

### **ASIIN Seal & European Labels**

# Accreditation Report in combination with preceding Evaluation Procedure

National Engineering Diploma (Master) programmes

Computer Engineering

Industrial Engineering

Provided by **Université Libre de Tunis, Tunisia** 

Version: 27 June 2025

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### **A About the Accreditation Process**

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for <sup>1</sup>	Previous accreditation (issuing agency, validity)	Involved Technical Commit- tees (TC) <sup>2</sup>
Computer Engineering	قینطولا قداهشلا سدنهمل National en- gineering di- ploma	ASIIN, EUR- ACE® Label	_	04
Industrial Engineering	قینطولا قداهشلا سدنهمل National en- gineer-ing diplo-ma	ASIIN, EUR- ACE® Label	_	06

Date of the contract: 31.05.2023

Date of the onsite visit of the preceding evaluation procedure: 08./09.11.2022

Date of the peer team's statement concerning the accreditation: 01.09.2023

### Peer panel:

Dr. Maher Aidi, Sfax, Tunisia

Prof. Dr. Bettina Harriehausen-Mühlbauer, Hochschule Darmstadt

Dr. Julian Popp, MHP Management- und IT-Beratung GmbH

Meriem Ben Salah, Industrial Engineering Student at EPI Sousse, Tunisia

Prof. Dr. Dieter Wloka, Universität Kassel

<sup>1</sup> ASIIN Seal for degree programmes; EUR-ACE® Label: European Label for Engineering Programmes

<sup>&</sup>lt;sup>2</sup> TC: Technical Committee for the following subject areas: TC 04 – Committees 04 – Informatics/Computer Science, 06 – Engineering and Management, Economics

Representative of the ASIIN headquarter: Dr. Natalia Vega

**Responsible decision-making committee:** Accreditation Commission for Degree Programmes

### Criteria used:

European Standards and Guidelines as of May 15, 2015

ASIIN General Criteria as of December 07, 2021

Subject-Specific Criteria of Technical Committee 04 – Informatics/Computer Science as of March 29, 2018

Subject-Specific Criteria of Technical Committee 06 – Engineering and Management, Economics as of September 20, 2019

### **B** Characteristics of the Degree Programmes

a) Name	Final degree (origi- nal/English translation)	b) Areas of Special- iza- tion	c) Corre- spond- ing level of the EQF <sup>1</sup>	d) Mode of Study	e) Dou- ble/Joint Degree	f) Dura- tion	g) Credit points/unit	h) Intake rhythm & First time of offer
Computer Enginee- ring	مداهشراا عزيطواا سدنهما National engineer- ing di- ploma	Computer Enginee- ring	7	Full time	No	6 Semes- ter	180 ECTS	SEPTEM- BER IN- TAKE /2001
Industrial Enginee- ring	قداهشلا غيزطولاً سدنهمل National engineer- ing di- ploma	Industrial Enginee- ring	7	Full time	No	6 Semes- ter	180 ECTS	SEPTEM- BER IN- TAKE /2014

### **Preliminary Note**

The following paragraphs are based on the *evaluation report* concerning the named degree programmes dated from February 23, 2023, in particular the results of the experts' analysis and assessment summarized in section F of the evaluation report.

This report is in line with the ASIIN General Criteria and the Subject-Specific Criteria (SSC) of the relevant Technical Committees 04 – Informatics/Computer Science and 06 – Engineering and Management, Economics, respectively. Hence, part 1 of the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG 1.1 to 1.10) is fully covered in the combined evaluation and accreditation procedure, as in the respective conclusions of the experts and the Technical Committees (sec. E – G) and in the final decision of the Accreditation Commission (sec. G).

Since the evaluation procedure from the onset is tailored to a potentially ensuing accreditation, the results of the evaluation are summarized accordingly. Thus, it is ensured that they could be easily converted into a proposal of the review team for the Accreditation Commission's final decision on the accreditation of the programmes. Consequently, the accreditation procedure has been completed in a shortened manner, in particularly waiving the regular audit visit of the expert group. A progress report of the HEI in response to the evaluation report, though, is a regular part of that procedure and, as a rule, will have been regarded in the expert's evaluative assessment.

<sup>&</sup>lt;sup>3</sup> Accessible on the internet: <a href="https://www.enqa.eu/wp-content/uploads/2015/11/ESG">https://www.enqa.eu/wp-content/uploads/2015/11/ESG</a> 2015.pdf (Access: 05.11.2022)

# C Results of the Evaluation Procedure concerning the ASIIN Seal

In the evaluation report, the analysis of the expert group has resulted in the following statement regarding the fulfilment of the ASIIN criteria:

ASIIN General		Meeting th	e Standards	
Criteria / Sub- ject-Specific Cri- teria	fully sufficient	sufficient minor reserva- tions / sugges- tions	partly sufficient major reserva- tions	not sufficient critical reserva- tions
1 Degree program	me: Concept, Conte	ent & Implementati	on	
1.1 Objectives and learning out- comes (intended qualification pro- file)				x
1.2 Title of the degree programme	х			
1.3 Curriculum (including SSC 04/06 for Mas- ter's pro- grammes)				х
1.4 Admission requirements		Х		
1.5 Workload & credit points				х
1.6 Didactics and Teaching Meth- odology	х			

