Annex No. 3

NATIONAL CENTER FOR EDUCATIONAL QUALITY ENHANCEMENT

Accreditation Expert Group Report on Higher Education Programme

Informatics, BA

LEPL – David Aghmashenebeli National Defence Academy of Georgia

Evaluation Date: September 2, 2025

Report Submission Date: October 30, 2025

Tbilisi

Information about a Higher Education Institution [1]

Name of Institution Indicating its Organizational Legal Form	LEPL - David Aghmashenebeli National Defense Academy of Georgia
Identification Code of Institution	218083222
Type of the Institution	University

Expert Panel Members

Chair (Name, Surname, HEI/Organisation, Country)	Hasan Çakır, Gazi University, Turkiye
Member (Name, Surname, HEI/Organisation, Country)	Ia Mosashvili, Kutaisi International University, Georgia
Member (Name, Surname, HEI/Organisation, Country)	Lia Kurtanidze, Georgian National University SEU, Georgia
Member (Name, Surname, HEI/Organisation, Country)	Tinatin Gabrichidze, New Vision University, Georgia
Member (Name, Surname, HEI/Organisation, Country)	David Tepnadze, Georgian Aviation University, Georgia

[1] In the case of joint education programme: Please indicate the HEIs that carry out the programme. The indication of an identification code and type of institution is not obligatory if a HEI is recognised in accordance with the legislation of a foreign country.

I. Information on the education programme

Name of Higher Education Programme (in Georgian)	ინფორმატიკა
Name of Higher Education Programme (in English)	Informatics
Level of Higher Education/programme	Bachelor's Degree
Qualification to be Awarded[2]	Bachelor of Informatics
Name and Code of the Detailed Field	0613 Software and applications development and analysis
Indication of the right to provide the teaching of subject/subjects/group of subjects of the relevant cycle of the general education[3]	N/A
Language of Instruction	Georgian
Number of ECTS credits	258
Programme Status (Accredited/ Non-accredited/ Conditionally accredited/ Newly proposed/International accreditation) Indicating Relevant Decision (number, date)	Accredited / 11.28.2018 No: 170
Additional requirements for the programme admission (in the case of an art-creative and/or sports educational programme, passing a creative tour/internal competition, or in the case of another programme, specific requirements for admission to the programme/implementation of the programme)	N/A
The quota for MD students requested by the HEI (In the case of Medical Doctor one-cycle educational programme)	N/A

[2] In case of implementing a joint higher education programme with a higher education institution recognized in accordance with the legislation of a foreign country, if the title of the qualification to be awarded differs, it shall be indicated separately for each institution.

[3] In case of Integrated Bachelor's-Master's Teacher Training Educational Programme and Teacher Training Educational Programme

II. Accreditation Report Executive Summary

- **General Information on Education Programme**

The Bachelor's program in Informatics has been offered at the National Defense Academy since 2013 and holds full accreditation since October 2020. The program is distinctive in that it combines technical training in the informatics field with the Academy's broader mission of preparing army officers who embody ethical principles, strong morals, and leadership skills in their professional practices, while also being competitive at an international level of computer sciences. The program is designed to serve the dual purpose of meeting the qualified personnel needs of the Georgian Defense Forces in the computer science field and preparing graduates for employment in the civilian sector. Furthermore, graduates are provided with the academic foundation necessary to pursue advanced studies at the master's level in Georgia or abroad. By integrating professional expertise with character development, the program aims to enable students to advance both in their professional careers and in their contributions to public life.

Below are the few facts about the informatics program;
Teaching language: Georgian
Total ECTS credits: 258
Number of affiliated faculty: 8
Number of invited faculty: 5
Total number of enrolled students: 98
Duration of the study program: 8 semesters (4 years)
Classes and labs: Computer labs, Design labs, Library, and Museum

The programme objectives are listed as;

- To prepare qualified, competitive specialists with broad theoretical knowledge and practical skills in modern and fundamental areas of information and communication technologies;
- To teach modern methods of creating, developing and securing computer systems and computing environments;
- To develop the skills of understanding, analyzing, decision-making and effective communication of problems arising in a theoretical and practical context;
- To develop professional responsibility.

The programme aims to prepare officers for national defense forces in modern information and communication technologies.

Overview of the Accreditation Site Visit

The evaluation of the program was carried out on September 2, 2025 by the expert panel formed by the NCEQE. The expert panel included two Georgian field experts, one Georgian higher education expert, one Georgian student expert, and an international chair of the panel/field expert. The site visit format was one day face-to-face on site visit. Prior to site visit, the expert team had the opportunity to read the self evaluation report and supporting

documentation. Then the team met online on August 29, 2025 to share their insights about the self evaluation report and the documentation supporting the claims in the report. The site visit included interviewing with the academy administration, quality assurance team, department head, faculty members, students, alumni, and employers as well as observation of materials and technical facilities. The accreditation visit was well organized, the working environment was welcoming, the meeting attendees had high ownership about the quality assurance processes and were open to questions from the experts. The simultaneous translation service was provided for the international expert.

Brief Overview of Education Programme Compliance with the Standards

The program complies with requirements in all standards except the Standard 5.1, for which the program substantially complies.

Recommendations

- Strengthen the role of the self-evaluation process and internal evaluation in the process of continuous improvement of the program to ensure it leads to the program quality development and implementation of the PDCA cycle. (5.1).

Suggestions

- In order to strengthen the evaluation process, reconsider using the Kirkpatrick evaluation model as the methodology for evaluating learning outcomes. (1.3);
- Establish a policy of reviewing and updating syllabi literature lists every academic year, ensuring inclusion of recent peer-reviewed research, industry standards, and emerging technologies.(1.5);
- Strengthening the practical component of the program through the inclusion of additional field-specific courses and laboratory work (2.2);
- It is advised to strengthen the internationalization component of the program with a particular focus on enhancing mobility opportunities for faculty members in the field of Informatics. (4.1);
- Establishment or ensuring the more clear statement of the ways to synthesise the multifaceted data and information gathered through quality assurance will further support the development of the quality framework. (5.3).

Brief Overview of the Best Practices (if applicable)[4]

N/A

[4] A practice that is exceptionally effective and that can serve as a benchmark or example for other educational programme/programmes.

- **Information on Sharing or Not Sharing the Argumentative Position of the HEI**
  - The institution concurs with the recommendation about strengthening the role of the self-evaluation process and internal evaluation in the process of continuous improvement of the program. A suggestion about reconsidering using the Kirkpatrick evaluation model was made by the expert group, which aimed to further strengthen their programme evaluation. The institution stated their position about continuing using the Kirkpatrick evaluation model as a guiding framework for their programme evaluation activities.

Quantitative Data Analysis of the educational programme in accordance with the requirements of the accreditation standards, for example:

- Staff and Supervisors - The programme has 14 academic, scientific, and invited staff (including academic, scientific, international and invited staff). Of the 8 academic staff, 7 of them hold PhD degrees. 2 of the 8 invited staff have PhD degrees. The number of faculty members in the programme is sufficient and satisfies the accreditation standards.

- Scientific/Research Indicators - During the last 5 years, programme faculty published a total of 169 scientific papers. Of these publications, 47 of them are in the local journals, 28 of them in the international journals, and 73 of them are conference papers. The amount of publication for the faculty members meets the accreditation criteria.

- Academic Staff Turnover Rate: For the last 5 years, the programme retained all academic and invited staff, which is a positive point from the perspective of meeting accreditation standards.

- Data on the Individuals Enrolled: During the last 5 years the programme announced 60, 50, 50, 40, and 40 seats per year. The number of persons who wish to enrol in the program changes between 165 to 106, showing a decline over the years. Over the 5 years, between 26 and 12 persons enrolled in the programme. Considering the number of faculty members, programme resources, and facilities, the programme satisfies the accreditation criteria.

- Analysis of other quantitative data: There are a total of 98 enrolled students, of which 57 are active students in the programme. Considering the total number of academic and invited staff, the ratio for 1 faculty member has approximately 4 students, which is well below the widely accepted academic standards.

In case of re-accreditation, a brief overview of significant achievements and/or progress (if applicable) during the accreditation period, as well as a review of the fulfillment of the recommendations received during the previous evaluation process.

According to the self evaluation report, the program has undergone several revisions driven by internal evaluations, external recommendations, legislative updates, and the approval of sectoral characteristics in Information and Communication Technologies since the last

accreditation process. These changes were formalized following the positive accreditation reviews in 2018 and 2021. Adjustments included revisions to program objectives and learning outcomes, as well as modifications to course structures. The overall program volume was slightly reduced from 260 to 258 credits, and the"Government and Law" course was removed. The assessment system was strengthened through an increase in the minimum competency threshold for midterm evaluations from 30% to 40%.

