ASIIN Seal

Accreditation Report

Degree programmes

Ba Network Engineering
Ba Digital Media Arts

Provided by

Qingdao Hengxing
University of Science and Technology

Version: 27/03/2026

Status: *Final Report*

Table of Content

A About the Accreditation Process

Name of the degree programme (in original language)	**(Official) English translation of the name**	**Labels applied for** [1]	**Previous accreditation (issuing agency, validity)**	**Involved Technical Committees (TC)** [2]
网络工程	Network Engineering	ASIIN	/	02
数字媒体艺术	Digital Media Arts		/	02, 04
Date of the contract: 18.03.2025 **Submission of the final version of the SAR:** 09.07.2025 **Date of the onsite visit:** 03.-05.11.2025 **at: Qingdao Hengxing University of Science and Technology, China**				
Expert panel: Prof. Dr. Liu Zheng, Shandong University of Finance and Economics Prof. Dr. Paul Grimm, University of Applied Sciences Darmstadt Prof. Dr. Martin Welsch, IBM Germany R&D Xingbang Hu, Student at Shanghai University of Engineering Science				
Representative of the ASIIN headquarter: Dr. Thomas Lichtenberg				
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 March 28, 2023 Subject-Specific Criteria of Technical Committee 02 – Electrical Engineering/Information Technology as of September 23, 2022 Technical Committee 04 – Informatics/Computer Science as of March 29, 2018				

[1] ASIIN Seal for degree programmes

[2] TC: Technical Committee for the following subject areas: TC 02 - Electrical Engineering/Information Technology; TC 04 - Informatics/Computer Science.

B Context of the Degree Programmes

B-1 Numbers and facts

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF [3]	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Network Engineering	工学学士 /Bachelor of Engineering	Network Engineering	Level 6	Full time	No	8 Semester	198 ECTS	Sept. 2014
Digital Media Arts	艺术学学士 /Bachelor of Arts	Digital Media Arts	Level 6	Full time	No	8 Semester	190 ECTS	

B-2 Characteristics and features

Qingdao Hengxing University of Science and Technology (QHUST), is a private, full-time undergraduate institution situated in Qingdao, Shandong Province. Hengxing University is a member of the Association of Sino-German Universities of Applied Sciences, was founded in 2000, upgraded to a vocational college in 2003, elevated to undergraduate status in 2014, authorized to grant bachelor's degrees in 2018, and passed the MOE Undergraduate Teaching Assessment in 2023.The university operates under the sponsorship of the Hengxing Group, a prominent private high-tech enterprise. The university places a strong emphasis on application-oriented education, offering programmes in engineering, management, the arts, and related disciplines that are closely linked to industry needs. It has developed modern teaching and research facilities, along with extensive partnerships with enterprises to promote practical training, innovation, and professional competence. As a private university, Hengxing University benefits from greater flexibility in curriculum design and institutional management, allowing it to adapt swiftly to technological and economic changes. This responsiveness, combined with its focus on employability and hands-on learning, has enabled the university to cultivate skilled, practice-ready graduates who contribute to the industrial and economic development of Qingdao and the wider Shandong region.

[3] EQF = The European Qualifications Framework for lifelong learning

This evaluation report covers the following bachelor's programs at Qingdao Hengxing University of Science and Technology (QHUST):

The *Network Engineering* programme is the core discipline of the School of Information Engineering, serving as both its foundation and a driving force for development. Officially approved in 2014 as the first undergraduate programme of the School, it is among the earliest and most influential programmes offered. Over the past decade, the programme has produced seven cohorts of graduates, totaling 1,022 alumni, who now contribute across various sectors of the information and communication technology (ICT) industry. Since its inception, the programme has achieved several major milestones. In 2016, it was recognized as a Provincial Advantage and Characteristic Programme; in 2018, it successfully passed the undergraduate degree evaluation. It was later selected as a “First-Class Undergraduate Programme Construction Site in Shandong Province” (2020), a High-Level Professional Construction Project of the School (2021), and a Demonstration Programme for Industry–Education Integration in Qingdao (2023)—each recognition underscoring its continuous progress and regional leadership in education. Aimed primarily at IT enterprises, technology companies, and research institutes, the programme focuses on cultivating application-oriented professionals. Students gain a solid grasp of network engineering theories, technologies, and system management, alongside strong abilities in network system design, implementation, operation, and maintenance. Emphasis is also placed on professional ethics, social responsibility, and an international outlook.

