of the economy, infrastructure development, regional and local government and self-government as well as other subjects. Continuous progress and the improvement of the quality and competitiveness of study programmes, training of teaching staff and the development of professional activities are part of the important tasks on which the future of the Polytechnic is based.

The Vision of the Polytechnic

The Polytechnic will be a centre of excellence in quality work with highly skilled work in the areas of social and transport science. Collaborating with the economy and local government, this higher education institution will be publicly accountable and contribute to the development of society.

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION
1. The only Polytechnic in the county
2. Small cohorts of students lead to personalised education
3. Clear emphasis on practice
4. Wide range of industrial placements for internships
5. Connection with the local community
6. Good support services for students

DISADVANTAGES OF THE INSTITUTION
1. Learning outcomes of the courses are not properly aligned with those of the corresponding programmes

2. Study programmes are not up to date

3. Challenges in recruitment and retention of high-quality teaching staff appropriate to the curriculum

4. Mobility of students and academic staff is very low

5. Internationalization is absent

6. Scientific and professional activity are very low

7. Public information is neither up to date nor accurate

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE
1. EU project Tesla for socially useful learning
2. Engaging practitioners as external lecturers

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

The Polytechnic has established an internal quality assurance system that covers all it activities: study programs, teaching process, student support, learning resources, professional and scientific activity, though there are some insufficiencies in the implementation of this quality assurance framework. Despite that the procedures and policies are in place, the learning outcomes at degree and course level are not entirely appropriate and in many cases the distribution of ECTS credits within courses is not proper. Many worthwhile activities have been organized once or twice, but not continued regularly.

The previous process of reaccreditation was undertaken in 2012 and resulted in many recommendations concerning the activities of Polytechnic. The Polytechnic did resolve some of the issues raised in that report, but a greater effort should be made to address the full range of issues raised.

Information on the web site is incomplete and it is not always clear what the latest information is. There are many documents on the web site, but they are not organized and sometimes it is very difficult to find the concrete information. The English language version of the web site is incomplete, and only part of the information is available in English.

In order to support academic integrity, freedom and to prevent all types of unethical behaviour, intolerance and discrimination, the Polytechnic has developed some elements and documents, but they need to be adopted as everyday practice at institution. Since the Expert Panel has received several e-mails through the confidential communication there are some serious doubts about organisational activities at the institution.

The Polytechnic plays an important role in its local environment. It is very active in organizing various events with different groups of stakeholders on a range of topics. The Polytechnic participate or has participated in several projects aimed at development of the local community. The Polytechnic offers two lifelong learning programmes: courses for learning foreign languages (English and German) and a programme for tourist guides. Information about lifelong learning programmes is scarce and it can be concluded that the process of their development is just beginning.

Recommendations for improvement

Internal quality assurance system needs to be the part of regular and every day activities of each person at the institution. The internal consistency of study programs needs to be increased. Professional development of teaching and non-teaching staff should be based on yearly based planned activities and reports on that should be done regularly.

The Polytechnic should continue to work on recommendation from previous reaccreditation, such as: the existing and established structures and processes should be formalized to achieve transparency and the independence from the individuals in charge, the institution needs to improve its reputation, the Polytechnic should align itself with the international academic community etc.

All unethical situations should be resolved transparently and according to the defined procedures. Professional College Board should be informed about these processes. Management of the Polytechnic is responsible for the image of the institution and it should work hard and transparent to make it positive.

Software PlagScan should be introduced as an obligatory tool for all students' seminars and final papers.

The web site needs to be redesigned and updated with information that are valid for the current academic year. It needs to be maintained regularly and it should be organized better.

English version of the web site should also be redesigned and updated with all needed information for possible international students or any interested person from abroad.

Polytechnic should connect more with the business community in its environment and design its services to their needs and help them grow and develop.

The Polytechnic should be more active in designing and offering lifelong learning programs to its community and should ask them what the needs are. These programs need to be more aligned with the programs of the Polytechnic and to the needs of the community, business sector in environment, civil sector, etc.

Quality grade
Minimum level of quality

II. Study programmes

Analysis

General goals of study programmes are aligned with strategy, vision and the mission of Polytechnic. The justification for delivering existing study programmes are supported with reports of employability of graduated students.

Learning outcomes are mostly adequate defined at the study programme level, but it is not clear what the real competencies of students who finish each study program are. Also, it is not clear how some courses contribute to learning outcomes on programme level. In some courses learning outcomes are overlapping and it should be avoided.

Although most learning outcomes of study programmes are using verbs on level 6 of CQF, most of them relate to developing "cognitive skills". It is suggested to redefine learning outcomes in order to develop other needed skills, such as social skills, autonomy and responsibility.

It is important to emphasize that not all syllabuses were available on the web page during the visit, and they were also not presented during the meeting.

Diploma supplements that were presented to the panel contained no learning outcomes.

Although students, graduates and external stakeholders expressed their satisfaction with their educational experience at Polytechnics, some of the examples of test and examination scripts seen by the expert panel show lack of depth of knowledge tested by the questions as formulated and candidates' corresponding answers. According to this

view, the courses do not challenge and educate the students adequately for diploma standard. These problems are partly a result of inadequately defined learning outcomes. Polytechnic conducts surveys with students and stakeholders about content and quality of study programs, but there is no evidence that study programmes were improved based on inputs from different stakeholders. Some programme changes have been implemented through changes of Operative teaching plan (*izvedbeni plan*), but those changes were not connected to stakeholder's input. It is also important to outline that changes needs to be included in Study programme in order to be clear and visible what is valid study programme.

The panel has identified that ECTS distribution in syllabi and inside of each course needs to be corrected. There is no evidence about the assessment or re-allocation of ECTS.

Student practice is an integral part of all study programmes, and it is conducted in sixth semester. The organization and implementation of student practice is on satisfactory level of quality. Polytechnic has contracts and agreements with different government institutions, as well as private companies.

Recommendations for improvement

Study programmes need to be revised according to the market needs. All stakeholders, especially employers from the private sector, should be more intensely involved into strategic planning process, and into the processes of creation and revision of study programmes. It is necessary to significantly improve the learning outcomes on the study programmes level and courses level. It is very important to think and to make it clear how individual courses contribute to study programme learning outcomes, are course learning outcomes defined according to CQF and Bloom taxonomy and if learning outcomes are overlapping. The process of the assessment has to be revised; it is necessary to critically observe all existing assessment tools and to define whether they match learning outcomes. It is suggested to include more team members in this process, from professionals, teachers, external stakeholders to make it clear and understandable to all. The literature needs to be updated and more English literature needs to be included into syllabi. The panel recommends that the Polytechnic includes external consultants into this process, if possible, to ensure quality standards.

Student workload and ECTS points needs to be aligned and it should be starting point for revising the distribution of ECTS points. It is suggested that this process starts parallel with the revision of study programmes.

Learning outcomes need to be included into the diploma supplement.

To reach higher level of student practice quality, the Polytechnic should develop a procedure of systematic collection and analysis of feedback from students and employers. It is suggested to increase the number of private entrepreneurs where students can do their practice.

Unsatisfactory level of quality

III. Teaching process and student support

The criteria for admission or continuation of studies are defined and published, as well as the procedures related to transferring from another HEI and recognition of prior learning. There is no admission entry exam. HEI collects and analyses information on the student progress. The average duration of studying is decreasing, but the number of students who have lost the right to study from generation is concerning. It can be explained with a relatively low level of admission criteria.

The HEI encourages the use of various teaching methods and interactive learning. As there are small cohorts of students, education is personalized, and teaching methods can be adjusted to their needs. Mentoring and tutoring systems are not established and implemented. Teachers are offering consulting hours and are available on request which can be considered as a measure to increase pass rates and completion rates. On the other hand, being at the disposal to the students all the time and organizing the courses in a way that students do not need to learn much at home could disable them in developing autonomy in the learning process. Student survey results show that students are pleased with the quality of delivering classes. Classrooms are well equipped. The HEI has functional library and student administration services.

The HEI has established functional procedure for outgoing and incoming student mobility and has Erasmus Charter and several bilateral exchange contracts. However, outgoing mobility practically does not exist. Currently, there is no possibility for entire programme or part of the programme to be delivered in a foreign language, because there are no teachers who could deliver classes in a foreign language.

The criteria and methods for evaluation and grading are published in Syllabi and presented to students in the beginning of the course. Although Syllabi are published on the web page, published information in general is not consistent, so it is hard to determine which document has the correct information. Some of the Syllabi are not available on English.

The HEI analyses the employability of its graduates. Career Centre does not exist. Alumni club, together with students, takes part in humanitarian actions. During the site visit it was discovered that both Alumni and employers were satisfied with the employability and competences of the students.

In order to get candidates with appropriate prior knowledge it is recommended to apply a higher level of criteria for admission or introducing an admission entry exam. Implementing both mentoring and tutoring system could ensure achieving better results. Evaluation criteria should be closely aligned with learning outcomes and examination has to include questions and tasks that correspond to the required level of knowledge. Polytechnic should add learning outcomes and achievements per learning outcome (or course) to the Diploma Supplement.

Polytechnic should organize Career days and establish functional Career Centre which students could use for planning their future career. Although Polytechnic maintains contact with alumni, it is recommended that it organizes more events related to connecting alumni with students, focused on students' career opportunities.

Polytechnic should invest time and resources in motivating students to take part in the Erasmus program and work hard on increasing student mobility.

Quality grade

Satisfactory level of quality

IV. Teaching and institutional capacities

Analysis

The student-teacher ratio at Polytechnic is in accordance with the positive legislation. There has recently been significant turn-over of teaching staff at Polytechnic which could have had substantial negative effects on the continuity of teaching and institutional memory. Current heads of two departments do not have appropriate qualifications for these positions.