Some changes related to the curriculum were also introduced. New compulsory courses, including Algorithms and Data Structures, Fundamentals of Programming (C++), Discrete Structures and Mathematical Logic, Web Technologies II, Arduino Programming and Intelligent Systems Design, and Machine Learning and Artificial Intelligence were added. While updating curriculum, the programme removed some courses such as Fundamentals of Philosophy, General Psychology, Academic Writing, Data Structures and Programming, Artificial Intelligence, and Intelligent. Subjects such as Big Data and Mobile Application Programming were reclassified as elective courses, including English-language options.

Another notable change was the introduction of Turkish as a compulsory foreign language option in the free component of the curriculum, alongside English, French, and German, providing greater flexibility and alignment with the Academy's international outlook. In addition, between 2021 and 2025, a series of student conferences were organized to strengthen the research competencies of the students, contributing to the overall enhancement of the academic environment.

III. Summary Table of Compliance of the programmes with the standards

	Standard	Evaluation
1.	**1.1. Educational Programme Objectives, Learning Outcomes and their Compliance with the Programme**	**Complies with requirements**
1.1	Programme Objectives	**Complies with requirements**
1.2	Programme Learning Outcomes	**Complies with requirements**
1.3	Evaluation Mechanism of the Programme Learning Outcomes	**Complies with requirements**
1.4	Structure and Content of Educational Programme	**Complies with requirements**
1.5	Academic Course/Subject	**Complies with requirements**
2.	**Methodology and Organization of Teaching, Adequacy of Evaluation of Programme Mastering**	**Complies with requirements**
2.1	Programme Admission Preconditions	**Complies with requirements**
2.2	The Development of Practical, Scientific/Research/ Creative/ Performance and Transferable Skills	**Complies with requirements**
2.3	Teaching and Learning Methods	**Complies with requirements**
2.4	Student Evaluation	**Complies with requirements**
3.	**Student Achievements and Individual Work with Them**	**Complies with requirements**
3.1	Student Consulting and Support Services	**Complies with requirements**
3.2	Master's Student Supervision	**N/A**
4	**Providing Teaching Resources**	**Complies with requirements**
4.1	Human Resources	**Complies with requirements**
4.2	Qualification of Supervisors of Master's Student	**N/A**
4.3	Professional Development of Academic, Scientific and Invited Staff	**Complies with requirements**

4.4	Material Resources	**Complies with requirements**
4.5	Programme/Faculty/School Budget and Programme Financial Sustainability	**Complies with requirements**
5	**5. Teaching Quality Enhancement Opportunities**	**Complies with requirements**
5.1	Internal Quality Evaluation	**Substantially complies with requirements**
5.2	External Quality Evaluation	**Complies with requirements**
5.3	Programme Monitoring and Periodic Review	**Complies with requirements**

Guidelines and Standards (See link)

Accreditation Standards for Higher Education Programmes

Guideline for Assessment of Accreditation Standards of Higher Education Programmes

Suggestions on the evaluation of the methodology for determining the threshold number of student quotas on a higher education institution educational programme of a certified medical doctor

Assessment criteria

Definitions:
Recommendations - should be considered by the HEI in order to comply the programme with the requirements of the standard
Suggestions - non-binding suggestions for the programme development

IV. Compliance of the Programme with Accreditation Standards

1. Educational Programme Objectives, Learning Outcomes and their Compliance with the Programme

A programme has clearly established objectives and learning outcomes, which are logically connected to each other. Programme objectives are consistent with the mission, objectives and strategic plan of the HEI. Programme learning outcomes are assessed on a regular basis to improve the programme. The content and consistent structure of the programme ensure the achievement of the set goals and expected learning outcomes.

1.1 Programme Objectives

Programme objectives consider the specificity of the field of study, level and educational programme, and define the set of knowledge, skills and competences a programme aims to develop in graduate students. They also illustrate the contribution of the programme to the development of the field and society.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The programme objectives are stated in the self evaluation report are clearly established, realistic and achievable. The public programme page presents an explicit aim for the Bachelor of Informatics degree. The program prepares qualified specialists with theoretical and practical ICT knowledge and methods. This statement is clear and consistent with what the self-evaluation report claims; it reads as realistic for a bachelor level and is implementable within a standard curriculum.
The programme objectives are stated as;

- To prepare qualified, competitive specialists with broad theoretical knowledge and practical skills in modern and fundamental areas of information and communication technologies;
- To teach modern methods of creating, developing and securing computer systems and computing environments;
- To develop the skills of understanding, analyzing, decision-making and effective communication of problems arising in a theoretical and practical context;
- To develop professional responsibility.

The published aim explicitly addresses modern and fundamental ICT areas and methods for developing and securing systems — that aligns with the informatics field and bachelor-level expectations. The Academy's BA mission (training academically and militarily prepared officers) further places the programme in its military/operational context. The programme considers field-specific and level-specific needs.

The programme aims to describe broad expected knowledge and skills in the informatics field such as theoretical knowledge, practical skills, decision-making, communication, professional

responsibility. The programme's importance to national defence needs and employability in both the Defence Forces and civilian market. The Academy's mission emphasizes producing ethical, leadership-oriented officers with modern methods — so the programme's social contribution claim is plausible and consistent with institutional mission. The programme objectives show clear alignment with the BA programmes' mission (academic + military training) and the Informatics. These objectives are explicitly framed to satisfy that mission. Staffing documents show an identifiable Informatics team which supports integration with the Academy's structural units. The programme considers local market demands and international trends by benchmarking their program against similar programs in other countries.

The program objectives are consistent with the similar programs in the international area. Also the programme has international agreements with several institutions for faculty and student exchange programs. The program objectives and supporting course lists are publicly available on the institution's website. Staff listings and the presence of a named Head/teaching staff related to Informatics on public documents indicate program ownership within the Academy.

The programme goal is clearly stated, aligned to the Academy's mission, and framed for defence and civilian employability. The principal weaknesses are in transparency and measurability: the programme would benefit from publishing measurable graduate learning outcomes, a curriculum-to-outcome (course mapping) document, labour-market evidence, explicit internationalization measures, and stakeholder-engagement records to fully satisfy the detailed criteria you provided.

Evidences/Indicators

- Informatics Educational Program N2
- Program Strategy N3.2
- Analysis of Labor Market and Employer Requirements N4
- Interview results
- Academy Website: www.eta.edu.ge

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
1.1 Programme Objectives	Complies with requirements

1.2 Programme Learning Outcomes

➢The learning outcomes of the programme are logically related to the programme objectives and the specifics of the study field.

➢ Programme learning outcomes describe knowledge, skills, and/or the responsibility and autonomy that students gain upon completion of the programme.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The learning outcomes of the programme reflect the programme's objectives as they include ICT fundamentals, software tools, problem analysis, ethical decision-making, leadership, teamwork, and communication. They also integrate military-specific outcomes (platoon-level operations) alongside civilian ICT competencies, which shows the dual mission of the Academy. Knowledge, skills, and aspects of responsibility/autonomy are all represented. The outcomes are phrased in action-oriented terms (e.g., *identify, describe, analyze, explain, plan, execute*). This phrasing supports measurability and could benefit from linked assessment rubrics to strengthen measurability. They are achievable within a bachelor-level programme and realistic in scope.

The outcomes are aligned with Level 6 of the National Qualifications Framework (bachelor level), as explicitly stated in the self-evaluation. They reference the detailed field descriptor "0613 Software and Applications Development and Analysis" and ICT sectoral characteristics. The inclusion of both advanced ICT knowledge and responsibility/autonomy in decision-making and leadership matches bachelor-level expectations in the learning outcomes.

It is evident that the programme uses sectoral benchmarks and the NQF field descriptors when formulating learning outcomes. This shows that outcomes are not arbitrary but structured around nationally established benchmarks.

The Academy highlights a 100% graduate employment rate, which indicates that the graduates are employed by the National Defence Forces and suggests high alignment with employer needs. Outcomes such as effective teamwork, leadership, and ICT competencies are

transferable both to the Georgian Defense Forces and civilian labour markets in the IT field. The Academy also mentions that graduates continue studies at the next level, confirming the outcomes facilitate progression to master's level programmes.

The integration of ICT competences with military-specific leadership and operational outcomes reflects the dual peculiarity of the Academy's context. Collaboration with the Ministry of Defense during curriculum updates ensures responsiveness to evolving employer needs.