ASIIN General	Meeting the Standards					
Criteria	fully sufficient	sufficient	partly sufficient not sufficient			
	July Sufficient	minor reserva-	major reserva-	critical reserva-		
		tions/sugges-	tions	tions		
		tions		tions .		
2 Exams: System,	Concept and Organ	isation				
2 Exams: Sys-				x		
tem, Concept						
and Organisation						
3 Resources						
3.1 Staff and				х		
staff develop-						
ment						
3.2 Funds and	х					
equipment						
4 Transparency an	nd Documentation					
4.1 Module de-	х					
scriptions						
4.2 Diploma and			х			
Diploma Supple-						
ment						
4.3 Relevant	х					
rules						
5 Quality Management: Quality Assessment and Development						
5 Quality Man-		-	х			
agement: Qual-						
ity Assessment						
and Develop-						
ment						

The results of the evaluation procedure have been categorically framed according to the possible outcomes of accreditation procedures. Hence, these results have been addressed as "critical concerns" equivalent to "conditions" in an accreditation procedure in case the experts found serious deficits, "major recommendations" as equivalent to "requirements",

if they identified shortcomings they consider significant, but also repairable in a reasonable amount of time, and, finally, "minor recommendations" analogous to "recommendations" in case of supporting clues for the future development of the programme/s.

In accordance with this translation scheme, "critical concerns", "major" and "minor recommendations" of the evaluation report are translated in the following list of possible requirements and recommendations:

### (Possible) Conditions

### For both degree programmes

- C1. (ASIIN 1.1, 1.3) Revise and specify the objectives and programme-related learning outcomes in accordance with the Master level aimed for and consonant with the contents of the programme. Match the programme learning objectives with the respective SSC. Include the feedback of the major stakeholders when formulating the programme learning outcomes. Communicate them and them accessible to the stakeholders as well.
- C2. (ASIIN 1.3) Revise and update the curriculum according to the scientific and technological state-of-the-art at Master's level (EQF level 7).
- C3. (ASIIN 1.3, 2) Raise the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project parallel to the overall level of the programmes in order to match Master level standards.
- C4. (ASIIN 1.3, 1.6, 2) Increase the academic level of the thesis, which is part of the Graduation Research Project, by a higher level of training for these activities. Thereby, ensure that students are better guided concerning academic work and be familiarised with academic research methods writing.
- C5. (ASIIN 1.5) Establish and implement a monitoring mechanism for student workload in order to ensure the timely identification and rectification of significant discrepancies.
- C6. (ASIIN 3.1) Increase the number of permanent staff and to develop a strategy to avoid high fluctuation of personnel.

### (Possible) Requirements

### For both degree programmes

- A 1. (ASIIN 1.4) Establish rules concerning the recognition of learning achievements at other universities at home or abroad for incoming students that start their study at ULT.
- A 2. (ASIIN 3.1) Enhance the qualification of the teaching staff.
- A 3. (ASIIN 4.2) Issue a Diploma Supplement in line with the ECTS User's Guide entailing additional information about the learning objectives, structure and contents of the study programme as well as the individual performance. Apart from the overall grade, there needs to be an indication of the grade distribution within the relevant student cohort.
- A 4. (ASIIN 5) Implement feedback cycles in terms of anonymous evaluations, surveys etc.

### (Possible) Recommendations

### For both degree programmes

- E 1. (ASIIN 1.3) It is recommended to integrate more electives into the programmes in order to ensure different focus directions and broaden subject-related competences as well as the development of individual interests and interdisciplinary competences.
- E 2. (ASIIN 1.3) It is recommended to intensify and promote the training of soft skills in the courses in order to further essential competences for the future career.
- E 3. (ASIIN 1.3) In order to foster the mobility of both students and the teaching staff, it is recommended to enhance the English language proficiency of students and lecturers (e.g. providing more courses in English or having guest lecturers from partner universities).
- E 4. (ASIIN 1.4) It is recommended to add English and French proficiency tests after the entrance exam to assess the student's levels and establish the courses based on their different levels (American testing level A, B, and C). In addition, international tests should be offered to see the progress of the students over the years (TOEIC).
- E 5. (ASIIN 3.1, 3.2) It is recommended to allow lecturers to regularly spend research time (e.g. "sabbatical") in order to enhance the research capacity of the departments.

- E 6. (ASIIN 3.2) It is recommended to definitely improve the study materials (e.g. books referenced in the literature section of modules in the module handbook) in the library.
- E 7. (ASIIN 3.2) It is recommended to improve and guarantee the quality of the internet connection inside the university.
- E 8. (ASIIN 5) It is recommended to increase the awareness of supporting disabled. This include a barrier-free teaching and studying environment (e.g. building).
- E 9. (ASIIN 5) It is recommended to collect programme- and course related statistical data in order to facilitate meaningful analyses of the data and targeted follow-up measures.