The resulting direct connection with industrial practice is valuable for students. However, this extent of reliance on contracted external teachers exposes the Polytechnic to a high level of risk of discontinuity in teaching.

Although, teachers have been recruited through public tenders, it is not clear if the recruitment procedure comes as a result of the long-term development goals towards the needs of the Polytechnic.

Members of staff are encouraged to engage in international activities, including ERASMUS exchange, but this activity is minimal.

Polytechnic disposes of sufficiently good quality teaching, laboratory and office space for academic and administrative uses. A lecture theatre is equipped for live-stream at each of the Otočac and Gospić sites to facilitate interactive delivery of lectures from remote HEIs. These spaces are well maintained and mostly equipped appropriately for their respective purposes. Library is organised in two locations, in Town Otočac for Administrative study, and in Town of Gospić for Transport studies and Economic and entrepreneurship study, but number of titles are rather limited. Financial situation of the Polytechnic is stable. The additional building in Gospić is not yet finished, and neither time-frame nor financial resources have been established for this.

It is recommended to hire and retain high level quality permanent teaching staff as well as external associates in order to further strengthen and maintain the institutional memory of the Polytechnic and to develop a sustainable plan of career development for the existing teaching staff.

Designated course holders should be established members of academic staff rather than external and contract staff. Similarly, external and contract staff should not be solely responsible for large amounts of teaching on individual courses.

Teachers should be directed towards doctoral and postgraduate studies that are in connection with the courses they teach.

The number of lecturers who participate in the ERASMUS programmes, international conferences and professional and scientific projects should be increased. It is recommended to earmark per capita amounts for training costs for the employees.

The student computers at Otočac should be configured for internet access so that they can be used for internet search of literature and other material relevant to students' work. The library should be expanded especially with the new and accurate titles which cover the main academic areas which are studied at the Polytechnic. Indicative time-frame and dedicated financial resources for finishing the additional building located in Gospić should be developed.

The Polytechnic in any sense should not be viewed as institution for political patronage, but it should build image of the non-partisan academic institution with high quality of teaching process and teaching staff.

Quality grade
Minimum level of quality

V. Professional and scientific activity

Analysis

The Polytechnic supports members of academic staff to attend conferences and an application procedure is defined for this, though this support is not clearly contingent on presentation of a poster or paper there. Some members of the academic staff are keen to attend national and international conferences which provide them with opportunities to disseminate their professional and scientific contributions, and to learn of current issues and developments in their field. There is no central repository for copies of papers that are published or presented by members of the academic staff.

The Polytechnic identifies an important role in regional social life through professional and economic projects as well as its educational role for young adults in the region. The Polytechnic participated in 8 projects involving planning and development of regional

infrastructure, and broader educational activities. Notable amongst these are participation in the EU Project "Tesla for socially useful learning" which aligns well with the Polytechnic's mission. There were also 11 lectures and workshops that were open to the wider public, 4 roundtable and panel discussions, and 2 expert scientific conferences for the transfer of knowledge.

The professional and scientific activities of the staff at the Polytechnic receive limited exposure. The research activity of the staff is low, and the resulting output limited in scope. There is no institutional policy on academic research and publication, although the recommendation from last re-accreditation process recommended that professional activities are also initiated by the responsible bodies of the polytechnic and the results are monitored.

Recommendations for improvement

The Polytechnic should establish a policy for research activity by staff to support presentation and publications of research findings. Each department should identify appropriate research themes and encourage their staff to engage in them. Members of staff should be encouraged to present their work at national and international conferences.

The Polytechnic should establish and maintain up to date a list of presentations and publications by members of staff and upload this material to its web site.

Professional and scientific activities should be the base for improving teaching with new insights, information, researches etc. All teachers should be motivated to be involved in professional and scientific activities and to publish at least one professional or scientific paper annually.

The Polytechnic should continue and strengthen its contributions from its areas of competence to regional development. The recently strengthened activity in open sessions of roundtable and panel discussions should be continued with associated publicity and professional contribution to engage the interest and participation of members of the local community.

Departments of the Polytechnic should develop coordinated programmes of conferences relevant to their specialism, with international participation. This could be realised by each department organising a series with a conference every 3 years to establish a rolling programme.

Quality grade

Unsatisfactory 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

According to the documents (the Self-evaluation report and different documents that were available to expert panel) it can be concluded that Polytechnic has established the internal quality assurance system and that it covers all areas of activities of Polytechnic: study programs, teaching process, student support, learning resources, professional and scientific activity. There is the Committee for quality assurance consisted of vice dean for teaching, representatives of teaching staff, assistants, external stakeholders and students and there are two persons responsible for quality assurance at the institution: commissioner and the deputy. The last minutes of the Committee meeting that are available on the web sites of the Institution are from 2016. Internal quality assessment was done two times (in 2013. and 2018.), but not regularly. There is an Action plan for quality improvement for only two years in a row and the last one is for 2016/2017. There is a Strategy for the period 2017-2021 in which it is said that it is based on SWOT analyses, but SWOT is not the part of Strategy document and it cannot be found on the web site of the Polytechnic. There are also some insufficiencies in the implementation of the quality assurance framework as despite the procedures and policies are in place the learning outcomes at degree and course level are not entirely appropriate and in many cases the distribution of ECTS credits within courses was not done properly. The internal consistency of study programmes needs to be increased. Another area that requires more attention is development of professional research. There is an Ordinance of education and professional development of teaching and non-teaching staff, but these processes are not regular, and they are not based on planned activities. The institution collects some data on its processes and results, but there is no evidence of how they are using or reacting on results of these processes.

Recommendations for improvement
Internal quality assurance system needs to be the part of regular and every day activities of each person at the institution. All employees have to be aware of importance of this system and they need to contribute to the quality of it.

Internal quality assessment needs to be done regularly and the Committee for that has to be appointed each year – it is not the constant body of any institution. The members of Committee for quality should not be the part of that body, especially president of the Committee or any member of management.

Matrix of learning outcomes of the Programme and learning outcomes of the courses should be revised as well as distribution of ECTS credits within the course.

Professional development of teaching and non-teaching staff should be based on yearly based planned activities and reports on that should be done regularly. It would be more transparent if some budget would be allocated for each person for that purposes.

Minimum level of quality

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

Analysis
The previous process of reaccreditation was undertaken in 2012 and resulted in many recommendations concerning the activities of Polytechnic. The Polytechnic did resolve some of the issues raised in that report, but a greater effort should be made to address the range of issues raised.

Recommendations were connected to the following areas:

- The existing and established structures and processes should be formalized to achieve transparency and the independence from the individuals in charge.

  o The Polytechnic should continue with all activities regarding this recommendation specially connected to regular revision of study programmes, based on feedbacks from students, teachers and external stakeholders. All gathered information in the Polytechnic should be used to improve performance of all activities.

- The institution needs to improve its reputation.

  o The Polytechnic needs to continue working on this. Reputation of the institution relates to reputation of all employees of the Polytechnic and to the quality of all processes. The environment in which the Polytechnic is operating is very small and the Polytechnic should be aware of its role in it. According to the publicly available articles it can be concluded that the reputation of the institution is not very positive, and the management and

all employees should work on changing the image of the Polytechnic to more positive one. It should also offer additional courses and help to students who have problems with studying and passing certain courses in order to decrease the drop-out rate.

- The institution should establish cooperation with industry

  o The Polytechnic establish good cooperation with the public sector and mainly, publicly owned companies in the region. These activities should be continued and the number of companies that are cooperating with the Polytechnic should be increased, especially from the private sector (having in mind that the Polytechnic run the program on Economic of entrepreneurship).

- The polytechnic should align itself with the international academic community

  o In the matter of internationalization, the Polytechnic did not do much. They've signed the Erasmus Charter but almost nobody (students, teaching and non-teaching staff) has used this opportunity. Internationalization is important part of any higher education institution, it helps in raising the quality of all activities, brings the good practices, help in building international network, raise the quality of professional and scientific activities and a lot of efforts need to be done in this respect.

- The existing IT facilities need improvement in configuration and usage

  o The Polytechnic should invest further resources in IT facilities to fulfil the needs of the students and staff in learning and teaching processes, and in associated support activities. There are two rooms equipped for distance learning, but they are not used regularly.

Recommendations for improvement
Working on all these recommendations is a continuous process and it has to become the part of the routine activities in the Polytechnic. Majority of recommendation are like the recommendations from previous reaccreditation process, with some addition, based on current situation. Special attention needs to be done to better structure of the study programs, internationalization of the institution, motivation of students and teaching staff to use Erasmus mobility funds and to image of the institution.

Quality grade
Minimum level of quality

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

Analysis
In order to support academic integrity, freedom and to prevent all types of unethical behaviour, intolerance and discrimination, Polytechnic has developed some elements and documents, such as: Code of ethic and Ethic committee, The Ordinance on Employee's Responsibilities for violating employment obligations, The Ordinance on disciplinary responsibilities for students, named the Commissioner for the employee's dignity protection and the students' public attorney. The institution has also introduced the use of software PlagScan, but there is no evidence on implementation of this software on obligatory bases. It is also noticed that the same persons, who are in the same time in the management of the Institution are in many of these Committees, what should be a conflict of interest and should be avoided.
According to the information from the web site (mainly syllabuses of the programs and courses), it could be concluded that there is quite high turnover of the staff what could be result of some conflicts inside the institution. It was difficult to find out the valid list of current employees and teachers. Since the Expert Panel has received several e-mails through the confidential communication there are some serious doubts of what is going on at the institution.

Recommendations for improvement
All information on the web site about employees should be accurate. Management of the Polytechnic is responsible for the image of the institution and it should work hard and transparent to make it positive. All employees and students should be involved in these processes, without exception. Being in the management of the HEI is very responsible function that asks for full time commitment. It cannot be done along with responsible political functions. It could lead to situations of a conflict of interests and it should be avoided. Image of the institution relates to the image of all employees, but firstly with the management and they should be aware of this.
All unethical situations should be resolved transparently and according to the defined procedures. Professional College Board should be informed about these processes.
Software PlagScan should be introduced as an obligatory tool for all students' seminars and final papers.