The statement specifies that programme development involves multiple stakeholders: Deputy Rector, Head of the Bachelor's Programme, Quality Assurance Service, Ministry of Defense representatives (employers), and Junkers (This term will be used interchangeably with the term Cadet throughout the document). This indicates an inclusive process, although there is no explicit mention of graduate or student input.

The report notes that continuation of studies at the next level is possible and that outcomes are developed in accordance with NQF cycles. Therefore it indicates learning outcomes across other clustered educational programmes (e.g., master's, other ICT programmes) are harmonized in terms of complexity and difficulty.

In terms of the program structure and the content of the courses, they are aligned with the programme's learning objectives in a logical way. Additionally, the evaluation of the learning outcomes indicates that the way the program structured and the course contents ensured that the learning objectives were achieved by the students.

The Academy shares learning outcomes through its website, internal information systems (Emod), and information meetings with stakeholders. Outreach to school students across Georgia also demonstrates an effort to make outcomes visible to prospective applicants.

Evidences/Indicators

- Informatics Educational Program N2
- Results of Learning Outcomes Assessment; N5
- Results of Academic Performance Monitoring; N5.5
- Map of Program Goals and Learning Outcomes; N5.1.
- Document confirming the participation of persons involved in the development of the program learning outcomes - minutes of meetings N5.2
- Report on the evaluation of the program learning outcomes; N5.3
- External evaluation of the program; N5.6
- Information on the career development of graduates; N6.1.1
- Index of graduates continuing their studies at the next level; N6.1.2.
- Interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
1.2 Programme Learning Outcomes	Complies with requirements

1.3 Evaluation Mechanism of the Programme Learning Outcomes

- Evaluation mechanisms of the programme learning outcomes are defined; the programme learning outcomes evaluation cycle consists of defining, collecting and analyzing data necessary to measure learning outcomes;
- Programme learning outcomes assessment results are utilized for the improvement of the programme.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The National Defense Academy has established a structured mechanism for evaluating program learning outcomes. The evaluation is led by the head of the program, in collaboration with affiliated and invited staff. Learning outcomes are formulated with reference to Bloom's Taxonomy, ensuring measurable and action-oriented statements. The Academy applies a transparent, criteria-based assessment system designed to measure what Cadets know and can do upon completion of courses. Assessment details are included in syllabi, explained in dedicated information sessions, and made accessible on the Ilias platform and Academy website. Feedback mechanisms provide Cadets with individual guidance on results and improvement strategies.

The Academy employs the Kirkpatrick methodology, introduced through NATO exercises, to ensure alignment of learning outcomes, teaching activities, and assessment. This model evaluates educational effectiveness on four levels: reaction, learning, behaviour, and results.

Quantitative measures, including Gaussian distribution principles, are applied to track academic performance, with specific grade distributions serving as benchmarks. Deviations beyond 20% trigger a review of learning outcomes and assessment approaches. Although the academy is using the Kirkpatrick evaluation approach, it is mainly for evaluating the effectiveness of corporate training programs rather than formal learning programmes. The model is highly criticized for using mainly level 1 and level 2 evaluations and non-practicality of level 3 and level 4 evaluations at evaluating training programmes. Therefore it is suggested that the programme reconsiders the evaluation methodology of the informatics programme..

The programme uses both direct (exams, presentations, projects) and indirect (employer, graduate, and Cadet surveys, external evaluations) assessment methodologies. Employer and alumni feedback are emphasised, reflecting the Academy's close ties with the Ministry of Defence. Program benchmarking against peer institutions and external expert evaluations, such as those conducted by NATO's DEEP, further strengthen the process. Collegial discussions and mutual classroom attendance support faculty development, while national defence requirements guide program refinement.

Learning outcome assessment follows a four-year cycle: outcome definition, data collection, evaluation, and implementation of improvements. Supporting documents include evaluation rules, curriculum maps, rubrics, and quality manuals, structured under the ADDIE model.

The Academy has developed a comprehensive framework for ensuring that the evaluation of learning outcomes is conducted in a consistent and transparent manner. Learning outcomes are clearly formulated through the use of Bloom's Taxonomy, which ensures that they are measurable and unambiguous. Assessment procedures are systematically embedded in course syllabi, communicated to Cadets in orientation sessions, and made permanently accessible through the Ilias platform and Academy website. These measures guarantee equal access to information regarding assessment principles, criteria, and expectations.

The Academy's assessment system employs a balanced combination of direct and indirect methods, ranging from exams, presentations, and projects to employer and alumni surveys and external reviews. This multidimensional approach ensures that both academic achievement and workplace relevance are captured.

The program demonstrates a strong commitment to engaging external stakeholders in the evaluation of learning outcomes. Employers, particularly the Ministry of Defence of Georgia, are not only consulted but are deeply integrated into the definition of graduate competencies, making the Academy unique in the national context. Alumni input is also sought through surveys, and NATO DEEP experts contribute through external reviews.

The Academy has established explicit benchmarks for student achievement, most notably through the rank-based grading distribution (10%-25%-30%-25%-10%). Monitoring occurs at both course and program levels, with deviations greater than 20% triggering review and potential revision of learning outcomes or assessment strategies.

Academic and visiting staff are systematically involved in the evaluation process and have been trained in the use of modern assessment practices. Initiatives such as the "Effective Teaching" module and the "Training of Trainers" program, combined with peer observations and collegial discussions, have created a shared culture of assessment literacy. Staff are conversant with the use of Bloom's Taxonomy in formulating outcomes, the application of rubrics, and the use of digital tools (e.g., Ilias platform) to support assessment.

The Academy provides targeted professional development opportunities to support staff in designing, measuring, and analysing learning outcomes. Collaboration with NATO DEEP has introduced international best practices in both traditional and distance assessment methods.

The Academy has implemented mechanisms to ensure that stakeholders are familiar with the results of learning outcomes assessment. Cadets receive feedback at both the individual and cohort level, while assessment regulations and criteria are publicly available. Employers and alumni are engaged through surveys and feedback loops.

It appears that the Academy has established a clear four-year cycle for evaluating and improving program learning outcomes: defining outcomes, collecting data, analysing results, and implementing improvements. The linkage between assessment results and program modifications is evident in examples such as curriculum refinements following NATO DEEP recommendations and adjustments in teaching methods during the transition to distance learning. The criterion is fully met, and the mechanism may be considered as a strong example of structured quality assurance in military higher education.

Evidences/Indicators

- Informatics Educational Program
- Methodology for Planning, Developing and Evaluating Educational Programs
- Quality Assurance Manual
- Program Learning Outcomes Assessment Plan/Mechanisms
- Tools and Mechanisms Developed to Assess Learning Outcomes
- Results and Analysis of Learning Outcomes Assessment
- External Program Evaluation
- Learning Outcomes Assessment Report
- Program Analysis Document

- Academic Performance Monitoring Results
- Internal and External Stakeholder Survey Results
- Program Maps; N5.1
- Interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- In order to strengthen the evaluation process, reconsider using the Kirkpatrick evaluation model as the methodology for evaluating learning outcomes.

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
1.3 Evaluation Mechanism of the Programme Learning Outcomes	Complies with requirements

1.4. Structure and Content of Education Programme

- The Programme is designed according to HEI's methodology for planning, designing and developing of education programmes.
- The Programme structure is consistent and logical. The content and structure of the programme ensure the achievement of programme learning outcomes. The qualification to be granted is consistent with the content and learning outcomes of the programme.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

It is evident from the documents that the Informatics bachelor's program at the National Defense Academy is designed in accordance with the Academy's internal regulations, national legislation, the Georgian National Qualifications Framework (Level 6 Descriptor), sectoral standards in ICT higher education, and the European Credit Transfer and Accumulation System (ECTS). This alignment ensures coherence between the program's learning outcomes,

its structure, and the qualification awarded. The program follows a 3+1 model, consisting of major compulsory courses, electives, a bachelor's thesis, and a free component. The curriculum design provides Cadets with general mandatory courses in the first semester, followed by major courses and the bachelor's thesis, which is typically submitted in the sixth semester. In addition, the Academy integrates intensive foreign language instruction (English, French, German, and Turkish). The program reflects current research and innovation through the involvement of qualified staff, many of whom are Academy graduates and maintain engagement with international scientific literature.

The programme appears to be explicitly designed in line with the Academy's internal methodological framework, the "Rules for the Analysis, Planning, Development, Implementation, Evaluation, and Approval of Academic Educational Programs." This ensures a structured approach to program design, encompassing all stages from needs analysis to approval. The evidence from the self-report confirms that this methodology is consistently applied, with program documents aligned to sectoral descriptors, national qualifications requirements, and ECTS regulations. Furthermore, the programme structure follows the Academy's 3+1 model, which provides clarity in course sequencing, free components, and capstone requirements such as the bachelor's thesis.