### For the Industrial Engineering programme

E 10. (ASIIN 1.3) It is recommended to add specialities such as quality and audit or maintenance and diagnosis of industrial systems starting from the second year (third or fourth semester) to put students in a specific range of studies and also in the respective companies which give them a clear vision about their graduation project field and in the future their job titles.

# D Progress Report of the Higher Education Institution (21.03.2023)

After the completion of the preceding evaluation, the institution provided a detailed statement ("Modifications Statement") as well as the following additional documents:

### **General documents:**

- Annex-3-ULT-University-Rulebook.pdf
- Annex-4-ULT-Exams-Rulebook.pdf
- JORT-Alumni.png
- ULT-Guide Labo-Ateliers.pdf
- ULT-Library-Online-Ressources.pdf

### For the NED Computer Engineering:

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- LT-Computer-Eng-MH-052023.pdf
- ULT-Computer-Eng-Modificfation-Report052023.pdf
- ULT-Computer-Eng-PO-LO052023.pdf
- ULT-Computer-Eng-Self-Study-Survey052023.pdf
- ULT-Diploma-Supplement-Computer-Eng.pdf

### For the NED Industrial Engineering:

- ULT-Diploma-Supplement-Industrial-Eng.pdf
- ULT-Industrial Eng-Self-study-Survey052023.pdf
- ULT-Industrial-Eng-MH-052023.pdf
- ULT-Industrial-Eng-Modifications Report052023.pdf
- ULT-Industrial-Eng-PO-LO052023.pdf

# E Assessment of the experts based on ULT's progress report (01.09.2023)

The table below shows how the experts judge the changes and modifications, the ULT has presented and (partly) implemented in the meantime according to its progress report.

There is no further commenting on the experts' part concerning those criteria, which have been found adequately met in the evaluation procedure.

### **Possible Prerequisites**

### For both degree programmes

C 1. (ASIIN 1.1, 1.3) Revise and specify the objectives and programme-related learning outcomes in accordance with the Master level aimed for and consonant with the contents of the programme. Match the programme learning objectives with the respective SSC. Include the feedback of the major stakeholders when formulating the programme learning outcomes. Communicate them and make them accessible to the stakeholders as well.

<b>Initial Treatment</b>	
Peers	fulfilled
	Justification: A specific description document now lists the objec-
	tives and learning outcomes. In the description of the objectives,
	it shows a good picture of the target of the programmes. Further-
	more, the learning outcomes have been clearly specified. How-
	ever, these documents need to become part of the overall docu-
	mentation for both programmes and therefore be made availa-
	ble for the students or potential future students.
	As this is closely connected to the experts' concerns regarding
	the curriculum (ASIIN criterion 1.3), it shall be treated in connec-
	tion with the assessment of those concerns.

C 2. (ASIIN 1.3) Revise and update the curriculum according to the scientific and technological state-of-the-art at Master's level (EQF level 7).

Initial Treatment	Initial Treatment		
Peers	(partially) fulfilled		
	Justification: Improvements have been made in the curricula and		
	taken note of in the module handbooks (including state-of-the-		
	art literature). However, the experts point out that there remain		

doubts regarding the upgrade of the quality level of the programmes to EQF 7. It needs to be reasonably explained and appropriately evidenced how the curriculum is updated in such manner that students will achieve a level 7 (Master's) qualification in their disciplinary field. The peers recommend this as a (slightly modified) precondition for resuming the accreditation procedure.

C 3. plus C 4. (ASIIN 1.3, 2) Raise the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project parallel to the overall level of the programmes in order to match Master level standards. Introduce a higher level of training for these activities to ensure that students are better guided concerning academic work and be familiarised with academic research methods writing.

### **Initial Treatment** not fulfilled Peers Justification: There is no detailed description of the learning content of the final research project in the modified version of the handbook module. In addition, no evidence other than the exams rulebook and university rulebook is brought up on how the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project have been raised. In particular, no practical evidence has been shown, like an example of a graduation research project, after the new changes. In summary, there are still significant concerns regarding the quality level of the exams and thesis. Moreover, preparation/training for the graduation project is still not a clear part of the curriculum in both programmes. Didactical procedures to help students produce quality work during projects and thesis compilation is unclear. The introduction of a digital tool to help with the research project seems to be done, but it has not been introduced in the educational programme. The experts therefore suggest converting the potential into an actual condition for continuing the accreditation procedure.

C 5. (ASIIN 1.5) Establish and implement a monitoring mechanism for student workload in order to ensure the timely identification and rectification of significant discrepancies.

Initial Treatment		
Peers	partially fulfilled.	

Justification: An actual assessment of student workload monitoring has been successfully carried out, yet a "mechanism" to do this on a routine basis still needs to be implemented in order to ensure a timely response to discrepancies in the future as well. A onetime assessment of student workload is not enough to fulfil the requirement. A "mechanism" is meant to carry this as a regular QA instrument in the future. However, the peers consider the issue not that serious. It could be a "possible requirement" after the resumption of the procedure.

C 6. (ASIIN 3.1) Increase the number of permanent staff and to develop a strategy to avoid high fluctuation of personnel.

