



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO  
**STUDIJŲ PROGRAMOS**  
*AVIACIJOS MECHANIKOS INŽINERIJA (valstybinis kodas –  
612H42001)*  
**VERTINIMO IŠVADOS**

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**EVALUATION REPORT**  
*OF AVIATION MECHANICS ENGINEERING (state code –  
612H42001)*  
**STUDY PROGRAMME**  
At VILNIUS GEDIMINAS TECHNICAL UNIVERSITY

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Išvados parengtos anglų kalba  
Report language - English

## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Aviacijos mechanikos inžinerija</i>
Valstybinis kodas	612H42001
Studijų sritis	Technologijos mokslai
Studijų kryptis	Aeronautikos inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	Nuolatinė (4)
Studijų programos apimtis kreditais	240
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Aeronautikos inžinerijos bakalauras
Studijų programos įregistravimo data	1997-05-19

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## INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	<i>Aviation Mechanics Engineering</i>
State code	612H42001
Study area	Technology Sciences
Study field	Aerospace Engineering
Type of the study programme	University studies
Study cycle	First
Study mode (length in years)	Full-time (4)
Volume of the study programme in credits	240
Degree and (or) professional qualifications awarded	Bachelor in Aeronautical Engineerring
Date of registration of the study programme	19-05-1997

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The Centre for Quality Assessment in Higher Education

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## **I. INTRODUCTION**

### ***1.1. Background of the evaluation process***

The evaluation of on-going study programmes is based on the **Methodology for evaluation of Higher Education study programmes**, approved by Order No 1-01-162 of 20 December 2010 of the Director of the Centre for Quality Assessment in Higher Education (hereafter – SKVC).

The evaluation is intended to help higher education institutions to constantly improve their study programmes and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: *1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) visit of the review team at the higher education institution; 3) production of the evaluation report by the review team and its publication; 4) follow-up activities.*

On the basis of external evaluation report of the study programme SKVC takes a decision to accredit the study programme either for 6 years or for 3 years. If the programme evaluation is negative such a programme is not accredited.

The programme is **accredited for 6 years** if all evaluation areas are evaluated as “very good” (4 points) or “good” (3 points).

The programme is **accredited for 3 years** if none of the areas was evaluated as “unsatisfactory” (1 point) and at least one evaluation area was evaluated as “satisfactory” (2 points).

The programme **is not accredited** if at least one of evaluation areas was evaluated as “unsatisfactory” (1 point).

### ***1.2. General***

The Application documentation submitted by the HEI follows the outline recommended by SKVC. Along with the self-evaluation report and annexes, no additional documents have been provided by the HEI before, during and/or after the site-visit.

### **1.3. Background of the HEI/Faculty/Study field/ Additional information**

Vilnius Gediminas Technical University (hereinafter – VGTU) was established on 1st September 1956 and it is one of the largest higher education institutions in Lithuania. It offers academic studies in technologies and engineering fields and has 10 faculties and more than 100 study programmes in all levels. The Aviation Institute was founded in 1993 and is since then lead by prof. habil. dr. Jonas Stankūnas. Specialists of all three study cycles are prepared in the Institute: Bachelor, Master and PhD. It consists of three departments: Aviation Technologies, Aviation Mechanics and Avionics; and Flight Training Unit (with aviation technical maintenance service (Organization 145) and Flight simulator training laboratory), Air Traffic Control Training Unit and Aviation Engineering Practical Training Depot (Organization 147). It also has an Aviation Specialists' Qualification Improvement Centre.

### **1.4. The Review Team**

The review team was assembled in accordance with the *Expert Selection Procedure*, approved by Order No 1-55 of 19 March 2007 of the Director of the Centre for Quality Assessment in Higher Education, as amended on 11 November 2011. The Review Visit to HEI was conducted by the team on 3<sup>rd</sup> February, 2015.

1. Prof dr. David Kennedy (team leader), Head of Mechanical Engineering Department, Dublin Institute of Technology, Ireland.
2. Dr. Rynno Lohmus, Head of the commission of Estonian Higher Education Quality Agency; Senior Researcher at Faculty of Science and Technology, Institute of Physics, University of Tartu, Estonia.
3. Prof dr. François Resch, Professor Emeritus, Institute of Engineering Sciences, University of Toulon, France.
4. Prof. dr. Jolanta Janutėnienė, Head of the Mechanical engineering Department, Faculty of Marine Engineering, Klaipėda University, Lithuania.
5. Dr. Vigantas Kumšlytis, Manager of materials engineering and technical analysis at Public Company “Orlen Lietuva”, Lithuania.
6. Mr. Mantas Kinderis, 3<sup>rd</sup> year student of *Car Electronics* study programme, Vilnius College of Technology and Design, Lithuania.