The programme consists of 258 ECTS, distributed across major compulsory courses, electives, a bachelor's thesis, and the Combined Arms Command component. This volume corresponds well with the expectations for a Level 6 qualification under the Georgian National Qualifications Framework. The balance between theoretical foundations (e.g., algorithms, programming, systems administration) and applied military-science courses reflects the dual purpose of the Academy: producing both ICT professionals and commissioned officers. Complexity increases progressively, beginning with foundational mathematics and programming in the first year, followed by specialised courses such as machine learning, cybersecurity, and system design in later stages. Overall, the volume and complexity correspond well with national standards.

It is evident that the programme is compliant with national legislation, including the Law on Higher Education and the Ministry of Education and Science's regulations on credit calculation. The allocation of 258 ECTS demonstrates adherence to the European framework, ensuring comparability and potential recognition abroad. Each course syllabus specifies credit allocation, contact hours, and assessment criteria in accordance with ECTS standards, as confirmed by the curriculum file. Moreover, the structure provides the required balance of compulsory, elective, and free components

The National Defense Academy's Informatics programme is distinctive when compared with similar ICT programmes in Georgia. This individuality stems primarily from the integration of Combined Arms Command courses, amounting to 79 credits in the free component, which

reflect the Academy's mission of preparing officers who are both technologically proficient and militarily capable. Such integration ensures that graduates possess dual competencies: ICT expertise and leadership/military operational knowledge. Additionally, the language component, which includes instruction in English, French, German, and Turkish, and placement testing across six proficiency levels, further differentiates the programme by embedding systematic multilingual training. These unique features are tailored to the requirements of the Ministry of Defence and reflect the Academy's status as the country's only higher military educational institution. The 3+1 structural model, with its emphasis on a bachelor's thesis and structured electives, also contributes to programme individuality.

The programme's structure and course sequencing are aligned with the intended qualification of Bachelor of Informatics. The curriculum systematically develops competencies in fundamental ICT areas such as programming, databases, operating systems, cybersecurity, and machine learning, while simultaneously embedding military sciences and leadership training. This dual structure is justified by the Academy's mandate and corresponds to the graduate profile: ICT specialists who are also commissioned officers. The learning outcomes described in the programme documentation (e.g., ability to identify ICT problems, apply algorithms, design secure systems, and lead platoon-level units) are logically embedded within course content.

Furthermore, the programme is structured based on the higher education qualification framework and aligned with the programme learning outcomes. In order to achieve learning outcomes all courses were logically sequenced. The curriculum map document shows the link between courses and the intended learning outcomes of the programme. The ECTS credits in the courses are assigned as 5 or 6 ECTS credits. Evaluation of course syllabi shows that the number of ECTS credits indicates the appropriate workload of the course activities.

The Informatics programme does not have explicit concentrations similar to the civilian higher education context, but the major field (ICT) encompasses a coherent module of compulsory and elective courses that collectively reflect the programme's broader learning outcomes. For example, learning outcomes at programme level emphasise the ability to identify ICT issues, select appropriate tools, and develop secure systems. These outcomes are reinforced through specific courses such as Algorithms and Data Structures, Database Systems, Cybersecurity Technologies, and Machine Learning. Elective modules, such as Mobile Application Programming or Cyber Conflicts, expand competencies into specialised domains, thereby complementing core programme goals. The consistency between course-level and programme-level outcomes is documented in curriculum maps and syllabi, which link learning outcomes explicitly to assessments.

The structure of the programme demonstrates logical sequencing and coherence across teaching, research, and military components. Foundational courses in mathematics and

programming are offered early, followed by more advanced ICT courses in later semesters. Military science courses run in parallel, ensuring that Cadets develop both academic and professional competencies. Admission prerequisites, including mathematics or physics, foreign language, and physical fitness, ensure that entrants are adequately prepared for the intellectual and physical demands of the programme.

The Academy demonstrates a strong commitment to integrating new research and scientific developments into the programme. Academic staff are required to remain up to date with international literature, supported by proficiency in English and active participation in international conferences. Examples from the self-report show that recent advancements in ICT, such as cybersecurity and artificial intelligence, are reflected in elective and compulsory courses.

The programme reflects a sustainable commitment to internationalisation. This is evident in several dimensions: integration of English-language sources, provision of foreign language instruction in four languages with placement by competence level, participation in student and staff exchange programmes, and benchmarking of the curriculum against foreign programmes. The Academy also invites international lecturers and participates in NATO-led training and conferences, providing both faculty and Cadets with international exposure. In 2024, the Academy organised 95 events with substantial international participation, indicating active engagement in global academic and professional networks.

The programme development process is clearly collaborative. Internal stakeholders—including academic staff, visiting lecturers, and graduates who now serve as faculty—play a direct role in curriculum design and revision. Cadets provide feedback through surveys, and employers, particularly the Ministry of Defence, actively shape the competencies required of graduates. The Academy also considers feedback from accreditation experts and external evaluators such as NATO DEEP representatives. This broad-based involvement ensures that programme development is responsive to both academic standards and labour market needs.

Public accessibility of programme information is prioritised by the Academy. Details of educational programmes, syllabi, regulations, and assessment methods are publicly available on the Academy's website and accessible internally through communication platforms such as the Ilias system. Cadets receive detailed orientation on programme structure and requirements, while regulatory documents ensure clarity in admission prerequisites and course progression.

Evidences/Indicators

- Informatics Educational Program
- Course Syllabus

- Program Maps
- Methodology for Planning, Elaboration, Development, and Evaluation of Educational Programs
- Evidence of Participation of Individuals Involved in the Program
- Academy Website https://eta.edu.ge/
- Interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
1.4 Structure and Content of Educational Programme	Complies with requirements

1.5. Academic Course/Subject

➢ The content of the academic course / subject and the number of credits ensure the achievement of the learning outcomes defined by this course / subject.
➢ The content and the learning outcomes of the academic course/subject of the main field of study ensure the achievement of the learning outcomes of the programme.
➢ The study materials indicated in the syllabus ensure the achievement of the learning outcomes of the programme.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The Academy highlights that the academic courses within the Informatics programme are systematically designed to align with the programme's overall learning outcomes and the sixth level of the National Qualifications Framework (NQF). Each compulsory course specifies clear learning outcomes that are measurable and assessable, with mechanisms in place to verify their achievement through analysis of Cadet performance. The Quality Assurance (QA)

Service plays a central role in reviewing the clarity of course objectives, their consistency with programme aims, the alignment of learning outcomes with NQF descriptors, and the completeness of syllabi. In addition, QA monitors the coherence between course objectives, teaching methodology, learning outcomes, and assessment criteria.

The learning outcomes of core courses such as *Cyber Security Technologies* and *Systems Administration* show a clear alignment with the broader programme learning outcomes. For example, the Informatics programme expects graduates to identify ICT problems, apply modern tools, and communicate findings effectively. In *Cyber Security Technologies*, outcomes include the ability to classify risks, prevent cyberattacks, and present solutions, which directly support the programme's goal of producing ICT professionals with problem-solving and applied skills. Similarly, *Systems Administration* requires students to configure Windows Server services, manage group policies, and resolve operational issues, all of which build the applied competencies expected at the bachelor's level.

The course syllabi demonstrate a coherent relationship between course content and learning outcomes. For example, in *Cyber Security Technologies*, topics such as cryptographic algorithms, intrusion detection, and risk assessment directly underpin outcomes related to identifying vulnerabilities and designing preventive measures. Similarly, *Systems Administration* covers Windows Server architecture, Group Policy management, and system monitoring, which correspond to outcomes such as installing and configuring services, managing user access, and troubleshooting errors.

Credit allocation appears appropriate across the syllabi reviewed. The credit hours assigned to the courses reflects the complexity of the course content. For instance, *Cyber Security Technologies* is assigned 6 ECTS, with a balance of lectures, laboratory work, and independent study. This is reasonable given the breadth of the subject matter and the need for practice-based learning. *Systems Administration* similarly reflects the workload expected of a course requiring both theoretical understanding and significant hands-on configuration tasks. The ECTS workload corresponds to international standards.