Initial Treatmen	Initial Treatment			
Peers	not fulfilled Justification: Apart from the pure announcements of ULT, no evidence for new staff joining the university has been provided so far. Furthermore, there is no strategy formulated to avoid the high fluctuation. Hence, the experts consider this a further condition for the continuation of the accreditation procedure.			

### **Possible Requirements**

### For both degree programmes

A 1. (ASIIN 1.4) Establish rules concerning the recognition of learning achievements at other universities at home or abroad for incoming students that start their study at ULT.

<b>Initial Treatment</b>	
Peers	fulfilled
	Justification: No evidence of such a recognition process has been
	given. However, it is noted that the rules for recognition of ac-
	quired engineering competences gained in national and interna-
	tional universities are defined by Tunisian national regulations, as
	the Ministry of Higher Education is responsible for the recogni-
	tion of national diplomas. Separate regulations by individual HEIs
	are therefore dispensable.

A 2. (ASIIN 3.1) Enhance the qualification of the teaching staff.

Initial Treatment	
Peers	partially fulfilled Justification: Regarding external training or enhancement of the qualification of staff, this will also require budget and time. Apart from the management's commitment to strengthen the human resources, only one example of a Siemens certification is given. Without further evidence, the experts consider this a "possible requirement" after a continuation of the procedure.

A 3. (ASIIN 4.2) Issue a Diploma Supplement in line with the ECTS User's Guide entailing additional information about the learning objectives, structure and contents of the study programme as well as the individual performance. Apart from the overall grade, there needs to be an indication of the grade distribution within the relevant student cohort.

Initial Treatment			
Peers	fulfilled Justification: Diploma supplement drafts are shown for each programme according to the requirements.		

A 4. (ASIIN 5) Implement feedback cycles in terms of anonymous evaluations, surveys etc.

Initial Treatment			
Peers	partially fulfilled Justification: A feedback process has been established and implementation plans are in place. The experts would like to see first-hand evidence that the proposed feedback cycles have been implemented successfully and therefore recommend maintaining this requirement until relevant evidence for this has been provided.		

### **Possible Recommendations**

### For both degree programmes

E 1. (ASIIN 1.3) It is recommended to integrate more electives into the programmes in order to ensure different focus directions and broaden subject-related competences as well as the development of individual interests and interdisciplinary competences.

Initial Treatment						
Peers	adequately addressed					
	Justification: Based on the change reports and updated module					
	handbooks, there is now more choice for electives and the op-					
	tions are better fitting to both programmes.					

E 2. (ASIIN 1.3) It is recommended to intensify and promote the training of soft skills in the courses in order to further essential competences for the future career.

Initial Treatment			
Peers	adequately addressed for industrial engineering programme insufficiently addressed for computer engineering programme Justification: Based on the change reports and the updated module handbooks, the soft skill training could now be said part of the curriculum in the Industrial Engineering programme. However, there is no evidence, that the curriculum in the Computer Engineering programme has undergone a similar adjustment. Hence, the experts propose to maintain a respective recommendation for this programme.		

E 3. (ASIIN 1.3) In order to foster the mobility of both students and the teaching staff, it is recommended to enhance the English language proficiency of students and lecturers (e.g. providing more courses in English or having guest lecturers from partner universities).

Initial Treatment	Initial Treatment			
Peers	not addressed satisfactorily Justification: The experts find some evidence for English language improvement of students but they are not convinced about this with regard to teachers or arrangement of guest lecturers. Consequently, they would like to leave this issue to the experts of the re-accreditation procedure, who then should check the progress, which ULT has made in this respect.			

E 4. (ASIIN 1.4) It is recommended to add English and French proficiency tests after the entrance exam to assess the student's levels and establish the courses based on their different levels (American testing level A, B, and C). In addition, international tests should be offered to see the progress of the students over the years (TOEIC).

Initial Treatment			
Peers	not addressed satisfactorily Justification: TOEIC test preparation is mentioned in the module handbooks and proficiency written tests in English, and French languages will be added to the existing Interview during the admission process. As ULT has not yet implemented written language tests in French and English, the experts consider this recommendation to be maintained.		

E 5. (ASIIN 3.1, 3.2) It is recommended to allow lecturers to regularly spend research time (e.g. "sabbatical") in order to enhance the research capacity of the departments.

Initial Treatment						
Peers	not addressed satisfactorily					
	Justification: There is only proof that the staff will be publishing					
	their research articles and collaborating with their respective re-					
	search lab partners, but there is no confirmation that the univer-					
	sity will allow them to take their research period.					
	As a result, the peers suggest maintaining this recommendation.					

E 6. (ASIIN 3.2) It is recommended to definitely improve the study materials (e.g. books referenced in the literature section of modules in the module handbook) in the library.

Initial Treatment			
Peers	adequately addressed Justification: The new access to the Scientific Literature Databases (ScolarVOX) is made transparent.		

E 7. (ASIIN 3.2) It is recommended to improve and guarantee the quality of the internet connection inside the university.

Initial Treatment			
Peers	not addressed satisfactorily Justification: No clear evidence can be found in the documents. The experts would recommend to leave it to the review team of the re-accreditation procedure to check whether the situation has been improved sustainably.		