## II. PROGRAMME ANALYSIS

### 2.1. Programme aims and learning outcomes

Vilnius Gediminas Technical University offers in total 5 study programmes in the field of Aerospace Engineering and 2 of them were evaluated by the expert team: bachelor of *Aviation Mechanics Engineering* and master of *Aviation Mechanics Engineering*.

There are 4 aims and 27 learning outcomes (hereafter – LO) formulated for a bachelor study programme of *Aviation Mechanics Engineering*. Some of the programme aims and LO (which are distributed into 5 groups: knowledge, cognition, special skills, social abilities, personal abilities) are defined too broad and in a blurred manner. For example: “Z2. Knowledge of natural sciences: physics, chemistry. Phenomena and processes, and their mathematical models.” (SER page No. 9). It is not clear at what level this knowledge should be reached by a graduate of this study programme and what precisely one will be able to do. Therefore it is suggested to amend the LO by making them more specific and focussed to the study programme (hereafter – SP) of *Aviation Mechanics Engineering*. The overall aim of the programme is “to prepare aeronautics engineering bachelor specialists in demand in the labour market” (SER page No.30). This is too broad and not well linked to the SP.

The relationship between the study programme LO and the outcomes required for all first cycle degrees (based on Dublin Descriptors) is balanced. However, according to the “Study cycle descriptions” approved by the Order of the Minister of Science and education of Lithuania the “ability to carry out research” is not described in the SER. The Expert team would suggest to update the LO of the programme by including this description and also according to the EU document EASA 1321/2014.

The aims and learning outcomes are publicly accessible on both the national study information and qualification description system AIKOS and the website of Vilnius Gediminas Technical University(<https://medeine.vgtu.lt/programos/programa.jsp?fak=8&prog=102&sid=F&rus=U&kib=en>) both in Lithuanian and English versions. Therefore, the students from abroad can also get acquainted with the expected LO of the study programme.

The SER was produced by a group which included the Head of the Department of Aviation Mechanics, Head of the Department of Transport accidents and incidents at the Ministry of Transport of the Lithuanian Republic, aircraft accident and incident research manager and this gives confidence that the programme aims are based on the needs of the labour market.

The Study Programme Committee of 5 people is responsible for all the changes in the *Aviation Mechanics Engineering* study programme that needs to be implemented (for example, to take into account the feedback from students or social partners or to respond to the recommendations of previous evaluation). It was emphasized during the meeting with the administration staff that many changes including the review of aims and LO were carried out by the Study Programme Committee following the recommendations of the previous programme evaluation in 2012 (previously the aims and LO were too mixed and now rewritten).

There is a student representative included in the Committee who communicates the information about the changes implemented in the programme to other students. However, it is not very clear how the former students are informed about the changes after their feedback and programme managers should find more active ways to ensure that students are aware of all changes.

Expert team recommends to also strengthen the regular contacts with social partners in order to gain more wide information about labour market needs. It seems that this recommendation has not been taken into serious account from the previous external evaluation in 2012. However SP is in good relationship with the national science policy strategies.

The programme aims and LO are consistent with the requirements of the Ministry of Education and Science of Lithuania in terms of the type and level of qualification offered which is a University Bachelor degree on the basis of 240 ECTS.

The programme *Aviation Mechanics Engineering*, its learning outcomes, content and qualifications offered (Bachelor of Aeronautical Engineering) are compatible with each other.

## ***2.2. Curriculum design***

The curriculum design meets the legal requirements for a Bachelor degree study programme.

The study subjects appear to be evenly spread and their themes are not repetitive. There is an effort to ensure that the students are led from general courses to basic professional ones and thence to more complex professional courses.

The content of the subjects is consistent with a university Bachelor's degree. The content and methods of the subjects are appropriate for the achievement of the intended learning outcomes. However, during the site visit social partners recommended to adjust SP according to aircraft related EU document EASA 1321/2014. As the aviation mechanics topic is a fast developing one it would be advisable for the SP management to organise the discussions about the content and possible ways of improvement of SP with social partners more often. Currently there are just annual meetings that may not be adequate to implement necessary changes in case of more urgent need.