The syllabi reviewed indicate that assessment methods are carefully designed to measure achievement of each learning outcome. In *Cyber Security Technologies*, learning outcomes such as risk identification and cryptographic application are assessed through a combination of written exams, lab assignments, and presentations. *Systems Administration* evaluates practical skills like configuring servers and managing policies through laboratory exams and project-based assignments. This ensures that both theoretical knowledge and applied skills are systematically assessed. The QA Service specifically monitors the correspondence between outcomes and assessment criteria, checking that no outcome is left unevaluated. Rubrics and grading schemes in the syllabi further support transparency by indicating how performance

is measured. This reflects good practice, as it prevents a mismatch between intended and assessed outcomes.

The courses include up to date and international literature. For example, the syllabi for *Cyber Security Technologies* and *Systems Administration* include compulsory literature and teaching resources that support achievement of learning outcomes. *Cyber Security Technologies* references textbooks and manuals on network security, cryptography, and system protection, which underpin outcomes such as identifying vulnerabilities and applying preventive tools. *Systems Administration* lists resources on Windows Server administration and network configuration, directly supporting outcomes related to installation, configuration, and troubleshooting. These resources ensure students have the foundational and practical knowledge required to meet both course-level and programme-level outcomes.

The Academy demonstrates will to integrate modern research and achievements into teaching resources. Syllabi reference foundational texts alongside materials reflecting contemporary developments. In *Cyber Security Technologies*, for example, resources cover both classic cryptographic principles and modern approaches to cyber defence, such as intrusion detection systems. *Systems Administration* includes references to current server technologies, demonstrating alignment with industry practices.

Furthermore, the presence of a Scientific Research Center at the Academy ensures continuous updating of materials, and faculty actively incorporate international literature in English into coursework. Georgian-language resources are also developed where necessary to support accessibility. This dual approach allows Cadets to engage with cutting-edge research regardless of language barriers.

Nevertheless, the syllabi could more explicitly identify recent publications (e.g., within the last five years) and include references to scholarly ICT journals or conference proceedings. This would strengthen the connection between academic teaching and current research achievements.

Evidences/Indicators

- Informatics Educational Program; N2
- Course Syllabuses; N2
- Program Maps N5.1
- Results of Course Learning Outcomes Assessment; N5
- Results of Survey of Program Implementing Personnel and Junkers N8
- Interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- Establish a policy of reviewing and updating syllabi literature lists every academic year, ensuring inclusion of recent peer-reviewed research, industry standards, and emerging technologies.

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
1.5. Academic Course/Subject	Complies with requirements

2. Methodology and Organisation of Teaching, Adequacy of Evaluation of Programme Mastering

Prerequisites for admission to the programme, teaching-learning methods and student assessment consider the specificity of the study field, level requirements, student needs, and ensure the achievement of the objectives and expected learning outcomes of the programme.

2.1 Programme Admission Preconditions

The HEI has relevant, transparent, fair, public and accessible programme admission preconditions and procedures that ensure the engagement of individuals with relevant knowledge and skills in the programme to achieve learning outcomes.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The Academy is unique among higher education institutions in Georgia, as it is the only higher military educational institution in the country. Due to its specific focus, the admission requirements for its programs are also distinct. We ensure that these requirements are clear and fair. Applicants who register for the Unified National Examinations and select the Academy's educational program during the registration process can compete for admission, provided they are under 24 years old in the year of registration. For admission to the bachelor's program, Cadets are required to fulfill the prerequisites established by the academy, after which they must pass the Unified National Examinations.

This framework ensures that only applicants possessing the requisite knowledge and competencies to achieve the intended learning outcomes are admitted. To this end, the academy actively employs multiple information channels—including its official website,

social media platforms and consultation sessions—to provide prospective students with accurate and timely information.

Moreover, the academy applies a "Methodology for Planning the Number of Cadets" that takes into consideration both the specific characteristics of the program and the availability of institutional resources, thereby guaranteeing the sustainability of the teaching and learning process. Collectively, these mechanisms create a legally robust and logically coherent environment in which admission requirements are explicitly aligned with program content, the level of study, and the qualification to be awarded. This alignment ultimately contributes to the effective delivery of a high-quality educational process.

Evidences/Indicators

- Educational program;
- Website and other means of communication;
- Methodology for Planning the Number of Junkers;
- Interview results;

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
2.1 Programme Admission Preconditions	Complies with requirements

2.2. The Development of Practical, Scientific/Research/Creative/Performing and Transferable Skills

Programme ensures the development of students' practical, scientific/research/creative/performing and transferable skills and/or their involvement in research projects, in accordance with the programme learning outcomes.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The program provides both theoretical and practical components; however, there is a recognized need to further strengthen the practical courses in relation to the specific requirements of the field. The University has established a research funding policy that offers students financial support both for participation in international events and for the implementation of research projects. Nevertheless, evaluations have indicated the necessity of ensuring broader student engagement in research activities, so that they may not only acquire theoretical knowledge of the discipline but also develop practical skills.

The Academy actively promotes student integration into practical activities. Significantly, 100% of the Academy's graduates are employed, primarily in their respective fields of specialization. Overall, the existing system effectively supports the development of essential competencies; however, further efforts are required to enhance student engagement and expand opportunities for their academic and professional development.

Evidences/Indicators:

- Implemented, ongoing and/or planned scientific research projects;
- Collections of conferences and scientific papers;
- List of conferences where Junkers are involved;
- Interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- Strengthening the practical component of the program through the inclusion of additional field-specific courses and laboratory work;

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
2.2. The Development of practical,	Complies with requirements

scientific/research/creative/perfo
rming and transferable skills

2.3. Teaching and Learning Methods

The programme is implemented by use student-oriented teaching and learning methods. Teaching and learning methods correspond to the level of education, course/subject content, learning outcomes, and ensure their achievement.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The academy employs a student-centered and diversified teaching methodology. Courses are designed to address not only theoretical knowledge but also interactive and practical activities. The teaching methods used in the courses match the goals of each subject. Lectures and seminars are planned to give both theoretical knowledge and practical skills. Teachers use different active learning methods, such as discussions, group work, presentations, research tasks, and practical exercises. These methods help students take part in the study process and think critically.

The teaching and learning methods also consider the individual needs of students. When necessary, individual study plans are made according to students' interests and level of academic preparation. This flexible approach helps every student achieve the best learning results.

Distance learning modules are also integrated into the curriculum, complementing rather than altering the program's objectives and learning outcomes, thereby reinforcing their achievement. Notably, the teaching methods are aimed not only at knowledge transfer but also at fostering students' creative and analytical competencies, better preparing them for real-world professional activities. As a result, the employed methodologies are aligned with the course content, level of study, and disciplinary requirements.

Evidences/Indicators

- Educational programs;
- Teaching - learning methods;
- Syllabi;
- Interview results;

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
2.3. Teaching and learning methods	Complies with requirements

2.4. Student Evaluation

Student evaluation is conducted in accordance with the established procedures. It is transparent, reliable and complies with existing legislation.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The cadet's evaluation scheme demonstrated in the self-evaluation report (SER), educational program and syllabi complies with requirements of Georgian legislation (the Order No. 3 of the Minister of Education and Science of Georgia dated January 5, 2007), includes a detailed breakdown of assessment criteria, ranging from "Excellent" to "Failed to pass". Each course syllabus outlines individual evaluation methods, forms, and components, linking them to specific and measurable learning outcomes.

The assessment system is outlined in the syllabi in accordance with the "Regulating Rule of the Educational Process", which is publicly available on the David Aghmashenebeli National Defence Academy of Georgia website. As cadets mentioned during an interview at the beginning of their study they had an introductory meeting with the representatives of the Academy, the head of the Quality Assurance Service, and the heads of the program. All students are granted their email and login on ILIAS platform where they can find additional information and regulatory documentation. The evaluation system, methods and forms operating within the HEI provides for the following scheme:

a) five types of positive assessment:

(A) Excellent – 91-100 points.

(B) Very good – 81-90 points.

(C) Good – 71-80 points.

(D) Satisfactory – 61-70 points.

(E) Acceptable – 51-60 points.

b) two types of negative assessment:

(FX) Student could not pass examination – 41-50 point that means that she/he is required to work more for passing the exam, and that she/he is entitled to retake exam only once after individual work;

(F) failed to pass –40 points and lower that means that the work done by cadet is not sufficient and she/he has to redo the course.

Additional criteria for assessing cadet's achievement in the course are defined in the appropriate syllabus.

The self-evaluation report of the computer engineering program demonstrates a commitment to diverse and modern student evaluation methods. These methods include assignments, tests, presentations, and laboratory work, aligning with the program's emphasis on practical skills. The evaluation system is designed to be transparent and fair, with measures such as encoding final exam papers and providing constructive feedback to students.