E 8. (ASIIN 5) It is recommended to increase the awareness of supporting disabled. This include a barrier-free teaching and studying environment (e.g. building).

<b>Initial Treatment</b>	Initial Treatment			
Peers	adequately addressed Justification: The documents include modification plans. According to ULT's statement, "The campus new main building [] was built following the regulations to support disabled people". In addition, it reads "The technical maintenance staff will be urged to satisfy immediate need for disabled people mainly the re-programming of the Elevator operation when needed".  In summary, the experts consider this to appropriately dealing with the issue concerned.			

E 9. (ASIIN 5) It is recommended to collect programme- and course related statistical data in order to facilitate meaningful analyses of the data and targeted follow-up measures.

<b>Initial Treatment</b>	Initial Treatment			
Peers	not addressed satisfactorily Justification: The average measured time for self-study is indicated in the study plan as a reference for the students. However, statistical data as addressed in the recommendation do consist of more than that, so the recommendation should be maintained.			

### For the Industrial Engineering programme

E 10. (ASIIN 1.3) It is recommended to add specialities such as quality and audit or maintenance and diagnosis of industrial systems starting from the second year (third or

fourth semester) to put students in a specific range of studies and also in the respective companies which give them a clear vision about their graduation project field and in the future their job titles.

Initial Treatment			
Peers	not addressed satisfactorily Justification: No new evidence has been provided by ULT regarding the issue addressed in the recommendation. Thus, it should be maintained without alteration.		

### F Summary: Peer recommendations (01.09.2023)

Taking into account the progress report submitted by ULT, the experts summarize their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum dura- tion of accredi- tation
NED/Ma Computer Engineering	Suspension			
NED/Ma Industrial Engineering	Suspension			

### **Conditions**

### For both degree programmes

- C 1. (ASIIN 1.1, 1.3) Communicate the revised and specified objectives and programmerelated learning outcomes to the major stakeholders and make them publicly accessible.
- C 2. (ASIIN 1.3) Explain and evidence reasonably how the curriculum is updated in such manner that students will achieve a level 7 (Master's) qualification in their disciplinary field.
- C 3. (ASIIN 1.3, 1.6, 2) Provide evidence how the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project have been raised in order to match Master level standards. Demonstrate that a higher level of training for these activities has been introduced to ensure that students are better guided concerning academic work and be familiarised with academic research methods writing.
- C 4. (ASIIN 3.1) Increase the number of permanent staff and to develop a strategy to avoid high fluctuation of personnel.

### **Possible Requirements**

### For both degree programmes

- A 1. (ASIIN 1.5) Establish and implement a monitoring mechanism for student workload in order to ensure the timely identification and rectification of significant discrepancies.
- A 2. (ASIIN 3.1) Enhance the qualification of the teaching staff.
- A 3. (ASIIN 5) Implement feedback cycles in terms of anonymous evaluations, surveys etc.

### **Possible Recommendations**

### For both degree programmes

- E 1. (ASIIN 1.3) In order to foster the mobility of both students and the teaching staff, it is recommended to enhance the English language proficiency of students and lecturers (e.g. providing more courses in English or having guest lecturers from partner universities).
- E 2. (ASIIN 1.4) It is recommended to add English and French proficiency tests after the entrance exam to assess the student's levels and establish the courses based on their different levels (American testing level A, B, and C). In addition, international tests should be offered to see the progress of the students over the years (TOEIC).
- E 3. (ASIIN 3.1, 3.2) It is recommended to allow lecturers to regularly spend research time (e.g. "sabbatical") in order to enhance the research capacity of the departments.
- E 4. (ASIIN 3.2) It is recommended to improve and guarantee the quality of the internet connection inside the university.
- E 5. (ASIIN 5) It is recommended to collect programme- and course related statistical data in order to facilitate meaningful analyses of the data and targeted follow-up measures.

### For the Computer Engineering programme

E 6. (ASIIN 1.3) It is recommended to intensify and promote the training of soft skills in the courses in order to further essential competences for the future career.

### For the Industrial Engineering programme

E 7. (ASIIN 1.3) It is recommended to add specialities such as quality and audit or maintenance and diagnosis of industrial systems starting from the second year (third or fourth semester) to put students in a specific range of studies and also in the respective companies which give them a clear vision about their graduation project field and in the future their job titles.

### **G** Comment of the Technical Committees

### **Technical Committee 04 – Informatics/Computer Science (28.11.2023)**

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee discusses the case and follows the vote of the experts without change.

The Technical Committee 04 – Informatics/Computer Science recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum dura- tion of accredi- tation
NED/Ma Computer Engineering	Suspension			

# Technical Committee 06 – Engineering and Management, Economics (23.11.2023)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee discusses the case and follows the vote of the experts without change.