The scope of the programme (4years full-time) appears adequate to allow the achievement of the learning outcomes.

The uniqueness of the study programme was described by the administration staff as being oriented towards the technical maintenance of the aircraft. The SER (p. 12) mentions a similar study programme in another university in Lithuania – Kaunas University of Technology as well as similar programmes in other countries but no details nor analysis is provided in order to show the benefits or value in studying *Aviation Mechanics Engineering* programme. It was not clear for the Expert team during the site visit as well how this study programme is being analysed in comparison to other study programmes taking into account not only the general orientation of the programme but also comparing the subjects taught, arrangements of practice, etc. It would be advisable for the programme managers to cooperate more with other higher education institutions both locally and internationally in order to share the experience in providing similar study programmes and also to emphasize the strengths of *Aviation Mechanics Engineering* study programme.

The discussions with students and alumni showed their positive attitude towards the curriculum design of the programme, as they are able to provide their feedback at the end of each course on the subjects taught. Students are also able to recommend changes directly to their teachers or the Head of the department. However, neither students nor alumni could remember a concrete

situation of the changes implemented after their proposals and this once again proves the need of a more clear feedback system.

### **2.3. Teaching staff**

Staff members who meet the legal requirements in terms of qualifications and experience cover the programme. Of the 55 staff teaching the programme, 29 members have a scientific degree, which is above the legal requirement. One staff member has recently defended their PhD degree and 46% of all academic staff is below 40 years old.

The programme is taught by a team of lecturers whose activities together with the pedagogical work cover also scientific, contact research and company contracts activities. This ensures that the latest science and technological achievements in the industry are transferred to the students. There are many on-going projects, both national and international. However, the teaching staff research bases mostly in national level journals. Expert team would recommend an increase in the participation level at an international scale.

No subjects are taught in English for students in this programme except the English language course. During the site visit both students and teachers admitted the benefit in using English language during the lectures and it was also a wish from the side of social partners to receive graduates of *Aviation Mechanics Engineering* study programme with a better knowledge in English. Therefore the Expert team recommends to prepare at least some subjects or themes in the curriculum in English and also to engage foreign visiting lectures to this SP.

Several staff members have benefitted from international experience (scientific conferences, short term visits, etc.) in countries such as Great Britain, Germany and France. This should be further encouraged.

The qualifications of staff in terms of their degrees in their disciplines are certainly adequate. 47% of lectures have scientific degree. Some lectures have also a part-time engagement in companies. This should be further encouraged, as it is a direct link to modern industry. Many full-time teachers have industrial experience, but in many cases, it lacks the up-to-date approach. As the field of aviation mechanics engineering is a fast-developing one, some renewal of qualification in the industry would be welcomed and beneficial.

The students to staff average ratio is 3:1. This is great. However, from an economical point of view there is a risk for SP sustainability.

In SER it is described, that teaching staff visits seminars and scientific conferences. During site visit teaching staff stated that the financial resources for their visits to international scientific conferences is not sufficient. The average visit rate is once per 2 years. The Expert team would suggest for the SP management to find more resources for this issue and maybe to simplify the procedures for participation in scientific conferences and other training activities as too much paperwork was required for those wishing to apply.

Staff members have published a number of scientific papers. Typically 1 article per 2 years. However, mostly in local journals. Expert team recommends to increase the international scale.



#### **2.4. Facilities and learning resources**

VGTU Antanas Gustaitis Aviation Institute has 14 renovated and modern rooms of various sizes, the total area of which is 722 m<sup>2</sup>. All auditoriums are equipped with stationary multimedia equipment.

Several computer facilities and proper software has been implemented to perform tasks related to this SP. However, some serious shortcomings were noticed during the site visit. Teachers expressed their wish to have better software and newer equipment in laboratories they use. The missing technology is also a 3D printer. The Expert team recommends at least to include the theoretical topic of 3D printing to the curriculum of the SP as it is a fast-developing field and students can highly benefit from using this tool in their research. Therefore, the theoretical background lectures would be great to support this activity.