During interviews cadets confirmed that their assessment is based on objectivity and transparency. And in case of questions or misunderstandings, they have the opportunity to look through their quiz or exam papers, get answers from professors/academic staff and appeal evaluation if needed. If cadet's protest is found right, the appeal application is submitted for review to the dean of the relevant faculty, who creates an appeal commission with persons from relevant field.

Evidences/Indicators

- Self-evaluation report
- Educational program
- Syllabus of training courses
- Educational process regulatory rule
- Website and electronic portal
- Instructions for conducting exams
- Interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
2.4. Student evaluation	Complies with requirements

3. Student Achievements, Individual Work with Them

The programme ensures the creation of a student-centered environment by providing students with relevant services; promotes maximum student awareness, implements a variety of activities and facilitates student involvement in local and/or international projects; proper quality of scientific guidance is provided for master's student.

3.1 Student Consulting and Support Services

Students receive consultation and support regarding the planning of learning process, improvement of academic achievement, and career development from the people involved in the programme and/or structural units of the HEI. A student has an opportunity to have a diverse learning process and receive relevant information and recommendations from those involved in the programme.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

DANDA has various students' services implemented focused on cadets development and support activities. They are involved in HEI everyday life. From a self- evaluation report and site visit we have got information that student and graduate were involved in program development and self-evaluation groups. During the interview cadets noted that they were involved in the program evaluation process in different ways, like: evaluation of academic/ invited staff, program structure, administration etc. The evaluation team was able to check the electronic platform (ILIAS) where students are getting these questionnaires to assess their professors/ academic staff and once the process is finished Quality Assurance Service and academic staff are getting feedback. LMS is equipped with other possibilities like registering on the classes, getting schedule for the semester, checking their study progress and using it as a communication tool with administration or teaching staff, request and get notice from administration without going to the university, create CV and etc. This platform was suggested by western partners for academy as a best practice.

The Academy ensures the integration of cadets into the Academy's environment through an orientation week. During this week, they are provided with all kinds of information, be it about administrative procedures, accommodation, their lifestyle, or other matters. It is important for the Academy to promote the cultural, social, and academic integration of cadets, and at the same time to raise the level of intercultural sensitivity among both non-ethnic Georgian cadets and Georgian cadets.

The Academy offers cadets the opportunity to participate in local as well as international conferences, projects, and events. Cadets have numerous opportunities to participate in international exchange programs, conferences, and summer schools (included IT related topics and programs) with partner military institutions in countries like the USA (West Point), France, Germany, and others including. For many years, the Academy has been offering public lectures and seminars to cadets, involving not only Georgian but also high-ranking foreign military and civilian officials, who hold discussions and public lectures for cadets on various topics. (Speakers include officials such as retired sergeants of the U.S. Special Forces, retired colonels of the U.S. Armed Forces, the chairman of the advisory board of the Bundeswehr of the Federal Republic of Germany, the former Deputy Minister of Defence of Germany, professors from the University of London, the Deputy Military Attaché of France, etc.).

The Academy offers extensive extracurricular activities, including various sports teams (Swimming, hand-to-hand combat, basketball, football, volleyball, rugby, mini-football, wrestling, boxing), a drama club, and intellectual games.

Cadets receive a fully funded education. Additionally, a robust scholarship system provides a fixed monthly stipend to all cadets, with opportunities for high-performing individuals to earn additional merit-based scholarships. In order to improve the quality of education and increase the motivation of bachelor's program cadets, a fixed scholarship was increased and established at 320 GEL, and from April 2025, it will be 500 GEL, which is given to every cadet. An additional scholarship is awarded only to those with a high rating (high academic performance, leadership, and physical fitness standards). The criteria and amount of the scholarship are established by the order of the Minister of Defence of Georgia as follows: a) A+ (95-100 points + Phys. training 100 points) – 300 GEL + fixed amount; b) A (91-94 points + Phys. training 90 points) – 200 GEL + fixed amount; c) B (81-90 points + Phys. training 80 points) – 100 GEL + fixed amount. In addition, from 2023, 4th-year cadets of the bachelor's program will receive a monthly scholarship of 1200 GEL, and from April 2025, 1320 GEL.

Evidences/Indicators

- Self-evaluation report
- Electronic portal

- Website
- Consultation schedule
- Financing student projects
- Interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
3.1 Student Consulting and Support Services	Complies with requirements

3.2. Master's Student Supervision

- A scientific supervisor provides proper support to master's student to perform the scientific-research component successfully.
- Within master's programmes, ration of students and supervisors enables to perform scientific supervision properly.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

N/A

Data related to the supervision of master's students	
Number of master theses supervisors	--
Number of master's students	--

Ratio - supervisors of master's theses/master's students	--

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
3.2. Master's Students Supervision	Select Appropriate

4. Providing Teaching Resources

Human, material, information and financial resources of educational programme ensure sustainable, stable, efficient and effective functioning of the programme and the achievement of the defined objectives.

4.1 Human Resources

➢ Programme staff consists of qualified persons, who have necessary competences in order to help students to achieve the programme learning outcomes.
➢ The number and workload of programme academic/scientific and invited staff ensures the sustainable running of the educational process and also, proper execution of their research/creative/performance activities and other assigned duties. Quantitative indicators related to academic/scientific/invited staff ensure programme sustainability.
➢ The Head of the Programme possesses necessary knowledge and experience required for

programme elaboration, and also the appropriate competences in the field of study of the programme. He/she is personally involved in programme implementation.
➢ Programme students are provided with an adequate number of administrative and support staff of appropriate competence.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The Bachelor's program in Informatics is supported by qualified academic and invited staff whose credentials meet the requirements established by national legislation and the Academy's internal regulations. Personnel qualifications are demonstrated through academic publications, professional practice, and participation in relevant projects over the past five years, which ensures subject-specific expertise. Visiting staff and instructors also bring practical experience that complements the achievement of the program's intended learning outcomes.

The program employs a semester-based workload allocation system covering teaching, research, consultation hours, and other duties. This workload model is regulated and renewable, ensuring that both academic and invited staff contribute across the full spectrum of responsibilities. The methodology for determining personnel numbers is transparent, taking into account student enrollment, program needs, maximum teaching hours, budgetary constraints, and ratios prescribed by internal rules (e.g., one academic staff member per 40 students in Bachelor's programs, and one per 10 in Master's programs).

Affiliation requirements are strictly enforced, with 100% of academic staff formally affiliated with the Academy, a practice that enhances program sustainability. Data on staff turnover is systematically collected and analyzed. Records indicate that turnover rates have not threatened program sustainability, and the Academy applies measures to ensure continuity when changes occur.

Interviews with faculty and stakeholders confirm that staff are not only knowledgeable about the program but also actively involved in its ongoing development and modifications. The program head demonstrates strong qualifications and comprehensive knowledge of the program. The role has remained institutionally stable despite organizational changes, and leadership capacity appears sufficient to ensure alignment with program objectives.

Interviews with academic staff confirmed that they do participate in international mobility activities; however, these are often more general in nature and less directly connected to their professional development in Informatics. Both the staff and program leadership expressed an interest in expanding such opportunities. Increasing the number and scope of professionally oriented mobility programs would not only enrich faculty expertise but also contribute to the

continuous modernization of the curriculum, foster the exchange of best practices, and strengthen the program's alignment with international standards in computer science and related disciplines. It would be desirable to place greater emphasis on mobility and collaboration specifically within the field of informatics.

Administrative and support staff are present in adequate numbers and possess the qualifications necessary to fulfill their duties. Testimonies from students confirm that these services are functional and supportive of the educational process.

The program demonstrates compliance with Standard 4. Human resources are adequate in number, qualification, and distribution to ensure sustainable program implementation and achievement of intended learning outcomes. Areas identified for further development relate primarily to strengthening professional development and succession planning mechanisms.