Quality grade
Minimum level of quality

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

Analysis

Polytechnic provide information about study programs and other aspects of their activity on the web site. Information on the web site are not completed and it is not always clear what the latest information is. There are many documents on the web site, but they are not organized and sometimes it is very difficult to find the concrete information. English version of the web site is not completed, and only part of the information is available in English (i.e. information about lifelong learning programs is not translated in English).

There is much information that is not easy to find on the web site, such as information on organization of different activities to social community (round tables, presentations, lectures etc.). Information about study programs, learning outcomes and teachers are incomplete, and it is not clear what applies in practice.

Much information on the web site is outdated. There are some parts of the web site where the information in English and Croatian are mixed and it is not clear why. Also, it is not clear to which academic year some information are related to (e.g. Current Academic Year Syllabi – why is this information in English here and what is "current academic year"?), https://www.velegs-nikolatesla.hr/ekonomika-poduzetnistva/.

Recommendations for improvement

The web site needs to be redesigned and updated with information that is valid for the current academic year. It needs to be maintained regularly and it should be organized better. Each teacher should have information about the course that teaches on his/her web site, with materials for students, literature for preparing the exam, etc.

English version of the web site should also be redesigned and updated with all needed information for possible international students or any interested person from abroad.

Quality grade

Minimum level of quality

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

As it is stated in the Self-analysis report and as it was visible from the visit, Polytechnic plays the important role in its environment. It is very active in organizing different events with different groups of stakeholders on different topics such as: implementation of GDPR, tax regulations for family farms, main directions of tourism development in Lika Senj county, international perspective of traffic engineering etc.

Through participation in an international project, Polytechnic has got state-of-the-art transport software which enables them to participate in design of transport solutions in Republic of Croatia.

Polytechnic participate or has participated in several projects aimed to development of local community such as Tesla for socially useful learning, Rural animators project, The project "Main Development Plan of the North Adriatic Functional Region's Transport System", Cooperation Agreement on the Implementation of the Road Infrastructure Development Project for the Lika-Senj county etc.

Polytechnic should connect more with the business community in its environment and design its services to their needs and help them grow and develop. Also, it should promote volunteer activity of students as a way for developing different set of skills, needed for employment and development of future career.

Satisfactory 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.

According to information in Self-analysis and the web page of the Polytechnic, Polytechnic offers two lifelong learning programs: courses for learning foreign languages (English and German) and program for the tourist guides. In year 2017 Institution has organized the Round table on the importance of lifelong learning and courses for learning foreign languages were presented and promoted than. Program for the tourist guides is announced for the Spring 2019, but there is no information of delivering that program. Polytechnic has organized a conference about implementation of the GDPR and all

participants have got the certificate of attendance, but it cannot be considered as lifelong learning program because it was held only once. Information about lifelong learning programs is very scarce and it can be concluded that the process of their development is in the beginning.

Recommendations for improvement

The Polytechnic should be more active in designing and offering lifelong learning programs to its community and should ask them what the needs are. These programs need to be more aligned with the programs of the Polytechnic and to the needs of the community, business sector in environment, civil sector, etc. such as different programs for entrepreneurs, unemployed people, etc. The lifelong learning is the concept that is even more important today, in very dynamic world and Polytechnic, as HEI should be one of the strongest promotors of such programs.

Quality grade

Minimum 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

According to the Strategy document for period 2017.-2021. (available at https://www.velegs-nikolatesla.hr/ostalo/Strategija20172021.pdf), general goals of study programmes are aligned with general strategy, vision and the mission of Polytechnic. The justification for delivering existing study programmes are supported with reports of employability of graduated students. However, this statistic varies in different reports (e.g. in analytic supplement number of unemployed alumni according to the statistics of the Employment Office in 2018 is 21, and in analysis received at the meeting this number is 28). Analysis of key areas of activities shows that in March 2019. the survey of employers was conducted. Only four (out of 30) employers took part in the survey and they have suggested more practical work. Due to short time from taking the survey to visit of the expert panel, changes could not be implemented. There is no evidence if such changes have been implemented in the past.

All stakeholders, especially employers from the private sector, should be more intensely involved into strategic planning process, and into the processes of creation and revision study programmes. When new knowledge emerges and becomes established, it should be incorporated into relevant study programmes, based primary on the needs of the labour market.

The effort of including international businesses into strategic planning process, as well as processes concerning study programmes should be intensified, since this was a recommendation from previous re-accreditation process.

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 was informed about progress on improving learning outcomes at the study level and for individual courses. Since the previous accreditation visit, the vice dean had analysed and corrected learning outcomes at the study level and had also conducted a workshop about learning outcomes for the teachers and head of studies. After that, teachers were required to correct and refine the statement of learning outcomes. Some inadequacies had already been identified during the previous accreditation visit, and as well as this, not all syllabuses were available on the web page at the time of the visit, and neither were they presented during the meeting.

At the study level learning outcomes are mostly adequate defined, but it is not clear what are the real competencies of students who will graduate each study programme (e.g. on study of Economics of Entrepreneurship are they future independent entrepreneurs, or are they being prepared for corporate careers). Also, it is not clear how individual courses contribute to learning outcomes on study level (e.g. how learning outcomes from course State and political system and political economy of Republic Croatia contribute to learning outcome "Develop a Project Cycle Management Plan" at the study level). Some learning outcomes need to be redefined (e.g. EPI6 "Usage of digital marketing tools, knowledge and techniques in the process of developing and managing a business entity", CPI13 "Describe legal regulations and explain key concepts of traffic in a foreign language" or USI10 "Understand the functioning of central government bodies and the functioning of local and regional self-government bodies"). Although in most learning

outcomes of study programmes used verbs are on level 6 according to Bloom taxonomy, most of them represent "cognitive skills". It is suggested that on study level also other areas (social skills, autonomy and responsibility) need to be included into learning outcomes on the level of study programmes. Besides the verb that is used, complete learning outcomes needs to reflect the level of the study programme (6th level according to Bloom taxonomy).

On study Economics of Entrepreneurship some learning outcomes on courses are inadequately defined (e.g. "Razviti osnovni kognitivni aparat potreban za opisivanje organizacija i njihovog djelovanja" / "Develop a basic cognitive device needed to describe organizations and their actions", "Nositi se sa promjenama turističkih trendova" / "Deal with tourism trends changes", or "Ovladati osnovnim svojstvima elementarnih funkcija jedne varijable" / "Provide the basic features of the elementary functions of a variable", etc.). Also, some learning outcomes have several learning outcomes combined into one (e.g. "Objasniti preduvjete za osnivanje i uspješan rad poduzeća, objasniti potrebna sredstva za rad poduzeća; znati interpretirati poslovanje poduzeća na tržištu, te pojasniti planiranje i financiranje poduzeća, objasniti pojedine vrste troškova, mjesta i nositelje troškova" / "Explain the prerequisites for the establishment and successful operation of the company, explain the basic resources for the operation of the company, know how to interpret the business of the enterprise on the market and clarify the planning and financing of the company, explain the individual types of costs, places and cost bearers" has five learning outcomes stated). Some learning outcomes are stated using inappropriate verbs, and therefore it is not possible to assess whether students have achieved the specified learning outcomes (e.g. "Razumjeti pojam političke ekonomije te znati objasniti ulogu države u istoj" / "Understand the term of a political economy and know how to explain the role of the state in the same"), while some learning outcomes actually define an activity, and not an outcome (e.g. "Analizirati slučajeve iz marketinga." / "Analyse marketing cases").

The structure of courses and their contribution to learning outcomes on study level is to be revised. E.g. the first semester of the first year has a total of eight courses. Only one of those courses is related to Entrepreneurship, at least according to the title of the courses (Osnove poduzetničke ekonomije / Fundamentals of entrepreneurial economics). New syllabus for this course is not available on the web page (https://www.velegs-nikolatesla.hr/syll/Osnove%20poduzetnicke%20ekonomije%20I.pdf), and the old syllabus is related to microeconomics, which is not specific for entrepreneurship (https://www.velegs-nikolatesla.hr/silabus/poslovni16.pdf, page 37). During the second semester out of six obligatory courses only one is connected to entrepreneurship (Ekonomika poduzetništva / Economics of entrepreneurship). Out of two electives one (marketing research) is contributing to entrepreneurship, although learning outcomes

are general, and not specific for entrepreneurship. Same analysis needs to be conducted for second and third year, having in mind that adding "entrepreneurship" to a course name does not necessary mean that this course specifically adds to entrepreneurial competencies (e.g. Logistics for entrepreneurs has no learning outcomes that are specific for entrepreneurs, available at

https://www.velegs-nikolatesla.hr/syll/Logistika%20za%20poduzetnike.pdf).

The programme for Road Transport has broad and ambitious aims that are broadly aligned with the mission and strategic goals of the Polytechnic. This programme has fifteen leaning outcomes that are addressed in the courses, although the alignment between courses and outcomes is not clearly appropriate in all cases (e.g. Transport law course that does not address CPI13 on legal regulations). Study on this programme will prepare graduates for entry to employment in the wide range of careers and continuation into specialist study as described in the self-evaluation. However, the curriculum is more limited in scope than would be required to achieve fully the aims, which should therefore be stated more realistically

The programme for Administrative Studies contains fifteen learning outcomes. It is stated in Self-evaluation document: 'The main objective of this study is to train professionals for administrative and legal matters in state and local government and self-government, and business organizations.' (p. 17). However, learning outcomes are mostly formulated in order to make Administrative study to be a copy of legal study. Administrative aspects are not covered in the satisfactory manner even though the main objective of study is to "train professionals for administrative … matters …". Out of 34 courses on the Administrative study programme (Table 2.1 of the Learning outcomes), 11 of them are devoted to languages (English and German), physical training (1 course) and Professional work (1 course), 6 of the courses could be labelled as administrative science courses, 2 as economic courses, while 14 courses are law courses. It is questionable whether such structure of courses contributes to the main objective of the study programme not to mention modern concept of administrative education which should not be based predominantly on the legal courses, but on administrative science courses.