The Technical Committee 06 – Engineering and Management, Economics recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum duration of accreditation
NED/Ma Industrial Engineering	Suspension			

# H Decision of the Accreditation Commission (08.12.2023)

Assessment and analysis for the award of the ASIIN seal:

The Accreditation Commission discusses the procedure. It follows the critical concerns, the peers still raise with respect to the overall qualification level of the programmes at hand, the methods of enabling students to work scientifically and the staffing of the programmes. The Commission thus agrees with the recommendation of the experts and the responsible Technical Committees and decides to suspend the procedure.

The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum duration of accreditation
NED/Ma Computer Engineering		Susp	ension	
NED/Ma Industrial Engineering		Susp	ension	

### **Conditions**

### For both degree programmes

- C 1. (ASIIN 1.1, 1.3) Communicate the revised and specified objectives and programmerelated learning outcomes to the major stakeholders and make them publicly accessible.
- C 2. (ASIIN 1.3) Explain and evidence reasonably how the curriculum is updated in such manner that students will achieve a level 7 (Master's) qualification in their disciplinary field.
- C 3. (ASIIN 1.3, 1.6, 2) Provide evidence how the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project have been raised in order to match Master level standards. Demonstrate that a higher level of training for these activities has been introduced to ensure that students are better guided concerning academic work and be familiarised with academic research methods writing.

C 4. (ASIIN 3.1) Increase the number of permanent staff and to develop a strategy to avoid high fluctuation of personnel.

### **Possible Requirements**

### For both degree programmes

- A 1. (ASIIN 1.5) Establish and implement a monitoring mechanism for student workload in order to ensure the timely identification and rectification of significant discrepancies.
- A 2. (ASIIN 3.1) Enhance the qualification of the teaching staff.
- A 3. (ASIIN 5) Implement feedback cycles in terms of anonymous evaluations, surveys etc.

### **Possible Recommendations**

### For both degree programmes

- E 1. (ASIIN 1.3) In order to foster the mobility of both students and the teaching staff, it is recommended to enhance the English language proficiency of students and lecturers (e.g. providing more courses in English or having guest lecturers from partner universities).
- E 2. (ASIIN 1.4) It is recommended to add English and French proficiency tests after the entrance exam to assess the student's levels and establish the courses based on their different levels (American testing level A, B, and C). In addition, international tests should be offered to see the progress of the students over the years (TOEIC).
- E 3. (ASIIN 3.1, 3.2) It is recommended to allow lecturers to regularly spend research time (e.g. "sabbatical") in order to enhance the research capacity of the departments.
- E 4. (ASIIN 3.2) It is recommended to improve and guarantee the quality of the internet connection inside the university.
- E 5. (ASIIN 5) It is recommended to collect programme- and course related statistical data in order to facilitate meaningful analyses of the data and targeted follow-up measures.

### For the Computer Engineering programme

E 6. (ASIIN 1.3) It is recommended to intensify and promote the training of soft skills in the courses in order to further essential competences for the future career.

### For the Industrial Engineering programme

E 7. (ASIIN 1.3) It is recommended to add specialities such as quality and audit or maintenance and diagnosis of industrial systems starting from the second year (third or fourth semester) to put students in a specific range of studies and also in the respective companies which give them a clear vision about their graduation project field and in the future their job titles.

### I Resumption of the procedure

### Comment/opinion of the university (01.05.2025)

ULT Tunis has provided a detailed "Modification Report" for both programmes under review (Computer Engineering & Industrial Engineering).

Regarding the <u>Computer Engineering degree programme</u>, ULT presented the following documents showing the curricular changes and additional measures taken to raise the overall quality level of the programme:

- Module Handbook
- Modification Report
- Revised Programme Objectives and Learning Outcomes
- Overview of Teaching staff 2024-2025
- Self-Evaluation of the Graduation Research Project
- Survey-Based Simulation of Personal Workload per Module
- Teacher Survey Report
- TOEIC Score Roster

Regarding the <u>Industrial Engineering degree programme</u>, ULT presented the following documents showing the curricular changes and additional measures taken to raise the overall quality level of the programme

- Module Handbook
- Modification Report
- Overview of Teaching staff 2023-2025
- Revised Programme Objectives and Learning Outcomes
- Report on "Enhancing the Level of Teaching and Learning in the Master's Program in Industrial Engineering"
- Students Survey Report on "Self-study time Measurement"
- List of Training and Certifications achieved by Teaching Staff
- Teacher Survey Report
- TOEIC Score Roster

### Assessment of the experts (06.06.2025)

### For both degree programmes

C 1. (ASIIN 1.1, 1.3) Communicate the revised and specified objectives and programmerelated learning outcomes to the major stakeholders and make them publicly accessible.

Initial Treatment		
Experts	fulfilled	
	Justification: The objectives and Los are stated <b>BUT</b> they are not	
	on EQF level 7 (see C 2 for details and examples)	

C 2. (ASIIN 1.3) Explain and evidence reasonably how the curriculum is updated in such manner that students will achieve a level 7 (Master's) qualification in their disciplinary field.