The practice base for the *Aviation Mechanics Engineering* students is quite outdated and needs upgrading as the practice lab containing real airplane elements is more than 30 years old. In addition, most airplane elements were fixed to the walls/tables and thus the students “hands-on” practical experience is lacking. During the site visit the students, alumni and social partners also declared the importance of the practical training during the studies. Unfortunately, the HEI practice base related with aircraft maintenance is not modern (e.g. wind tunnel and 3D printer is missing). Exception is maybe the unmanned aircraft systems (UAS) lab that provides students opportunity to learn new materials and aircraft design. The site visit confirmed that students have limited access to real airplane for modern practice as airplanes are based in the territory of Vilnius airport and difficult procedures needs to be performed for getting the approval to enter the field.

Student practice is an integral part of the VGTU philosophy for AME studies. Most practice involves working in the industry. This is performed in tight collaboration between companies and VGTU. Positive activity is related to the unmanned aircraft systems (UAS) lab that provides students opportunity to learn new materials and aircraft design. Still, this lab needs attention concerning personal health protection issues, e.g. fume cupboards and localised fume extract arms..

The students also have an opportunity to participate in mobility programmes outside Lithuania via Erasmus exchange programme in several European countries. Unfortunately, the number of participating students is not too high (0,35% of students during last 5 years). The common reason provided to justify those low numbers was usually the employment of students, even at the bachelor level. However, the Expert team would recommend to the programme management to pay special attention to this issue and to develop a plan on how to increase the internationalisation of the AME study programme.

VGTU lectures and students have access to central libraries. In addition, students have possibility to use the reading room. There are sufficient amounts of relevant periodical publications and textbooks. Students also have access to several electronic research databases.

#### **2.5. Study process and students' performance assessment**

The admission requirements are based on national guidelines from Lithuanian Association of Higher Schools Joint Admission.

The AME SP includes several theoretical and technical subjects needed for the AME graduates. Therefore, the higher drop-off (mostly in first year) rate ~42% is understandable as the entrant's educational background is different and not all students are able to deal with the level of physics or mathematics. Programme managers should clarify the drop-off reasons and in cases of need, provide additional supporting lectures, consultations, tutorials etc.

Students are encouraged to participate in projects jointly with teachers. Students have opportunity to present their results in Lithuanian young scientist's conference "Aviation Technologies".

VGTU has established links with European partners to enable students to participate in student mobility programmes. However, only 20 students have participated in such programmes during the 5 year period. This falls far short of the European target of 20% of all students should study abroad by 2020. One would hope for an even higher target for students of AME. This topic needs much more attention to stimulate the mobility.

There are regular meetings about SP quality issues; at least twice per year. Students have their representative in those meetings. Also, during the site visit students confirmed their good relationship with SP management. All their problems are treated individually.

At the end of each semester students have opportunity to fill the questionnaire about the quality of lectures. Most of the students participate in those surveys.

In the SER (p. 25) the programme managers declare, that graduates find employment easily. During the site visit, the social partners (employers) expressed themselves to be almost satisfied with the graduates produced by VGTU. They expressed their will to adjust SP according to EU document EASA 1321/2014. The final thesis quality needs improvement as in most cases the uncertainty rate was not considered into the analysis part.

## ***2.6. Programme management***

VGTU has allocated responsibilities as between the Dean's Office and Head of the Departments and these arrangements appear adequate. While the management responsibilities are allocated, the prevailing philosophy of the Department is to involve teachers in discussing issues. The university has also developed its mechanism for quality assurance of all programmes whereby a self-assessment is performed according to needs and the programme is updated accordingly.

The quality assurance mechanisms make provision for the collection and analysis of data on the implementation of the programme. VGTU has implemented international and European standard LST EN ISO 9001:2008 and the requirements of EUA higher education quality assurance standard. The mechanisms include an anonymous survey of student opinions on each subject and an analysis of student performance in each examination. The data is discussed by teachers at a Departmental meeting and changes to the programme are agreed.

There has been some improvements made according to previous expert comments and suggestions. However, some bottleneck e.g. students mobility has remained. Also, Department needs to address point 4 (from previous external evaluation report) dealing with the need for more practical activities on aircraft equipment for aviation programmes. It is still evident that this issue has not been sorted out and the Department needs to train students in the correct use of standard tools and structure laboratory activities so that all students know what is expected and

are all receiving the same training and learning experience. Department also needs to implement a structured and planned access to aircraft under its control for all students.