Furthermore, some of the learning outcomes (Table 2.1a) for the Administrative study have not been defined in satisfactory manner and do not contribute to the concept of modern education for public administration. Some of the outcomes consist of more than one verb (e.g. USI1, USI9, USI13) and others are vaguely defined. E.g. learning outcome USI13 "Develop and propose different solutions in the field of public administration", USI8 "Consider the revenue and expenditure model of financing the public administrative system", USI13 "Usage of social and communication skills when working with clients and public authorities".

On study programme Administrative study there were some courses listed in Operative plan of teaching (*Izvedbeni plan*) that have very similar names, and since syllabuses were

not available it is not possible to determine whether they have differences or similarities in content ("Financijsko upravljanje" and "Financijski menadžment", both English translations are "Financial Management"). It was explained that one course deals with financial markets, and the other one with financial analysis. Syllabuses of these courses were not found in "old" syllabuses (available at: https://www.velegs-nikolatesla.hr/silabus/upravni16.pdf), therefore it is not clear if these courses were conducted in previous years. Also, it is questionable if it is justified to have two financial courses on Administrative study.

In some courses learning outcomes are overlapping. For example, learning outcome 2 in course Business organization (Poslovna organizacija) is overlapping with learning outcome 6 in course Basics of management (Osnove menadžmenta).

Student grading is defined with Rulebook on Evaluation and Evaluation of Students (available at

https://www.velegs-nikolatesla.hr/pravilnici/Pravilnik%20o%20ocjenjivanju18.pdf), and with syllabi of each course.

One of the recomendations from previous reaccreditation was to include more english literature in syllabi. Analysis of public available materials of Economics of Entrepreneurship study (available at https://www.velegs-nikolatesla.hr/ekonomika-poduzetnistva/) shows that out of 35 syllabi of this study program (excluding physical education, foreign languages and student practice), only 27 are available. Out of these, four syllabi have English literature recommended in obligatory, and 12 in additional literature. It is also necessary to revise the literature, because it appears that it should be updated (e.g. among obligatory literature in Informatics there is a book published in 1998).

Generally, the effort of improving learning outcomes is visible when comparing "old" syllabi from academic year 2016/17 (https://www.velegs-nikolatesla.hr/silabus/poslovni16.pdf) and "new" syllabi from academic year 2018/19 (https://www.velegs-nikolatesla.hr/ekonomika-poduzetnistva/#syll1), but in order to have all learning outcomes (on study programme level and on course level) defined according to standards (level 6 according to Bloom taxonomy), additional corrections need to be made.

Recommendations for improvement

It is necessary to significantly improve the implementation of learning outcomes at both the study level and course level in all three programmes. The panel recommends first to revise learning outcomes at the study level. During this process the focus should be on clear and realistic definition of competencies that will be achieved by completing the

study programmes. In the second step the ways in which these competencies are supported by the learning outcomes should be specified clearly (based on all professional standards).

Following this definition and clarification of alignment of learning outcomes at the study level, individual courses should be revised. This process should determine: how individual subjects contribute to study level learning outcomes, whether course learning outcomes are defined according to professional standards, and the extent to which learning outcomes overlap.

Administrative study should be remodelled in order to represent a modern public administration study and not simple copy of legal study. It should have more emphasis on courses that are suitable for work in public administration such as administrative science courses, economics, sociology, etc.

The panel suggests inclusion of a greater range of team members in this process of revision, so that domain expert professionals, teachers, consultant and external stakeholders can contribute alongside team members who are familiar with defining learning outcomes. This will promote the relevant quality and industrial alignment of education provided by the Polytechnic.

The literature needs to be updated and more English literature needs to be included into syllabi.

Learning outcomes should be included in the diploma supplement.

Quality grade
Unsatisfactory 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 students, graduates and external stakeholders expressed their satisfaction with their educational experience and outcomes. However, some of the examples of test and examination scripts seen by the expert panel show lack of depth of knowledge tested by the questions as formulated and candidates' corresponding answers. According to this view, the courses do not challenge and educate the students adequately for diploma standard.

For example, an informatics subject has only multiple choice, true-false and gap filling exercises, which is not corresponding with the required level of learning outcomes (level 6). Furthermore, it is not possible to identify which question corresponds with specific learning outcome, because this is not marked in the test. Also, there are some questions (such as questions about decision making processes) that correspond neither with learning outcomes nor with teaching topics stated in the course syllabi.

One of the transport courses has similar situation: the learning outcome states that students will be able to connect and choose adequate corridor, but there are no questions in the test to examiner whether students are able to do this (all questions are versed as "specify and explain" different terms).

For one English course it was not possible to determine whether the test questions relate to learning outcomes, because only written exam was given to the panel, and in this exam the second and fourth learning outcome questions were missing.

In an economic course the panel found a similar situation. One learning outcome specifies that students will be able to examine market opportunities for starting a project, but questions in the test are focused on explaining and defining business plan, different analysis types and analysis of revenue and costs. There is no question that could examine students' knowledge of approaches to examine market opportunities. The test lacked question related to one learning outcome and the panel did not receive materials with this learning outcome exam. Two learning outcomes state that students will be able to evaluate creditworthiness and to give a proposal to increase success, but there is not one question that asks of students to propose something. Also, some questions do not contribute to the learning outcomes (e.g. define some type of assets).
Observed problems are partly a result of inadequately defined learning outcomes.

Recommendations for improvement

After the revision and improvement of learning outcomes, the process of the achievement of intended learning outcomes assessment has to be evaluated. During this evaluation it is necessary to critically observe all existing assessment tools and to define whether they match learning outcomes. If it is defined that assessment method does not match the required level, they have to be adjusted. The panel suggests that this evaluation is conducted within teams that will have members from the same profession and few members who are educated in the area of learning outcomes and knowledge assessment methods, so that they can assist professionals. Also, it is suggested to record these meetings through "minutes" containing the list of members who participated in the

meeting, the main topics of discussion and conclusions, in order to be able to demonstrate the change processes in the subsequent evaluation.

Unsatisfactory 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

All surveys are publicly available on the link https://www.velegs-nikolatesla.hr/kvaliteta/#pok5. During the site visit additional document with analysis of different surveys conducted form March 2019 was prepared and presented to the panel.

It is evident that Polytechnic conducts surveys with students on regular basis, and that survey templates for other stakeholders exist (alumni, graduates, companies and employers, administrative services and self-evaluation of teachers). However, there is no evidence that study programmes were improved based on inputs from different stakeholders.

Some changes have been implemented through changes of Operative teaching plan (*izvedbeni plan*), but those changes were not connected to stakeholder's input. It is also important to outline that Operative teaching plan cannot include subjects or changes that are not aligned with the Study program, even if the changes include less than 20% of the study program.

Recommendations for improvement

The panel recognizes the initial effort in getting the information about study programmes from stakeholders, but study programmes were never improved (since 2006). It is necessary to continue and intensify communication with all stakeholders, not only through surveys, but also through focus groups or individual meetings. This will enable the Polytechnic management to get better information about the competencies that the labour market needs. This should be an input for changing the study programmes according to Ordinance on the procedure for the improvement and revision of the study programmes (available at: https://www.velegs-nikolatesla.hr/pravilnici/Pravilnik%20o%20reviziji%20studijskih%20programa.pdf), and these changes should be formalized and recorded within the Polytechnic. The

process needs to include not only external stakeholders, but also formal bodies of the Polytechnic, like Quality committee and Professional College Board.

Minimum level of quality

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

Analysis
There is no evidence about the assessment or re-allocation of ECTS.
During the site visit, the panel was informed that students' questionnaires include questions about students' workload, but there was no evidence about specific questions about the ECTS credits (questionnaires are available at following link: https://www.velegs-nikolatesla.hr/kvaliteta/#pok5).
Also, during the visit we have been informed that one teacher contacted the Head of Department and ECTS coordinator with the request for ECTS revision on one specific course. However, in following meetings it was clarified that the actual request was to revise the quantity of teaching hours, and not ECTS points. Since this procedure has just started, in following reaccreditation processes it should be checked if it was recorded and what has been done.
The panel was informed that in previous analysis there was no need to make any changes in ECTS distribution.
The panel has identified that ECTS distribution in syllabi needs to be corrected. For example, in "old" syllabi published on web site (link: https://www.velegs-nikolatesla.hr/silabus/poslovni16.pdf), chapter 1.8. "monitoring student work" dedicated 0.5 points to class attendance, although 75 teaching hours are planned for a course. New syllabi don't have this distribution included.

Recommendations for improvement
The procedure for assessment of student workload and ECTS points needs to be formalized and implemented. This includes changes in student surveys (including more specific questions about workload), regular procedure for teachers (and their assessment of ECTS for their courses), as well as distribution of ECTS among different student obligations (teaching hours, practical work, preparation for the exam, taking the exam, etc.). This was also the recommendation from previous re-accreditation process.
It is suggested that this process starts parallel with the revision of study programmes and it should be conducted on regular basis.

Prior to revision of ECTS reallocation it is recommended to organize the workshop, obligatory for all teachers (full and part time) in order to make this clear to everyone.

Unsatisfactory level of quality

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

Analysis

The organization and implementation of student practice is on satisfactory level of quality. Polytechnic has contracts and agreements with different government institutions, as well as private companies. Each student receives tasks that need to be done during the time spent at the employer. Tasks for Economics of Entrepreneurship study and Road transport study are unified, while tasks at Administrative study differ depending on the employer.