Initial Treatment	
Initial Treatment	
Experts	not fulfilled
	Justification: The university has defined a 5 year plan to increase
	their academic level. As they haven't reached the final phase yet,
	it is hard to evaluate the updated academic level. The experts
	would need to see (at least) the modified module descriptions
	that may give an insight to the EQF level.
	Introducing project-based-learning is definitely a good step.
	BUT: Their unit "Computer and Technologies II" includes a mod-
	ule on "Python Programming". This is a class that is typically of-
	fered in a 1 <sup>st</sup> year bachelor programme. They have to revise the
	title of the course and also the content. On Master level, the cur-
	riculum should not include introduction to programing classes
	anymore. Other examples of where the academic level is not on
	EQF 7 are:
	Algorithm and Programming: In their Learning Outcomes, the
	university states:
	1. Students will demonstrate <b>basic</b> knowledge in fundamentals of
	algorithms and programming technologies and fundamentals of
	Computer Science.
	<u>Databases:</u> In their Learning Outcomes, the university states:
	1. Explain the main concepts and terminologies of databases.
	2. Design and create a relational database using standardization
	methods to ensure data integrity.
	3. Extract and analyze data from a database using complex que-
	ries to meet specific needs.
	All these 3 LOs are on EQF level 6 and are typically taught in the
	2 <sup>nd</sup> year of a BSc programme. The rather low level of the module

is also reflected by the literature that is recommended in the module handbook, as it's primarily on the introductory level. SUMMARY:

So even with their plan to raise the academic level, the experts do not see a clear raise in the module descriptions, i.e. the overall curricula.

C 3. (ASIIN 1.3, 1.6, 2) Provide evidence how the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project have been raised in order to match Master level standards. Demonstrate that a higher level of training for these activities has been introduced to ensure that students are better guided concerning academic work and be familiarised with academic research methods writing.

<b>Initial Treatment</b>	
Experts	not (completely) fulfilled Justification: The university has introduced project-based-learning in all semesters prior to the final thesis. This is certainly a good step. But all "training projects" are performed in groups. It has to be made clear that the final project is an individual project and/or that its evaluation can clearly be assigned to an individual student.

C 4. (ASIIN 3.1) Increase the number of permanent staff and to develop a strategy to avoid high fluctuation of personnel.

<b>Initial Treatment</b>	
Experts	not (completely) fulfilled
	Justification: 2 new teachers have been added to the team, but
	apparently they are still on probation.
	Furthermore, a list with seven new teaching staff members hold-
	ing a PhD is provided. However, all persons in this list have affilia-
	tions with other organisations such as other universities, labora-
	tories and research centres and it is not clear and traceable to
	what extent they are now engaged at ULT. It is therefore not cer-
	tain that the teaching staff situation has been appropriately
	adapted and improved.

### Requirements

### For both degree programmes

A 1. (ASIIN 1.5) Establish and implement a monitoring mechanism for student workload in order to ensure the timely identification and rectification of significant discrepancies.

Initial Treatment	
Experts	fulfilled
	Justification: A workload survey has been given to all students in
	the programme.

A 2. (ASIIN 3.1) Enhance the qualification of the teaching staff.

<b>Initial Treatment</b>	
Experts	not (completely) fulfilled
	Justification: The university only gives "free" time to teachers
	when they manage to compress their workload into a shorter
	time period (i.e. 4 teaching days instead of 5) and therefore hav-
	ing a day off. But, all-in-all, this doesn't give them extra time for
	research or self-study, as their original teaching load stays the
	same. The university has no means to give their staff paid time
	off, such as a sabbatical. It is up to the university to introduce
	ways for teachers to enhance their qualification.

A 3. (ASIIN 5) Implement feedback cycles in terms of anonymous evaluations, surveys etc.

<b>Initial Treatment</b>	
Experts	not (completely) fulfilled
	Justification: The university states that each student may come to
	the office hours of a teacher to discuss the evaluation. But, in re-
	ality, students will probably not do that, as it is the opposite of
	anonymous feedback. The feedback cycle has to be closed in
	class and in the cohort that filled out the original evaluation.

### Recommendation

### For both degree programmes

E 1.(ASIIN 1.3) In order to foster the mobility of both students and the teaching staff, it is recommended to enhance the English language proficiency of students and lecturers (e.g. providing more courses in English or having guest lecturers from partner universities).

Initial Treatment		
Experts	Fulfilled	
	Justification: The university has introduced and English language test and also several classes that are taught in English.	

E 2. (ASIIN 1.4) It is recommended to add English and French proficiency tests after the entrance exam to assess the student's levels and establish the courses based on their different levels (American testing level A, B, and C). In addition, international tests should be offered to see the progress of the students over the years (TOEIC).

Initial Treatment	
Experts	fulfilled
	Justification: see E.1

E 3. (ASIIN 3.1, 3.2) It is recommended to allow lecturers to regularly spend research time (e.g. "sabbatical") in order to enhance the research capacity of the departments.

Initial Treatment				
Experts	not (completely) fulfilled			
	Justification: The university has no means for teachers to spend			
	research time. See A.2			

E 4. (ASIIN 3.2) It is recommended to improve and guarantee the quality of the internet connection inside the university.

Initial Treatment				
Experts fulfilled				
	Justification: They improved their bandwidth.			

E 5. (ASIIN 5) It is recommended to collect programme- and course related statistical data in order to facilitate meaningful analyses of the data and targeted follow-up measures.