Number of the staff involved in the programme (including academic, scientific, and invited staff)	**Number of Programme Staff**	**Including the staff with sectoral expertise[5]**	**Including the staff holding PhD degree in the sectoral direction[6]**	**Among them, the affiliated staff**
Total number of academic staff	**17**	**9**	**0**	**0**
- Professor	2	2	0	2
- Associate Professor	4	4	0	4
- Assistant-Professor	2	2	0	2
- Assistant	0	0	0	0
Visiting Staff	4	4	0	0
Scientific Staff	5	4	0	0
Including International Stuff	0	0	0	0

Evidences/Indicators

- Job descriptions;
- Personal files of the staff;
- Staff workload scheme;
- Methodology for determining the number of academic and visiting personnel of the program;

[5] Staff implementing the relevant components of the main field of study

[6] Staff with relevant doctoral degrees implementing the components of the main field of study

- Results of the Junkers' survey.
- Staff qualification requirements;
- Competition materials;
- Information on publications in refereed journals, including international refereed journals;
- Academic/scientific/visiting personnel (including affiliated academic personnel) workload
- scheme, which takes into account the person's workload in other higher education institutions;
- Number of academic/scientific/visiting personnel in relation to the number of students enrolled in the programs;
- Ratio of academic and scientific personnel to visiting personnel;
- Ratio of affiliated academic staff involved in the educational/scientific components required for achieving the qualification to be awarded under the program to the number of students;
- Functions and personal file of the program director;
- Number of administrative and support staff;
- Job description document of administrative and support staff;
- Interview results

Recommendations:

-

Suggestions for the Programme Development

- It is advised to strengthen the internationalization component of the program with a particular focus on enhancing mobility opportunities for faculty members in the field of Informatics.

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
4.1 Human Resources	Complies with requirements

4.2 Qualification of Supervisors of Master's Students

The Master's students have qualified supervisor/supervisors and, if necessary, co-supervisor/co-supervisors who have relevant scientific-research experience in the field of research.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

Only the Bachelor's program is implemented.

Number of supervisors of Master's theses	Thesis supervisors	Including the supervisors holding PhD degree in the sectoral direction	Among them, the affiliated staff
Number of supervisors of Master's thesis			
- Professor			
- Associate Professor			
- Assistant-Professor			
Visiting personnel			
Scientific Staff			

Evidences/Indicators

Recommendations:

Suggestions for the Programme Development

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation

4.2 Qualification of Supervisors of Master's Students	N/A

4.3 Professional Development of Academic, Scientific and Invited Staff

➢ The HEI conducts the evaluation of programme staff and analyses evaluation results on a regular basis.
➢ The HEI fosters professional development of the academic, scientific and invited staff. Moreover, it fosters their scientific and research work.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The Academy has established structured mechanisms for the evaluation and professional growth of its academic, scientific, and invited staff. The Civilian Personnel Evaluation Guidelines serve as the primary regulatory framework, outlining evaluation principles, methods, and responsibilities. This system emphasizes transparency and consistency, ensuring that both rights and obligations of staff are clearly defined. Complementary procedures exist for military personnel, aligned with the Ministry of Defense's standards, which underscores the dual nature of the institution and the need to maintain coherence across civilian and military staff.

Evaluations are conducted regularly and include self-assessment reports by academic and visiting staff, which are reviewed by department heads and senior administrators. These evaluations cover teaching, research, and administrative responsibilities, ensuring a comprehensive view of each staff member's contribution. Importantly, the results are not merely formal; they feed into career development planning, reward schemes, and retention strategies. Mechanisms such as certificates of appreciation, financial incentives, and recognition awards provide tangible motivation for maintaining high performance.

The university regularly conducts evaluations and analyses of academic, research, and invited staff activities. This process encompasses the assessment of teaching, research, and creative performance, among them is the Informatics program. The results of these analyses are utilized to plan training programs aimed at enhancing professional competencies. The Academy actively promotes the professional development of its personnel involved in the program. They are encouraged to take part in international projects and exchanges, where they can share experiences with international military higher educational institutions. Additionally, they may attend conferences and engage in various scientific and research activities. The Academy began implementing the Advanced Distributed Learning (ADL)

Center to meet NATO standards. Currently, the Distance Learning Center, established based on ADL principles, is successfully operating and providing distance learning courses. The Academy has effective mechanisms in place to support this form of learning. Overall, significant progress has been achieved in staff development; nonetheless, the formalization of incentive mechanisms is necessary to ensure the continued effectiveness and sustainability of the system.

Surveys consistently highlight staff preparedness, fairness, and their ability to stimulate critical and analytical thinking. While some areas for improvement are noted—such as the need for more effective use of technology in online settings or better time allocation for feedback on written assignments—these issues appear to be addressed through ongoing professional development initiatives.

The Academy also integrates findings from organizational climate and staff needs assessments into planning. These studies reveal staff satisfaction with institutional support while also identifying specific areas for further development, such as improved technical infrastructure for distance learning and broader access to modern teaching tools. The integration of such feedback demonstrates responsiveness and adaptability.

Evidences/Indicators:

- The results of the staff evaluation and also the results of staff satisfaction surveys;
- Activities implemented for the purpose of staff development;
- Staff CVs.
- Self-Evaluation Report;
- Interview results;

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
4.3 Professional development of academic, scientific and invited staff	Complies with requirements

4.4. Material Resources

Programme is provided by necessary infrastructure, information resources relevant to the field of study and technical equipment required for achieving programme learning outcomes.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The material and technical resources available for the Bachelor's program in Informatics are sufficient, modern, and effectively managed. They contribute directly to the achievement of the program's learning outcomes. The Academy has established mechanisms for continuous development of library and IT services, ensuring responsiveness to both academic requirements and international standards. The combination of infrastructure, digital tools, and access to international knowledge resources creates a learning environment that is robust, sustainable, and aligned with the program's academic and professional objectives.

During the site visit, experts inspected classrooms, laboratories, the library, and other teaching and learning spaces used by the program. The facilities observed were modern, well-equipped, and adequate to ensure the effective delivery of the curriculum.

The Academy's infrastructure extends beyond standard lecture rooms to include specialized laboratories, computer centers, a simulation center, residential and recreation facilities, as well as a medical unit and sports facilities. These resources contribute to the holistic development of students and ensure that the educational environment meets NATO standards, as claimed in the self-evaluation report. The existence of a dedicated examination center equipped with modern technologies has improved the objectivity and efficiency of the assessment process, reducing administrative costs and increasing transparency.

A key strength lies in the Academy's library system. The Academy also demonstrates an active commitment to developing and updating library services. Mechanisms for resource renewal include consultations with academic staff, analysis of syllabi to identify required literature, and systematic procurement planning. The library combines a physical book collection with a growing portfolio of digital resources. It is supported by the Evergreen electronic catalog, enabling efficient searches and remote reservations. The library operates six days a week with

extended hours, providing generous access to students and staff. Rules for usage are clearly defined, and support for users, including cadets, is consistent. Importantly, all students receive laptops at the start of their studies, which ensures equal access to electronic learning resources and enables continuity during distance learning, as demonstrated during the pandemic. The institution collaborates with national and international partners, including the Georgian Libraries Consortium and eIFL, which provide access to major international databases such as Cambridge Journals Online, SAGE Journals, ScienceDirect, and Scopus. This integration allows students and staff not only to access but also to publish in international journals at reduced or no cost.

The library also features translation services, printing and publishing facilities, and maintains close cooperation with the National Parliamentary Library of Georgia, further broadening access to educational and research materials. Library staff regularly undergo professional development to ensure the effective operation of services, and user feedback mechanisms (comment boxes, surveys, usage statistics) are in place to guide service improvement

In addition to academic resources, the Academy has invested in digital learning tools, notably the ILIAS e-learning platform and Office 365-based services, which enhance blended and distance learning opportunities. The availability of an internal electronic library, as well as access to NATO's Advanced Distributed Learning (ADL) Center, highlights the Academy's effort to align with international standards in military and defense education.

Evidences/Indicators

- Onsite tour results;
- Interview results;
- Documentation confirming the ownership of infrastructure, technical equipment, and book fund;
- "Rules and instructions for using the library";
- Library, material, information, and digital resources and documents confirming their
- ownership/license purchase;
- Access to international electronic library databases and a document confirming it;
- Indicators of the use of access to international electronic library databases;

Recommendations:

- -

Suggestions for the Programme Development

- -

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
4.4 Material Resources	Complies with requirements

4.5 Programme/Faculty/School Budget and Programme Financial Sustainability

The allocation of financial resources stipulated in the programme/faculty/school budget is economically feasible and corresponds to the programme needs.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The financial sustainability of the Bachelor's Degree Program in Informatics at the National Defence Academy appears well-ensured. The program operates within the broader budgetary framework of the Academy, which is funded primarily from the state budget of Georgia under the Ministry of Defense's sub-program for Military Education. This stable funding arrangement provides predictability and continuity in program implementation.

The program-specific budget allocates resources for the salaries of academic, administrative, and support staff, professional development, acquisition and maintenance of educational resources, and other operational costs. According to the official budget documentation, the total allocation for the Informatics program over the 2025–2028 period amounts to 1,147,060 GEL, with annual expenditures averaging around 280,000–297,000 GEL. The majority of the funding is directed toward personnel remuneration (over 90% of the annual allocation), which includes base salaries, rank-based supplements, and additional allowances. This reflects the Academy's emphasis on ensuring staff retention, stability, and the capacity to attract qualified specialists.