Each student keeps a diary of professional practice, and those presented during the site visit are on satisfactory level.

There is no specific survey intended for employers and students that is connected to student practice, but on the meeting employers have expressed their satisfaction with students that were in their institutions/companies.

Student practice is an integral part of all study programmes, and it is conducted in sixth semester.

Recommendations for improvement

To reach higher level of quality, the Polytechnic should develop a procedure of systematic collection and analysis of feedback from students and employers on the quality of student practice. Their evaluation should be used as input for improving this area of education.

The person who is responsible for the student practice should be from the area of study programme because his/her role should be more than administrative one.

Quality grade
Satisfactory 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

The criteria for admission or continuation of studies are defined in Ordinance on Studying (Class: 003-05/17-01/03, Reg. number: 2125/61-01-17-1 of March 1, 2017) and the implementing decisions adopted pursuant to the Ordinance. The criteria are published on the Polytechnics' web page. Procedures regarding the admission criteria are defined.
According to the Table 3.1. in Analytical Supplement, there are 150 full-time and 186 part-time students studying at Polytechnic in the current year.
The admission criteria are based on State Matura results and on secondary education success. For candidates who are not in the State Matura system, the admission criteria are based on evaluation of the secondary education success. There is no admission entry exam.
According to the Table 3.2. in Analytical Supplement, enrolment quotas for the past three years were:
- Economics of Entrepreneurship: 30 full-time students and 60 part-time students,
- Road Transport: 30 full-time students and 40 part-time students,
- Administrative Studies: 30 full-time students and 30 part-time students.

Although many candidates applied, enrolment quotas were not fulfilled. While analysing the Table 3.2., there are more part-time students then full-time students, especially in Administrative Studies programme, where were no full-time students enrolled.
According to the Table 3.2., percentages at State Matura exam and average grades from the secondary school performance of enrolled students for the past three years were relatively low.

Both full-time and part-time students were present on the meeting during the site visit. Some of the students in the meeting transferred from another HEI. Procedures related to transferring and recognition of prior learning are defined in the Ordinance on Studying. Students stated they are more satisfied with studying on the Polytechnic than they were at another HEI.

Recommendations for improvement

It is recommended that HEI applies higher level of criteria for admission or introduces admission entry exam, so that the election of candidates with appropriate prior knowledge is ensured.

Quality grade

Satisfactory 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.

HEI monitors, collects and analyses information on student progress.

According to the Table 3.4 in Analytic Supplement, student progress, in the terms of achieved ECTS points, was relatively good.

Table 3.5 in Analytic Supplement shows the completion of study programmes. In 2015, average duration of studying was:

- Economics of Entrepreneurship – 3 years
- Road Transport – 2,9 years
- Administrative Studies – 3 years

Shown data for Road Transport is questionable because it is shorter than expected duration, which is 3 years. Apart from that, it is obvious that the average duration of studying was decreased from 2009 to 2015.

Number of students who have lost the right to study from generation is concerning, but it can be explained with a relatively low level of admission criteria.

Although in the Self-Evaluation document it is stated that mentoring and tutoring systems are established and implemented, during the site visit it was discovered that those systems do not exist. Although mentoring system is not implemented, Polytechnic is offering consulting hours and is available on request which can be considered as a measure to increase pass rates and completion rates.

Recommendations for improvement

It is recommended that HEI changes admission criteria, so that the election of candidates with appropriate prior knowledge is ensured. It is also recommended that HEI introduces both mentoring and tutoring systems, so that students can achieve better results.

Quality grade

Satisfactory level of quality.

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

Analysis

HEI encourages use of various teaching methods and interactive learning. During the site visit students stated they work on various projects, they have to present their work in front of the other students, teachers give them case studies to work on and field work is also included. Expert panel did not have a chance to visit many classes – site visit was organized on the last week of the lecturing period and students were writing exams. Teachers publish their lectures on Loomen, software tool for the creation of electronic education content and long-distance learning. As there are small cohorts of students,

education is personalized, and teaching methods can be adjusted to their needs. While analysing student survey results, it was discovered that students are pleased with the quality of delivering classes. If they are not satisfied with their grade, they have an option to earn an extra credit, by using "Challenge learning outcome". This should, according to Self-Evaluation document, consist of writing a paper on a given topic, making presentations, critical review, developing a project, etc. During the meeting with the students, they could not define what "Challenge learning outcome" is or they thought it is a form of an oral exam.

Teachers are available to students. Consulting hours are published on the web page and communication is carried via official electronic mail. During the site visit, students seem to be satisfied with teaching methods used and with the way teachers motivate them to engage. HEI enrols a high number of part-time students who are employed, so classes for them are organized on Saturdays, teachers are offering them consulting hours afternoon and Student administration office works in the afternoon once a week.

Being at the disposal to students all the time and organizing the courses in a way that students do not need to learn much at home can influence their responsibility for the achieving learning outcome and for final result and could disable them in developing autonomy in learning process which is very important, especially at a tertiary level.

Classrooms are well equipped. Courses that use computer programmes and tools are delivered in computer classrooms. As there are numerous external associates who are traveling from other cities, both Gospić and Otočac sites have one classroom equipped for live-streaming to facilitate interactive delivery of lectures from the remote HEI. The HEI has obtained traffic information software through its participation in international projects and it is used for teaching.

Recommendations for improvement

An internal exchange of knowledge, ideas and teaching methods could improve the process of knowledge transfer from teachers to students. By sharing good practices among existing resources, Polytechnic can ensure the development and implementation of new teaching methods.

Students need to be motivated to learn autonomously at home in order to fulfil all obligations for the course and programme.

Quality grade

Satisfactory level of quality.

3.4. The higher education institution ensures adequate student support.

Analysis

Although it is stated, in Ordinance on Studying and in the Self-Evaluation document, that mentoring system and tutor guidance for students are established, during the meeting with the students and faculty it was discovered that tutor system, in the terms of students

helping students, does not exist. Mentor system, in terms of teachers supporting student learning and progress, is not established, but teachers seem to be approachable and very helpful. They are available on the request and offer consulting hours.

Although it is stated, in the Self-Evaluation document, that HEI has Career Centre, during the site visit and meeting with the students, it was discovered that students were not familiar with the existence of Career Centre. Students confirmed that HEI has organized presentation related to career guidance and opportunities.

The HEI has established functional procedure for outgoing and incoming student mobility and has bilateral contracts with several institutions. Erasmus coordinator keeps detailed records about contracts and all information related to Erasmus program. Students are informed about Erasmus programs, but not interested in taking a part in the program.

The HEI employs an adequate number of administrative and technical staff. Number of administrative and technical staff is almost the same as the number of teaching staff.
The HEI has functional library and student administration services. During the meeting with the students, it was discovered that they are very pleased with administration services and administrative staff. Student records remain paper-based and should be transferred to electronic systems. Also, students seem to be very pleased with library services and staff. Library offers them online service called "Ask Librarian". Both in Otočac and Gospić, there is a reading room in which students can learn and use computers.

Although specific access for students with disabilities is not provided at either Gospić or Otočac, it is stated that persons with disabilities receive help from students and staff. During the visit it was found out that students with reading or writing difficulties are allowed extended time for written exams or oral instead of written exam.

Recommendations for improvement
It is recommended for the HEI to implement both mentor and tutor system and to establish a Career Centre.
It is recommended that student records are transferred to electronic systems.

Quality grade
Satisfactory level of quality.

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

Analysis

The HEI established systems for monitoring needs of students from vulnerable and under-represented groups and teaching process is adjusted to their individual needs, especially regarding mature, part-time students. Teachers are available and adjust their consulting hours according to needs of those students.

The Ordinance on Studying regulates the rights of students with disabilities and students with special needs. Currently there are no students with disabilities at the HEI, so the HEI stated that there is currently no need to organize and implement special systems. They had few students with disabilities so far and it was confirmed, during the site visit, that help for those students was provided. A new wing that is under construction at Gospić has an elevator planned, so the students with disabilities will have an access.

Although Ordinance on Studying from 2007, published on the web page, regulated financial support to students from vulnerable and under-represented groups in Article 17, Ordinance on Studying from 2017 has no such article or regulation.

Recommendations for improvement

It is recommended for the HEI to provide access for the student with disabilities in Gospić and Otočac.
It is recommended that HEI regulates financial support to students from vulnerable and under-represented groups in the Ordinance on Studying.

Quality grade

Satisfactory level of quality.

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

Analysis

Although HEI has Erasmus Charter and several bilateral exchange agreements, outgoing mobility practically does not exist.

According to the Table 3.6. in Analytical Supplement, in the last five academic years there was only one outgoing mobility (up to 3 months), which was related to completing student practice abroad.

Students are informed about the opportunities for completing part of their study or student practice abroad. The HEI organizes presentations and information is available on the web page.

During the site visit, evidence of presentations about Erasmus programs held and surveys about students' interest in taking a part in Erasmus program taken was found. Erasmus coordinator stated that student representatives are motivating students through posts on social networks.
According to the Self-Evaluation document and information found during the site visit, students have no interest in gaining international experience. HEI stated that the reason for this is the high number of part-time students who are employed and language barrier. Related to the second issue, the HEI signed bilateral agreements with countries in the region, where language barrier problem would not exist.

As there is no outgoing mobility, except one student who completed student practice abroad, the evidence of the recognition of ECTS credits gained at another HEI or student satisfaction with the quality of HEI's support regarding practical matters of student mobility could not be found. However, Ordinance on Studying regulates those procedures.

Recommendations for improvement
It is strongly recommended that the HEI invests time and resources in motivating students to gain international experience.

The HEI should conduct surveys of its students to investigate the reasons for students not being interested in gaining international experience. Results could be used to develop appropriate ways of motivating them. If the language barrier is the problem, HEI should dedicate itself to foreign language teaching or change admission criteria related to prior foreign language learning.