Social partners involvement is not sufficient as some AME specific subjects are missing. HEI should follow EU document EASA 1321/2014. During the site visit, social partners outlined their will to participate more actively in the SP development process. SP management should improve the connection with alumni's and stakeholders. The *Aviation Mechanics Engineering* study programme is very important for Lithuanian economy. It has a very considerable advantage in the fact that employment opportunities are very high in this field, and therefore employers have a high demand for qualified graduates. Therefore the quality of the programme should be of a top level.

A scheme of quality assurance includes provision for the review of every programme according to needs. However, during the meeting with students they claimed no information about the feedback based on the questionnaires filled and it shows a lack of communication between the programme managers and students. Those issues should be addressed as soon as possible.

### **III. RECOMMENDATIONS**

1. Programme managers need to address point 4 (from previous evaluation report) dealing with the need for more practical activities on aircraft equipment for aviation programmes. It is still evident that this issue has not been sorted and the Department need to train students in the correct use of standard tools and structure laboratory activities so that all students know what is expected and are all receiving the same training and learning experience.
2. Although some laboratory equipment is up to standard, other equipment needs to be updated. A wind tunnel should be fully assessable to students and adapted to aviation experimental needs. Students should have access to real planes.
3. Coordinate Measuring Machine and test tools such as NDT equipment are required for the programmes development plan.
4. Greater support and facilitation of staff to undertake research, personal development and overseas travel and conference attendance should be implemented.
5. Participation of social partners and alumni should be enhanced in the various aspects of the programme: strategy, lecturing, learning outcomes.
6. Personal care facilities (e.g. ventilation) needs attention in most labs.
7. The ratio teachers/students is excellent as the number of students is low. But the teacher contact workload is high and could be decreased to allow teachers to perform more research at international level.

## V. SUMMARY

The *Aviation Mechanics Engineering* bachelor study programme of the Antanas Gustaitis Aviation Institute (AGAI) of the Vilnius Gediminas Technical University (VGTU) was evaluated on February 3, 2015. The general picture is positive. The visit was well prepared and organized. Meetings and discussions with administrative and academic staff, students, alumni and social partners were direct and instructive. The Self-evaluation report provides a fair and complete description of the study programme. The *Aviation Mechanics Engineering* study programme supports the regional development and the graduate employment rate is excellent.

Previous external evaluation was performed in April 2012. The study programme was accredited for three years until August 2015. The Institute, taking into account the recommendations of the 2012 report, performed an internal self-evaluation assessment in 2013.

Since then, improvement is noticeable. Nevertheless, the elaboration of learning outcomes must be adjusted. An effort is still necessary to understand the full relevance of this framework, including participation of stakeholders (social partners from industry, alumni and students).

The Expert team saw a general progression but the following points require careful attention: updating facilities and laboratory equipment, teaching evaluation feedback from students, number of students admitted and engagement of social partners. This report contains recommendations to help improving the programme.

## VI. GENERAL ASSESSMENT

The study programme *Aviation Mechanics Engineering* (state code – 612H42001) at Vilnius Gediminas Technical University is given **positive** evaluation.

*Study programme assessment in points by evaluation areas.*

No.	Evaluation Area	Evaluation of an area in points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Teaching staff	4
4.	Facilities and learning resources	2
5.	Study process and students' performance assessment	3
6.	Programme management	2
	<b>Total:</b>	<b>17</b>

\*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;

2 (satisfactory) - meets the established minimum requirements, needs improvement;

3 (good) - the field develops systematically, has distinctive features;

4 (very good) - the field is exceptionally good.

Grupės vadovas: Team leader:	Prof. dr. David Kennedy
Grupės nariai: Team members:	Dr. Rynno Lohmus
	Prof. dr. François Resch
	Prof. dr. Jolanta Janutėnienė
	Dr. Vigantas Kumšlytis
	Mr. Mantas Kinderis

**VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO PIRMOSIOS PAKOPOS  
STUDIJŲ PROGRAMOS AVIACIJOS MECHANIKOS INŽINERIJA (VALSTYBINIS  
KODAS – 612H42001) 2015-03-16 EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-53-11  
IŠRAŠAS**

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**VI. APIBENDRINAMASIS ĮVERTINIMAS**

Vilniaus Gedimino technikos universiteto studijų programa *Aviacijos mechanikos inžinerija* (valstybinis kodas – 612H42001) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	3
2.	Programos sandara	3
3.	Personalas	4
4.	Materialieji ištekliai	2
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	2
	<b>Iš viso:</b>	<b>17</b>