Digital Media Arts is a high-level and first-class programme of QHUST. It was approved for enrolment in 2018. The predecessor of the programme was the animation programme established in 2002, which is one of the earliest programmes in the school. Since the undergraduate enrolment, a total of 334 graduates have been trained in three classes, and there are currently 395 undergraduate students. In the " 2021 China University programme Rankings by Subject", the school's Digital Media Arts programme was rated Class B. It is mainly aimed at enterprises and companies in related industries such as Digital Media Arts. The students receive practical training in relevant digital technologies, animation production, etc., have strong practical operation capabilities in digital animation production and are "stellar five excellent talents with good moral character, strong academic ability, thorough theoretical knowledge, hard work in practical operations, and internationalization”.

C Assessment of the Expert Panel

This accreditation report is based on the preliminary evaluation report for the degree programme(s) under review. As the evaluation report strictly adheres to the relevant general and subject-specific accreditation criteria, no changes have been made to the evaluative chapters. The expert panel considered the statement and additional information of the HEI for its concluding remarks and recommended resolution.

The following sections of the report are based on the audit discussions the expert panel had with relevant stakeholder groups: Representatives of the Rector's office, programme coordinators, representatives of the Quality Management Department and the International Office, teaching and lab staff, students, partners from industry and the private sector, and alumni.

The focus of this stage of the accreditation lies on an assessment of the two study programmes under review according to the criteria stipulated in the ASIIN General Criteria. These criteria encompass the objectives and learning outcomes, the name of the degree programme, the curriculum (structure and content), admission requirements, workload and credits, didactics and teaching methodology, examinations, resources, internal quality management, and transparency and documentation. The evaluation can result in an accreditation procedure.

In addition to the audit meetings, the expert panel relies on the documentation about the programmes and the documentary respectively regulatory framework QHUST has provided before, during and after the audit.

C-3 Objectives and learning outcomes of the degree programmes [ASIIN 1.1]

Description of the current status

According to the self-assessment report, both programmes define general competences that encompass communication skills, teamwork, problem-solving abilities, awareness of ethical and professional responsibilities, and the capacity for life-long learning. They also include aspects related to international orientation and cross-cultural communication, with English-language competences addressed through modules such as Digital Intelligence English.

In its self-assessment report for the *Network Engineering* programme, QHUST presents 11 'first level goals'. Appendices 07.1A TC02 and 07.1A TC04 provide comparisons between

the programme's learning outcomes and the subject-specific criteria of Technical Committee 02 (Electrical Engineering and Information Technology) and Technical Committee 04 (Informatics and Computer Science). In section 1.1.4 of the Self-Assessment Report, the programme managers describe differences between the TC 02 criteria and the programme's objectives and list areas not included in the curriculum, such as numerical mathematics, thermodynamics, solid-state physics, chemistry, material structure, metallurgy, electrical systems, motors, and electrical engineering components. They also outline programme components that relate to network-specific areas, including network protocol analysis, modern communication technologies, network management, network testing, cyber security, and network attack and defence, as well as courses from other fields such as Ethics and the Rule of Law, Outline of Modern Chinese History, and Basic Principles of Marxism. With regard to TC 04, the self-assessment report notes that the criteria are considered only partially applicable and describes differences in focus, indicating that Network Engineering includes subjects such as network architecture design, network protocol analysis, network management and optimisation, along with practical courses such as network integrated wiring, network equipment configuration, and debugging, whereas Computer Science and Technology and Software Engineering include content such as data structures, operating systems, software development methods, and project management.

For the Bachelor's programme in *Digital Media Arts*, the learning objectives are detailed in Appendix 01.1B (Programme Handbook for Digital Media Arts). In comparing the programme's learning outcomes with the subject-specific requirements of Technical Committee 04 (Informatics and Computer Science), the programme managers describe areas of overlap as well as areas of difference. They note that the definition of knowledge areas and course modules in SSC04 and in the Digital Media Arts programme diverges. Using the objective 'Formalisation, Algorithms and Mathematical Skills' as an example, SSC04 lists discrete structures, logic and algebra, analysis and numerics, probability theory and statistics, formal languages and abstract machines, modelling, algorithms and data structures, while the corresponding course modules associated with graduation requirement 1 of the Digital Media Arts programme include natural science courses, an introduction to the Digital Media Arts programme, dynamic sketching, design composition, digital image processing, animation direction and screenplay writing, an introduction to animation, interpretation of classic animation works, digital modelling design, and the laws of motion in animation.