It is recommended for the HEI to offer financial incentive for students to engage in Erasmus programmes. Opportunities for this could include several destinations that offer linguistic compatibility.

Activities related to motivating students should not be carried out by the students' representatives through social networks only. Teachers who took part and are going to take part in Erasmus program in 2019 and 2020, should share their experience with students and motivate them to do the same.

The ability to perform English language teaching needs to be raised to a higher level.

Quality grade
Unsatisfactory level of quality.

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

Although HEI has Erasmus Charter and several bilateral exchange agreements, incoming mobility does not exist. According to the Table 3.6. in Analytical Supplement, the number of foreign students coming to the HEI was 0.

Support to foreign students in the application and study at the HEI is provided by Erasmus coordinator. Erasmus coordinator collects detailed data about bilateral agreements and all information related to student exchange.

Information on the opportunities for enrolment is available in a foreign language (English) on the Web Page. However, English version of the web page is limited. During the site visit it was discovered that there is currently no possibility for entire programme or part of the programme to be delivered in a foreign language, because there are no teachers who could deliver classes in a foreign language. As the HEI has multiple bilateral agreements with other HEI in the region, teachers' language barrier cannot be an excuse for not having incoming mobility.

Recommendations for improvement
It is recommended for the HEI to attract foreign students. HEI could take part in Erasmus events at another foreign HEI, presenting information about advantages and opportunities to foreign students. HEI should offer financial incentives for students to engage in Erasmus programmes.

It is recommended for the HEI to educate teachers, so they can deliver their classes in a foreign language.

HEI should attract foreign students by improving its reputation in general and by translating the whole web page into foreign language.

Quality grade
Unsatisfactory level of quality.

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

Analysis

The criteria and methods for evaluation and grading are published in Syllabi and presented to students in the beginning of the course. Although Syllabi are published on the web page, published information in general is not consistent, so it is hard to determine what document has the correct information. Some of the Syllabi are not available on English.

The examination of students' knowledge is carried out through mid-terms, written and oral exams. Exams are public and teachers are obliged to allow any interested person to listen to the oral part of the exam. Student can access one exam four times in one academic year. In order to pass a course, students must pass each of the anticipated learning outcomes. Extra credit can be earned by 'Challenge learning outcome'. During the site visit it was discovered that students do not know what exactly 'Challenge learning outcome' is. Learning outcomes are published in the Syllabi. Evaluation criteria are not aligned closely with the learning outcomes, as it is explained in detail in chapter 2.2.

According to information from the meeting with students, HEI is flexible in responding to student's needs. An example that supports this fact is the information that part time students asked to reorganize the dates of the exams, so that they can take two exams in one day, and therefore eliminate the need to come for another exam on another day.

During the site visit, students stated that grading is objective and fair. Their grades are published online and visible only to them.

Students can ask for taking an exam before the examination commission if they consider that they were not objectively evaluated. Appeal procedure is regulated in Ordinance on Studying, but the evidence of functional student appeals procedure was not found because students did not appeal so far.

Recommendations for improvement

It is recommended to align evaluation criteria closely with learning outcomes and examination has to include questions and tasks that correspond to the required level of knowledge. This means that, after learning outcomes are re-defined, the assessment of knowledge has to be adjusted. It can be suggested that teachers from same field of expertise organize revision of exams and all evaluation of student achievements methods for all courses of a certain science field. Also, to ensure objectivity and reliability, double marking, or some other peer-to-peer assessment method are recommended.

Quality grade

Minimum level of quality.

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

Upon the completion of their studies, the HEI issues appropriate documents. Ordinance on the content and form of the certificate and the contents of the supplementary document on the study of the Nikola Tesla Polytechnic in Gospić (Class: 003-08 / 09-02 / 01, Reg. Number: 2125 / 61-01-09- 59, of 23 December 2009) describes detailed content of Diploma and Diploma Supplement.

During the site visit it was confirmed that those documents are issued and are in the right form. Examples of Diploma and Diploma Supplements were shown to Expert Panel members in Student administration office, in Otočac. Diploma Supplement does not include learning outcomes and achievements per learning outcome.

It is recommended for the HEI to add learning outcomes and achievements per learning outcome (or course) to the Diploma Supplement.

Satisfactory level of quality.

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

The HEI analyses the employability of its graduates. Enrolment quotas are aligned with market needs and available resources and analysed in the Chapter 3.1. of this document. Table 3.7. from Analytical Supplement shows number of students who completed the studies and number of unemployed alumni according to the statistics of the Employment Office, at the national level. While number of employed students who completed the study at Polytechnic seems to be high, it is hard to determine if they were part-time students who were working before enrolment and continued to work after completion of study or were they full-time students who were employed after the completion of the study for the first time.

Although Career Centre is mentioned in the Self-Evaluation document, during the site visit, student stated they did not know that Career Centre exist, but they had presentation about career opportunities. HEI employs expert external associates and has several contracts with employers. During the site visit, some of that employers confirmed that students from the HEI are competent and employable.

Alumni club was founded in 2018 and has all supporting documents published on the web page. Students are familiar with Alumni clubs' activities and together with alumni take part in humanitarian actions. During the site visit, alumni seemed to be very pleased with gained competences during the studying and are satisfied with the outcome of their enrolment in the HEI.

Recommendations for improvement

It is recommended that HEI organizes Career days and establishes functional Career Centre which students could use for help for planning their future career.
Although HEI maintains contact with alumni, it is recommended that HEI organizes more events related to connecting alumni with students, focused on students' career opportunities.

Quality grade

Satisfactory level of quality.

IV. Teaching and institutional capacities

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

According the data presented in Self-evaluation at the Polytechnic (p. 80) "... there are 13 teachers in permanent employment, of whom in the teaching title:

College professors - 3 (of which 1 in permanent employment)
Senior lecturers – 3
Lecturers – 7."

It is stated in the Self-evaluation (page 81): "Due to 13 teachers (without the assistant lecturer) permanently employed at the Polytechnic, the ratio of students and full-time teachers on 1 April 2019 is 25.85 students per a teacher." According to the presented data, the student-teacher ratio is in accordance with the positive legislation.

When it comes to coverage of study programmes by their own teaching staff, according data received during the field visit, teaching at all three study programmes is covered by their own staff in a satisfactory manner (74% teaching load of Economics study programme is covered by own staff; Transport – 54% and Public Administration – 55%). Teaching load of individual teachers is in accordance with the existing legal framework (20% more or less from the prescribed teaching workload for individual teachers).

However, it should be noted that there has recently been significant turn-over of teaching staff which could have had substantial negative effects on the continuity of teaching and

institutional memory of the Polytechnic. Some teachers have been fired and currently have a court dispute with the Polytechnic.

Current heads of two (out of three) departments do not have appropriate qualifications for these positions. The Head of Administrative Department has formal qualification in kinesiology, and the Head of Department for Road Transport has a degree in foreign language (English language). Neither of these appointees has shown relevant experience to direct the academic and technical activities of their department.

In parallel with the administrative position at the Polytechnic, the Dean and the Vice-Dean for Development hold political positions in local community. The Vice-Dean for Development is president of the Town Council of the City of Otočac and the Dean is a member of the Town Council of Otočac. Although, this might be viewed as establishing a connection with the local community it should also be stressed that it represent a particular risk of deterioration of the academic objectivity and rigour, especially because of the involvement in operational politics at local level. The Polytechnic in any sense should not be viewed as institution for political patronage, but it should build image of the non-partisan academic institution with high quality of teaching process and teaching staff.

The Polytechnic has one assistant lecturer. However, the assistant lecturer is enrolled in a PhD programme in a different field from the courses she is predominantly engaged in. She is engaged in a PhD programme in Criminology and is engaged in legal courses such as Labour and Social Law, Company Law, Transport Law, Administrative Law, etc. at all three study programmes.

Recommendations for improvement
It is recommended to develop a sustainable plan of career development for the existing teaching staff.

It is recommended to hire and retain high level quality permanent teaching staff as well as external associates in order to further strengthen and maintain the institutional memory of the Polytechnic.

It is recommended to build and maintain status of a non-partisan academic institution with the high-quality teaching process and academic staff.

Quality grade
Minimum level of quality

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

External associates are engaged at all three study programmes at Polytechnic. According the Self-assessment (pp 84-5) there are 8 external associates at the Business Department, 14 external associates at the Transport Department and 13 external associates at the Administrative Department. The resulting direct connection with industrial practice is valuable for students. However, this extent of reliance on contracted external teachers exposes the Polytechnic to a high level of risk of discontinuity in teaching.

External associates are designated as Holders of the courses which is not in accordance with the positive legislation (Art. 11/2 Pravilnika o sadržaju dopusnice te uvjetima za izdavanje dopusnice za obavljanje djelatnosti visokog obrazovanja, izvođenje studijskog programa i reakreditaciju visokih učilišta, NN 24/2010). It should be assured that the external associates are not the course holders.

Designated course holders should be established members of academic staff rather than external and contract staff. Similarly, external and contract staff should not be solely responsible for large amounts of teaching on individual courses. Where external and contract staff are mentors to students for their final essay, they should be co-mentored by a member of the established staff.

Minimum level of quality

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

Teachers have been recruited through public tenders (link https://www.velegs-nikolatesla.hr/natjecaji/). However, it is not clear if the recruitment procedure comes as a result of the long-term development goals towards the needs of the Polytechnic.

It is recommended that teachers should be directed towards doctoral and postgraduate studies that are in connection with the courses they teach. This will help to attract energetic and committed staff and so support recruitment and retention in core roles.