\* 1 - Nepatenkinamai (yra esminių trūkumų, kuriuos būtina pašalinti)

2 - Patenkinamai (tenkina minimalius reikalavimus, reikia tobulinti)

3 - Gerai (sistemiškai plėtojama sritis, turi savitų bruožų)

4 - Labai gerai (sritis yra išskirtinė)

&lt;...&gt;

**V. SANTRAUKA**

Vilniaus Gedimino technikos universiteto (VGTU) Antano Gustaičio aviacijos institute (AGAI) vykdoma bakalauro studijų programa *Aviacijos mechanikos inžinerija* buvo įvertinta 2015 m. vasario 3 d. Bendras vaizdas yra pozityvus. Vizitui buvo gerai pasirengta, jis gerai organizuotas. Susitikimai bei diskusijos su administraciniu ir akademinio personalu, studentais, absolventais ir socialiniais partneriais buvo tiesioginiai ir konstruktyvūs. Savianalizės suvestinėje pateiktas sąžiningas ir išsamus šios studijų programos aprašas. Studijų programa *Aviacijos mechanikos inžinerija* prisideda prie regiono plėtros, jos absolventų įsidarbinamumo lygis labai aukštas.

Ankstesnis išorinis vertinimas buvo atliktas 2012 m. balandžio mėn. Ši studijų programa buvo akredituota trejiems metams – iki 2015 m. rugpjūčio mėn. Atsižvelgdamas į 2012 m. vertinimo išvadų rekomendacijas, Institutas 2013 m. atliko vidinį įsivertinimą.

Nuo to laiko atlikti patobulinimai yra pastebimi, tačiau būtina pakoreguoti numatomus studijų rezultatus. Vis dar reikia pastangų siekiant suprasti šios programos aktualumą, įskaitant socialinių dalininkų (sektoriaus socialinių partnerių, absolventų ir studentų) dalyvavimo svarbą.

Ekspertų grupė mato bendrą pažangą, bet reikia atkreipti dėmesį į šiuos punktus: patalpų ir laboratorinės įrangos atnaujinimas, studentų grįžtamasis ryšys apie dėstymą, priimamų studentų

skaičius ir socialinių partnerių dalyvavimas. Šiose vertinimo išvadose pateiktomis rekomendacijomis siekiama pagerinti *Aviacijos mechanikos inžinerijos* studijų programą.

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### III. REKOMENDACIJOS

1. Programos vadovai turi spręsti ankstesnio vertinimo išvadų 4 punkte nurodytą problemą – didinti praktinių užsiėmimų, susijusių su aviacijos programoms skirta orlaivių įranga, skaičių. Akivaizdu, kad šis klausimas vis dar neišspręstas; katedra turi mokyti studentus teisingai naudotis standartiniais įrankiais ir taip organizuoti laboratorinę veiklą, kad visi studentai žinotų, ko tikimasi, ir kad visiems būtų suteiktos vienodos žinios ir vienoda patirtis.
2. Nors kai kuri laboratorinė įranga atitinka standartus, likusiąją reikia atnaujinti. Studentams turi būti visiškai prieinamas vėjo tunelis, pritaikytas aviacijos eksperimentams. Studentams turi būti užtikrinta galimybė naudotis tikrais lėktuvais.
3. Į programos tobulinimo planą reikia įtraukti koordinacinę matavimo mašiną ir testavimo priemones, pavyzdžiui, NDT įrangą.
4. Reikėtų labiau skatinti darbuotojus atlikti mokslinius tyrimus, siekti asmeninio tobulėjimo, vykti į užsienį, dalyvauti konferencijose ir padėti jiems tai daryti.
5. Reikėtų raginti socialinius partnerius ir alumnus dalyvauti programos veikloje įvairiais aspektais: dėstyti, rengti strategiją ir formuluoti numatomus studijų rezultatus.
6. Reikia atkreipti dėmesį į daugelio laboratorijų asmeninės apsaugos priemones (pvz., vėdinimą).
7. Dėstytojų ir studentų santykis yra puikus, kadangi studentų nedaug. Bet dėstytojų kontaktinių valandų skaičius yra didelis, ir jį būtų galima sumažinti, kad dėstytojai turėtų daugiau laiko tarptautinio lygmens moksliniams tyrimams atlikti.

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Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

Vertėjos rekvizitai (vardas, pavardė, parašas)