Initial Treatment				
Experts	fulfilled			
	Justification: The ERP system Konosys stores Statistics for each			
	academic year			

### For the Computer Engineering programme

E 6. (ASIIN 1.3) It is recommended to intensify and promote the training of soft skills in the courses in order to further essential competences for the future career.

Initial Treatment						
Experts	fulfilled					
	Justification: Several classes have been added to the curriculum					
	that meet this recommendation. Especially the class on Engineer					
	ing Ethics in the 2 <sup>nd</sup> year is a valuable add-on.					

### For the Industrial Engineering programme

E 7. (ASIIN 1.3) It is recommended to add specialities such as quality and audit or maintenance and diagnosis of industrial systems starting from the second year (third or fourth semester) to put students in a specific range of studies and also in the respective companies which give them a clear vision about their graduation project field and in the future their job titles.

Initial Treatment					
Experts	fulfilled				
	Justification: The university has added 2 specialties in the revised version of the curriculum. This could even be expanded. But, the right direction can be seen.				

### Conclusion and recommended resolution of the experts

Taking into account the progress reports and comments given by ULT, the experts are of the opinion that 3 conditions are still not met, which is why they are in favour of a refusal. The experts summarize their analysis and final assessment for the award of the seals as follows:

Degree Programme	ASIIN Seal	Accredited by German Engi- neers	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum dura- tion of accredi- tation
NED/Ma Computer Engineering			Refusal		
NED/Ma Industrial Engineering			Refusal		

### **Conditions**

### For both programmes

C 1. (ASIIN 1.3) Explain and evidence reasonably how the curriculum is updated in such manner that students will achieve a level 7 (Master's) qualification in their disciplinary field.

- C 2. (ASIIN 1.3, 1.6, 2) Provide evidence how the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project have been raised in order to match Master level standards. Demonstrate that a higher level of training for these activities has been introduced to ensure that students are better guided concerning academic work and be familiarised with academic research methods writing.
- C 3. (ASIIN 3.1) Increase the number of permanent staff and to develop a strategy to avoid high fluctuation of personnel.

### Requirements

### For both programmes

- A 1. (ASIIN 3.1) Enhance the qualification of the teaching staff.
- A 2. (ASIIN 5) Implement feedback cycles in terms of anonymous evaluations, surveys etc.

### Recommendations

### For both programmes

E 1. (ASIIN 3.1, 3.2) It is recommended to allow lecturers to regularly spend research time (e.g. "sabbatical") in order to enhance the research capacity of the departments.

## Assessment of the Technical Committees Technical Committee 04 – Informatics/Computer Science (11.06.2025)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee discusses the procedure and follows the assessment of the experts without any changes.

The Technical Committee 04 – Informatics/Computer Science recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Accredited by German Engi- neers	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum duration of accreditation
NED/Ma Computer Engineering			Refusal		

# Technical Committee 06 – Engineering and Management, Economics (16.06.2025)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee discusses the procedure and follows the assessment of the experts without any changes. The Technical Committee expresses explicit concerns regarding the credibility of the programme and do not regard the formulated prerequisites, requirements, and recommendations without critical consideration and substantive concerns. Considering the many problematic points, a rejection of the procedure is considered more appropriate. The Technical Committee unanimously expresses that the study programme must be fundamentally and completely revised conceptually

The Technical Committee 06 – Engineering and Management, Economics recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Accredited by German Engi- neers	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum duration of accreditation
NED/Ma Industrial Engineering			Refusal		

### **Decision of the Accreditation Commission (27.06.2025)**

Assessment and analysis for the award of the ASIIN seal:

The Commission discusses the procedure in depth and then agrees with the assessment of the experts and the Technical Committees without any changes.

The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Accredited by German Engi- neers	Maximum du- ration of ac- creditation	Subject-spe- cific label	Maximum duration of accreditation
NED/Ma Computer Engineering			Refusal		
NED/Ma Industrial Engineering			Refusal		

### **Conditions**

### For both programmes

- C 1. (ASIIN 1.3) Explain and evidence reasonably how the curriculum is updated in such manner that students will achieve a level 7 (Master's) qualification in their disciplinary field.
- C 2. (ASIIN 1.3, 1.6, 2) Provide evidence how the level of teaching and learning and consequently the standard and requirements of the Graduation Research Project have been raised in order to match Master level standards. Demonstrate that a higher level of training for these activities has been introduced to ensure that students are better guided concerning academic work and be familiarised with academic research methods writing.
- C 3. (ASIIN 3.1) Increase the number of permanent staff and to develop a strategy to avoid high fluctuation of personnel.

### Requirements

### For both programmes

- A 1. (ASIIN 3.1) Enhance the qualification of the teaching staff.
- A 2. (ASIIN 5) Implement feedback cycles in terms of anonymous evaluations, surveys etc.

### Recommendations

### For both programmes

E 1. (ASIIN 3.1, 3.2) It is recommended to allow lecturers to regularly spend research time (e.g. "sabbatical") in order to enhance the research capacity of the departments.