Quality grade
Minimum level of quality

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

Analysis
Polytechnic adopted Ordinance on education and professional development of teaching and administrative staff, which is in force since December 1, 2016. According data presented in Self-evaluation resources for training costs significantly increased in 2018 in comparison with the 2017, from 4.945kn in 2017 to 20.434kn in 2018. (Table 4.12 in the Analytic Supplement).

In order to increase the mobility of their staff, the Polytechnic adopted the Mobility Plan for Employees of the Nikola Tesla Polytechnic for 2019/2020.[1] The Plan is adopted in January 2019. So far, (June 2019) planned mobility from the Plan has not been realised. There are some announcements of the mobility of teaching staff (to University of Mostar).

Although members of staff are encouraged to engage in international activities, including ERASMUS exchange, the activity in this is minimal. "In 2019, the "Nikola Tesla" Polytechnic in Gospić applied to three projects under the Erasmus + programme. However, only one mobility of teaching staff has been achieved for the purpose of teaching at the Institute of Technology and Business of Česko Budjovice, Česko Budjovica, Czech Republic, EU)." (Self-evaluation, p. 89).

Recommendations for improvement
It is recommended to significantly increase the number of lecturers who participate in the ERASMUS programmes.

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[1] https://www.velegs-nikolatesla.hr/ostalo/Plan%20mobilnosti%20zaposlenika%20Veleučilišta%20Nikola%20Tesla%20u%20Gospić u.pdf

It is recommended to significantly increase the participation rate of lecturers at international conferences.

It is recommended to significantly increase participation in domestic and international professional and scientific projects.

It is recommended to earmark per capita amounts for training costs for the employees. Such approach would help to plan professional development for each employee of the Polytechnic.

Quality grade
Minimum 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
Sufficient good quality teaching, laboratory and office space for academic and administrative uses is available to the Polytechnic. A lecture classroom is equipped for live-stream at each of the Otočac and Gospić sites to facilitate interactive delivery of lectures from remote HEIs. These spaces are well maintained and mostly equipped appropriately for their respective purposes.

A new wing is under construction at Gospić that will provide substantial additional teaching and office space that is designed to be accessible to mobility impaired students and staff. Although construction of the structure of this wing is well advanced, it is currently in abeyance, awaiting completion of construction work and fitting out.

The newly installed Dell i3 computer fleet at Gospić together with the AutoCAD and PTV software will support up to date teaching and training of students. There are two HP Pentium computers at Otočac available for student use.

Recommendations for improvement
The student computers at Otočac should be configured for internet access so that they can be used for internet search of literature and other material relevant to students' work. The two HP Pentium computers are now outdated and should be replaced by up to

date equipment – ideally also more numerous - that will support current software for several years into the future.

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
Library is organised in two locations, in Town Otočac (for Administrative study), and in Town of Gospić for Transport studies, and Economic and entrepreneurship study.

Number of titles are rather limited (ca 130 titles in Otočac and 737 titles in Gospić). It should be noted that the library does not subscribe to some leading academic journals that deal with the some of the topics (e.g. Ekonomski vjesnik (Econviews), Zbornici Pravnih fakulteta u ZG, ST and OS, Hrvatska i komparativna javna uprava and other Croatian academic journals which cover the academic areas of the Polytechnic's programmes).

Recommendations for improvement
It is recommended that Polytechnic expands its library especially with the new and accurate titles which cover the main academic areas which are studied at the Polytechnic.

A few national and international newspapers and economic magazines (e.g. the Financial times, The Economist) should be made available. Access should be provided to the collections of other HEIs via on-line databases (e.g. EconLit, RePEc (Reseaerch Papers in Economics)).

Quality grade
Minimum level of quality

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

Analysis
Most revenues of the Polytechnic are coming from the State budget and the tuition fees. with 5.8 mil kn in 2017 and 6.6 mil kn in 2018 of operating income. In the same period operating expenses were 5.3 mil kn in 217 and 6 mil kn in 2018. Financial situation of the Polytechnic is stable

Monthly travel expenses for external associates and full-time lecturers are registered under the title "other costs" (Table 4.12, point 6 of the Analytic supplement) which is misleading. The amount is rather significant (434.898 kn in 2017 and 472.940 kn in 2018, which is approximately 40.000 kn per month) so it should be registered under title travel costs (point 5.1 of the Analytic supplement).

The additional building in Gospić (approximately 300 square metres of new space for teaching, cabinet and library) is not yet finished and there is not established time-frame nor financial resources to finish the new building.

Recommendations for improvement
It is recommended to develop indicative time-frame and dedicate financial resources for finishing the additional building located in Gospić.

It is recommended to adequately record all expenses, especially travel costs for lecturers and external associates which should be listed explicitly rather than be presented under the heading 'Other costs'.

Quality grade
Satisfactory 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 scientific research.

Analysis
The Polytechnic supports several members of academic staff in their studies for doctorate by financing their tuition fees. This is subject to completion and award of the

doctorate together with continued service for a defined period on penalty of refund. This support for 8 members of staff has led to 7 doctoral awards with consequent development of the staff in post. Other members of academic staff fund their own doctoral studies.

Some members of the academic staff are keen to attend national and international conferences. This provides them with opportunities to disseminate their professional and scientific contributions, and to learn of current issues and developments in their field. The Polytechnic supports members of academic staff to attend conferences and an application procedure is defined for this, though this support is not clearly contingent on presentation of a poster or paper there. Some members of academic staff fund their own conference attendance.

No records of papers that are published or presented by members of the academic staff are available from the Polytechnic. There is no central repository for copies of these papers and presentations.

The Karst Centre was intended to support professional advancement including professional research and academic research, and public engagement. Following the departure of the Head of the Karst Centre from the Polytechnic, this Centre has been repurposed and the remaining member of administrative staff redeployed to library work. This development has reduced the capability of the Polytechnic and the support for academic staff in in these activities.

Recommendations for improvement
The Polytechnic should establish a policy for research activity by staff to support presentation and publications of research findings. Each department should identify appropriate research themes and encourage their staff to engage in them. Each Head of Department should monitor activity and contributions to this, arranging appropriate support for their staff in undertaking, presenting and publishing their work.

Members of staff should be encouraged to present their work at national and international conferences. Funding in support of this should be conditional on acceptance of presentation to provide a clear and object incentive.

The Polytechnic should establish and maintain up to date a list of presentations and publications by members of staff and upload this material to its web site. Copies of these publications should be made available for reference in the Polytechnic's libraries and, where permitted, through the web site.

To increase the results in professional and scientific research, a motivational and reward system can be introduced if financial resources are sufficient.

Unsatisfactory level of quality

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

Analysis

The Polytechnic identifies an important role in regional social life through professional and economic projects as well as its educational role for young adults in the region.

The Polytechnic's Self-Evaluation lists (p36-9) participation in 8 projects involving planning and development of regional infrastructure, and broader educational activities. Notable amongst these are participation in the EU Project "Tesla for socially useful learning" which aligns well with the Polytechnic's mission. The Polytechnic is also engaged in road and North Adriatic regional transport infrastructure projects, which provide pathways to implementation for the road transport department. There were also 11 lectures and workshops that were open to the wider public. The Polytechnic organised 4 roundtable and panel discussions, and 2 expert scientific conferences for the transfer of knowledge.

The Polytechnic organised a series of professional conferences (2013, 2014 and 2017) with international participation on sustainable development of rural areas and published the proceedings (Self Evaluation, p98).

Recommendations for improvement

The Polytechnic should continue and strengthen its contributions from its areas of competence to regional development. This includes the design and management of regional transport systems, sustainable development, and entrepreneurship in support of tourism. This will serve to transfer knowledge directly to relevant application to the benefit of the regional community and society as a whole.

The recently strengthened activity in open sessions of roundtable and panel discussions should be continued with associated publicity and professional contribution to engage the interest and participation of members of the local community.

Departments of the Polytechnic should develop coordinated programmes of conferences relevant to their specialism, with international participation: the series on sustainable development of rural areas provides a model for these. This could be realised by each department organising a series with a conference every 3 years to establish a rolling programme. Continuity of capable administrative support for this cyclic programme would be established as a common resource within the Polytechnic.

The professional and scientific activities recommended here will provide the academic staff with opportunities to disseminate and their work through presentation and publication. International involvement would lead to opportunities for members of staff to engage in academic exchange.

Quality grade
Minimum level of quality

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

Analysis
The panel notes that the Polytechnic did not include any material on this point (or any of the following ones) in the self-evaluation document that was submitted.

The professional and scientific activities of the staff at the Polytechnic receive limited exposure. The research activity of the staff is low and the resulting output limited in scope: Table 5.1 (Bibliography in the lasts 5 years) of the Analytic Supplement to Self-Analysis shows a total across all types of 57 publications for the whole of the Polytechnic, corresponding to about 1 output per person-year. There is no institutional policy on academic research and publication, although the recommendation from last re-accreditation process recommended that professional activities are also initiated by the responsible bodies of the polytechnic and the results are monitored. Within this, achieving only 2 publications at the highest category indicates a lack of effective effort directed towards this objective.

Recommendations for improvement
To strengthen the scientific contribution, serious action needs to be taken. This should start by establishing a policy on academic research and publication that specifies normal expectations on academic staff.

The management of the Polytechnics should identify areas and conferences of interest and find a motivation mechanism that will move teaching staff to take part in different projects and conferences. It is necessary to dismantle teachers with other responsibilities to have enough time for such projects. These activities need to be evaluated and recognized as significant part of academic workload.

Quality grade
Unsatisfactory level of quality

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

Analysis
The panel notes that the Polytechnic did not include any material on this point.
As it was stated before, professional and scientific activities at Polytechnic are very scarce and they should be systematically developed.

Recommendations for improvement
Professional and scientific activities should be the base for improving teaching with new insights, information, researches etc. All teachers should be motivated to be involved in professional and scientific activities and to publish at least one professional or scientific paper annually. Teacher should be motivated to participate in projects and students should also be involved in project activities and they should be motivated to write final theses based on the project work. Students also should be motivated to participate in professional and scientific activities and to participate in writing professional papers.