Beyond salaries, the budget includes allocations for goods and services such as remuneration for part-time staff, travel, office expenses, and other educational needs. Although modest in scale, these allocations are sufficient to support program-level operations. Importantly, the budget also provides for the acquisition of non-financial assets, including equipment and learning resources, with dedicated funding for machinery, inventory, and non-produced

assets. This indicates an awareness of the need to periodically update the material base that underpins the program.

The budgeting process itself is participatory and aligned with the institution's strategic planning framework. Structural unit heads identify program needs and communicate them to the Finance Management Division, which consolidates priorities and prepares the draft budget. This ensures that allocations correspond to actual program requirements and strategic objectives. The Deputy Rector and Chief of Staff oversee financial management, ensuring legality and efficiency of expenditure.

The budget also provides for research-related expenses, staff training, conferences, exchange programs, and international mobility opportunities, though the scale of such allocations remains relatively small compared to personnel costs. Nevertheless, the Academy supplements its financial resources with access to grants, donations, and partnerships where available, ensuring flexibility in addressing additional needs.

Overall, the financial resources allocated to the Bachelor's Program in Informatics are economically feasible, stable, and aligned with the program's needs. The reliance on state budget funding ensures continuity, while the internal processes for planning and allocation demonstrate institutional capacity for financial management. The balance of expenditures, however, shows a strong concentration on personnel costs, suggesting that continuous monitoring is needed to maintain adequate investment in infrastructure, educational technology, and research support to sustain long-term program development.

Evidences/Indicators

- Budget;
- Interview results.

Recommendations:

- -

Suggestions for the Programme Development

- -

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
4.5. Programme/ Faculty/School Budget and Programme Financial Sustainability	Complies with requirements

5. Teaching Quality Enhancement Opportunities

In order to enhance teaching quality, programme utilises internal and external quality assurance services and also, periodically conducts programme monitoring and programme review. Relevant data is collected, analysed and utilized for informed decision making and programme development.

5.1 Internal Quality Evaluation

Programme staff collaborates with internal quality assurance department(s)/staff available at the HEI when planning the process of programme quality assurance, developing assessment instruments, and implementing assessment process. Programme staff utilizes quality assurance results for programme improvement.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The collaboration between quality assurance service and the program stakeholders was evident based on the documentation, as well as based on the results of the interviews. The program staff collaborated with the quality assurance service in the process of self-evaluation, as well as the overall process of the continuous improvement of the program, evaluation of the program and the learning courses, and other QA processes and mechanisms, which will be further discussed in the description of the standard's component 5.3.

The process of preparation of the self-evaluation report, as well as the continuous development of the program during the period of its implementation, was carried out based on the continuous feedback and suggestions based on the evaluation and feedback from QA service, taking into account the results of implementation of the Quality assurance tools.

The self-evaluation report was prepared with the collaborative effort and input of all the relevant stakeholders.

However, the self-evaluation report did not include any areas for improvement of the program, as requested by the form of the self-evaluation report, nor did it include the planned actions for improvement.

The topic was addressed during the interview with the self-evaluation team and based on the feedback, team members decided to leave the part of the report blank, as they believe that the program, for now, does not have any areas for improvement, the program has fulfilled all the recommendations from accreditation and authorization and is in full compliance with all the requirements of the standard.
However, the expert panel believes that even if the program is compliant with the standards' requirements, the main aim of the self-evaluation process is to define the areas, or processes that could be further improved, and to work towards the continuous improvement, providing the basis for the implementation of the PDCA cycle.
The program quality assurance, however, is proven to be based on the PDCA cycle, as the program evaluations have led to the improvements in the program, while the self-evaluation process, not identifying any areas for further improvement, risks to compromise the culture of continuous improvement.
The institution has developed mechanisms to ensure the implementation of quality electronic teaching and learning process, as well as its evaluation.

Evidences/Indicators

- Self-evaluation report;
- Composition of the self-evaluation team;
- Program quality assurance mechanisms and the results of their implementation;
- Minutes of the process of working on the program development;
- Interview results.

Recommendations:

- Strengthen the role of the self-evaluation process and internal evaluation in the process of continuous improvement of the program to ensure it leads to the program quality development and implementation of the PDCA cycle.

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
5.1 Internal quality evaluation	Substantially complies with requirements

5.2 External Quality Evaluation

Programme utilises the results of external quality assurance on a regular basis.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

Informatics Bachelor's program utilizes the results of external quality assurance. The external quality assurance of the program is implemented through various processes:

- The processes of accreditation and authorization through LEPL – National Center for Educational Quality Enhancement;
- External peer evaluation by representatives of the different universities;
- External evaluation by NATO DEEP (Defense Education Enhancement Program);
- Evaluation and communication by the J7 Military Education and Preparation Department of the Ministry of Defense.

The results of the external quality evaluations are used for the further development of the program. The informatics program was evaluated by the peers from Georgian and International Universities, the evaluation by NATO DEEP experts was also carried out in the reporting period. The program has also been modified based on recommendations received in the process of accreditation and authorization.

Based on the abovementioned, the program utilizes results of external evaluation on a regular basis and the mechanisms for external quality assurance are various, well-defined and implemented.
The academy team, program staff, head of the program, QA team and all the stakeholders met during the site visit are open and welcoming the evaluation process for the development of the program.

Evidences/Indicators

- Self-evaluation report;
- External peer evaluations report;

- Interview results.

Recommendations:

- N/A

Suggestions for the Programme Development

- N/A

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
5.2. External Quality Evaluation	Complies with requirements

5.3 Programme Monitoring and Periodic Review

Programme monitoring and periodic evaluation is conducted with the involvement of academic, scientific, invited, administrative, supporting staff, students, graduates, employers and other stakeholders through systematic data collection, study and analysis. Evaluation results are applied for the programme improvement.

Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The monitoring and evaluation of the Informatics programme is carried out with the involvement of academic and administrative staff, students, graduates and employers, through systemic collection and analysis of information.

The National Defense Academy of Georgia has well-established and implemented quality assurance mechanisms and tools, which foresee involvement of relevant stakeholders in the process and ensures multifaceted evaluation of the educational programs. The implementation of the tools and their utilization for the program development is supported by evidence.

Even though the majority of changes described in the self-evaluation report were based on the recommendations of experts or aimed at ensuring the program's compliance with the benchmarks of the field, the expert panel identified changes stemming from internal quality assurance processes and the feedback received from the stakeholders. The close collaboration of the academy with the employers is one of the strengths of the program, which is also

reflected in the compliance of the program with the requirements of the employers and close collaboration in the program development.

The classroom observation is carried out systematically and used for the quality assurance of the teaching and learning process. The institution provided the sample of the filled evaluation form, based on the request of the experts.

Students, by the end of each semester, evaluate the courses and lecturers, delivery of the courses in the semester.

As mentioned above, the quality assurance mechanisms ensure evaluation of the program implementation by relevant stakeholders, namely, the mechanisms used for the evaluation of the program are:

- Surveys of students;
- Survey of graduates;
- Staff survey;
- Employers' survey;
- Job market analysis;
- Benchmarking against analogue programs;
- Analysis of the student academic performance;
- Analysis of the program learning outcomes attainment;
- External peer evaluation;
- Classroom observations.

As the program's holistic evaluation would require the synthesis of all of the information gathered from different sources, and triangulation of the data, it is suggested that the institution develops, or more clearly states the ways in which it is carried out, which, at this stage is not fully clear. It would support further development of the well-established quality assurance framework of the institution.

Evidences/Indicators

- Quality Assurance Documentation;
- Analysis of the internal quality assurance mechanisms implemented;
- Self-evaluation report;
- Interview results.

Recommendations:

- N/A

Suggestions for the Programme Development

- Establishment or ensuring the more clear statement of the ways to synthesise the multifaceted data and information gathered through quality assurance will further support the development of the quality framework.

Evaluation

Please, evaluate the compliance of the programme with the component

Component	Evaluation
5.3. Programme monitoring and periodic review	Complies with requirements

Attached documentation (if applicable):

Signatures:

Chair of Accreditation Expert Panel

Prof. Dr. Hasan Çakır,

Accreditation Expert Panel Members

Assoc. Prof. Dr. Ia Mosashvili ,

Assoc. Prof. Dr. Lia Kurtanidze, signature

Assoc. Prof. Dr. Tinatin Gabrichidze, signature

Davit Tepnadze, signature