Quality grade
Minimum level of quality.

APPENDICES

1. Quality assessment summary - tables

2. Site visit protocol

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

Quality grade by standard				
I. Internal quality assurance and the social role of the higher education institution	*Unsatisfactory level of quality*	*Minimum level of quality*	*Satisfactory level of quality*	*High level of quality*
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				
II. Study programmes	*Unsatisfactory level of quality*	*Minimum level of quality*	*Satisfactory level of quality*	*High level of quality*
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				
III. Teaching process and student support	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
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				
IV. Teaching and institutional capacities	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
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				
V. Professional and/or scientific activity	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
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 „Nikola Tesla"
u Gospiću**

**Re-accreditation of the
Polytechnic of „Nikola Tesla"
in Gospić**

Edukacija Stručnog povjerenstva

Training of Panel members

Mjesto događanja:
Agencija za znanost i visoko obrazovanje

Venue:
Agency for Science and Higher Education

Donje Svetice 38/V, 10 000 Zagreb

	Ponedjeljak, 3. lipnja 2019.	**Monday, 3rd June 2019**
09:00 – 09:45	Edukacija članova Stručnog povjerenstva (kratko predstavljanje rada Agencije, upoznavanje sa sustavom visokog obrazovanja u 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)
09:45 – 10:00	*Pauza za kavu*	*Coffee break*
10:00 – 14:00	Priprema Stručnog povjerenstva za posjet Veleučilištu „Nikola Tesla" u Gospiću (rad na Samoanalizi) Pitanja za posjet	Preparation of the expert panel members for the site visit of Polytechnic of „Nikola Tesla" in Gospić (working on the Self-evaluation) Questions for the site visit

	Reakreditacija **Veleučilišta „Nikola Tesla"** **u Gospiću**	**Re-accreditation of the** **Polytechnic of „Nikola Tesla"** **in Gospić**

PROTOKOL POSJETA

VISIT PROTOCOL

Mjesto događanja:

Venue:

Trg. dr. Franje Tuđmana 5, 53220 Otočac

	Ponedjeljak, 3. lipnja 2019.	**Monday, 3rd June 2019**
16:30 – 17:15	Sastanak sa studentima (otvoreni sastanak za studente preddiplomskog stručnog studija *Upravni studij* – dislocirana lokacija Otočac)	Meeting with the students (open meeting for the students of undergraduate professional study programme *Administrative studies* – dislocated in Otočac)
17:15 – 17:45	Obilazak Veleučilišta „Nikola Tesla" u Otočcu (knjižnica, ured za administraciju, informatička služba i učionice)	Tour of the Polytechnic of „Nikola Tesla" in Otočac (library, administrative office, IT services, classrooms)

	Reakreditacija **Veleučilišta „Nikola Tesla"** **u Gospiću**	**Re-accreditation of the** **Polytechnic of „Nikola Tesla"** **in Gospić**

PROTOKOL POSJETA

VISIT PROTOCOL

Mjesto događanja: *Venue:*

Bana Ivana Karlovića 16, 53000 Gospić

	Utorak, 4. lipnja 2019	**Tuesday, 4th June 2019**
09:00 – 10:00	Sastanak s upravom visokog učilišta (dekan, prodekani) i tajnikom *(bez prezentacije)*	Meeting with the management (Dean, Vice- deans) and Secretary *(no presentations)*
10:00 – 11:30	*Sastanak članova Stručnog povjerenstva* **(analiza dokumenata)**	*Internal meeting of the panel members* **(document analysis)**
11:30 – 12:15	Sastanak s pročelnicima prometnog, poslovnog i upravnog odjela	Meeting with the heads of the Departments of Business, Transport and Administrative Studies
12:15 – 13:15	Sastanak s nastavnicima u stalnom radnom odnosu, nisu na rukovodećim mjestima *(otvoreni sastanak)*	Meeting with full-time employed teachers who do not have managerial positions *(open meeting)*
13:15 – 14:15	*Radni ručak Stručnog povjerenstva*	*Working lunch*
14:15 – 15:00	Sastanak sa studentima *(otvoreni sastanak za sve studente)*	Meeting with the students *(open meeting for all students)*
15:00 – 15:45	Sastanak s vanjskim predavačima	Meeting with external lecturers
15:45 – 16:30	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
16:30 – 17:00	*Interni sastanak članova Stručnog povjerenstva - refleksija o viđenom*	*Joint meeting of the expert panel members – reflection on the day*
17:00 – 17:30	Organizacija dodatnog sastanka o otvorenim pitanjima **(prema potrebi)**	Organisation of additional meeting on open questions **(if needed)**
18:00 –20:00	*Pisanje završnog izvješća*	*Work on Final Report*

Reakreditacija Veleučilišta „Nikola Tesla" u Gospiću

Re-accreditation of the Polytechnic of „Nikola Tesla" in Gospić

PROTOKOL POSJETA

VISIT PROTOCOL

Mjesto događanja:

Venue:

Bana Ivana Karlovića 16, 53000 Gospić

	Srijeda, 5. lipnja 2019.	**Wednesday, 5th June 2019.**
09:00 – 10:30	*Sastanak članova Stručnog povjerenstva (Analiza dokumenata)*	*Internal meeting of the panel members (Document analysis)*
10:30 – 11:30	Sastanak članova Stručnog povjerenstva s: – Povjerenica za osiguravanje i unapređivanje kvalitete – Voditeljica seminara u programu cjeloživotnog obrazovanja – ECTS koordinatorom – Erasmus koordinatorom – Voditeljima stručne prakse	Meeting with: – Commissioner for Quality Assurance and Improvement – Seminar Leader of the Life Long Learning Programmes – ECTS Coordinator – Erasmus Coordinator – Leaders of internship
11:30 – 12:15	Sastanak s alumnijima *(koji nisu zaposlenici Veleučilišta "Nikola Tesla" u Gospiću)*	Meeting with the alumni *(which are not employees of the* Polytechnic of „Nikola Tesla" in Gospić*)*
12:15 – 13.15	*Radni ručak Stručnog povjerenstva*	*Working lunch*
13:15 – 15:15	– Obilazak (knjižnica, referada, informatičke učionice) – prisustvovanje nastavi – sastanak s predstavnicima tvrtki kod kojih studenti obavljaju studentsku praksu	– Tour of the Polytechnic of „Nikola Tesla" in Gospić (library, IT services, student office) – participation in teaching classes – meeting with representatives of companies in which students do student practice
15:15 – 16:15	*Interni sastanak članova Stručnog povjerenstva*	*Internal meeting of the panel members*

16:15 – 16:45	Organizacija dodatnog sastanka o otvorenim pitanjima *(prema potrebi)*	Organisation of additional meeting on open questions *(if needed)*
16:45– 17:00	Sastanak s upravom visokog učilišta (dekan, prodekani) i tajnik	Meeting with the management (Dean, Vice- deans) and Secretary
18:00 – 20:00	*Pisanje završnog izvješća*	*Work on Final Report*

	Četvrtak, 6. lipnja 2019.	**Thursday, 6th June 2019.**
09:00 – 13:00	Sastanak Stručnog povjerenstva – izrada nacrta završnog izvješća i rad na dokumentu Standardi za vrednovanje kvalitete	Joint meeting of the expert panel members – Drafting the final report and working on the document Standards for the evaluation of quality
13:00 – 14:00	*Ručak*	*Lunch*
14:00	Polazak za Zagreb	Departure for Zagreb

SUMMARY

The Polytechnic Nikola Tesla in Gospić commenced work in the academic year 2006/2007, providing undergraduate professional studies that are organized within the Business, Transport and Administrative Departments, in accordance with the permissions issued by the Ministry of Science and Education. The core task of the Polytechnic is to educate young people for the acquisition of professional knowledge through well-structured professional studies.

The main advantages of the Polytechnic are: being the only Polytechnic in the county, having small cohorts of students, emphasis of the programmes is on practical knowledge, offer of good support services for students, there are a wide range of industrial placements for internships. The Polytechnic plays an important role in its local environment and has participated in several projects aimed at development of the local community. Polytechnic has several examples of good practice such as EU project Tesla for socially useful learning and engaging practitioners as external lecturers.

Some issues were raised during the site visit that relate to quality system of the institution with main emphasis on definition of learning outcomes, structure of study programmes, quality of teaching staff, internationalization of the and scientific and professional activities.

The previous process of accreditation was undertaken in 2012 and resulted in many recommendations. Some of these have already been implemented, but a greater effort should be made to address the full range of issues that were raised in that accreditation. The Polytechnic has established an internal quality assurance system that covers all its activities, but more should be done in making this system operational. The Polytechnic has encountered several problems in defining learning outcomes at the programme and course levels. The competences to be gained by students of each study program should be defined more clearly. The study programmes should be revised and improved based on discussion and contributions from stakeholders as well as the established needs of relevant labour markets. The number of lecturers who participate in the ERASMUS programmes, international conferences and professional and scientific projects should be increased. The research activity of the staff is low, and the resulting output limited in scope. There is no institutional policy on academic research and publication.

Although the student-teacher ratio at Polytechnic is in accordance with the positive legislation, there has recently been substantial turn-over of teaching staff at Polytechnic which is likely to have negative effects on the continuity of teaching and institutional memory.

The Polytechnic has available sufficient good quality teaching, laboratory and office space for academic and administrative use, and the financial situation of the Polytechnic is stable. The additional building in Gospić is not yet finished, and neither time-frame nor financial resources required for this have been established. Completion of this building

will enhance the estate and potential of the Polytechnic substantially and should be considered a priority for investment.

The Polytechnic should not be viewed as an institution for any kind of political patronage but should instead build the image of a non-partisan academic institution with high quality teaching staff and education.