QHUST maintains a "talent cultivation programme", which describes a *review process for study programmes* in which the ILOs are regularly reviewed. A comprehensive revision is carried out every four years, and minor adjustments are made every year in June. The process is as follows: The Academic Affairs Office sets guidance and requirements for drafting/revising Programme Handbooks. Each college forms a dean-led leadership group and a

professional research team to consult industry and graduate representatives, then drafts each handbook to school standards and submits it. The Office organizes internal/external expert reviews; colleges revise, finalize, and the dean signs. The Office compiles all talent-cultivation plans, seeks Teaching Committee deliberation, and implements them after Presidential approval. Afterwards, colleges enter plan data into the Academic Affairs Management System, develop course syllabuses and teaching guides, and inform teachers and students during admission education so everyone understands the programme's arrangements and requirements.

Analysis and assessment of the expert panel

Overall, the reviewers are of the opinion that QHUST has defined clear learning outcomes for both the *Network Engineering* and *Digital Media Arts* programmes, which are consistent with the professional expectations of their respective fields. The reviewers welcome the university's analysis in relation to the subject-specific criteria and confirm that, for *Network Engineering*, the intended learning outcomes comply with the standards of the subject-specific criteria established by Technical Committees 02 (Electrical Engineering and Information Technology) and 04 (Informatics and Computer Science). For the *Digital Media Arts* programme, which leads to a Bachelor of Arts degree, the university notes certain deviations from the subject-specific criteria of the Technical Committee 04. The reviewers consider these deviations reasonable and justified, as the programme is a design-oriented media course rather than a purely computer science programme. However, they note that Learning Outcome 5 ("Use Modern Tools: Able to develop, select, and use appropriate technologies, resources, modern tools, and information technology tools for complex work…", Appendix 01.1B Programme Handbook – DMA) *is not fully implemented in the curriculum*.

The intended learning outcomes in the *Digital Media Arts* programme cover many relevant soft skills such as teamwork, communication, and leadership; however, several important competencies are missing or could be expressed more precisely. While collaboration, organisation, and presentation are well represented, the outcomes lack explicit reference to conflict resolution, negotiation, adaptability, and time management, which are essential in creative and multidisciplinary environments. Similarly, the outcomes mention "communication" and "international perspectives" but could be more specific about active listening, digital and visual communication tools, and professional networking skills. The project management section addresses organisation and leadership but would benefit from a clearer focus on critical thinking, problem-solving, creativity, and ethical responsibility within project contexts. Overall, the learning outcomes would be stronger if they specified measurable behaviours—such as using industry-standard collaboration platforms,

managing project timelines, or demonstrating cross-cultural communication competence—rather than relying on general terms like “good communication skills” or “play an effective role.”

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 1.1

Digital Media Arts: The reviewers thank QHUST for its response and acknowledge that various software applications are already being used within the programme. However, expert panel refers explicitly to the wording of Learning Outcome 5*: “Be able to develop, select and use appropriate technologies, resources, modern engineering tools and information technology tools for practical problems, including prediction and simulation of practical problems, and understand their limitations.”* In the reviewers’ assessment, the current range and depth of applications within the programme do not sufficiently demonstrate that this learning outcome can be achieved in a transparent and verifiable manner. They therefore maintain their requirement that the curriculum be designed and structured in such a way that the intended learning outcomes can be clearly and comprehensibly attained *(A 6).*

Digital Media Arts: The reviewers appreciate the explanations regarding the training of soft skills in the curriculum and understand that corresponding skills are taught in various modules. However, they do not consider these competencies laid out in the curriculum to be equally comprehensible in the learning outcomes and therefore maintain their strong recommendation that the learning outcomes need to be adjusted accordingly (A 7).

The experts assess the criterion as partially fulfilled.

C-4 Name of the degree programmes [ASIIN 1.2]

Description of the current status

The naming of undergraduate programmes in Chinese universities is uniformly formulated and announced by the Ministry of Education of China and is uniformly followed and used by all universities. This also applies to the study programmes *Network Engineering* (网络工程） and *Digital Media Arts (*数字媒体艺术). *Network Engineering* is a bachelor's degree programme at regular colleges and universities that belongs to the field of computer science. As of 2024, there are 398 colleges and universities in China that offer this programme. *Digital Media Art* is a bachelor's degree programme offered at regular colleges and universities, which falls under the field of art. As of 2024, there are 154 undergraduate colleges and universities in China that offer Digital Media Arts programmes.

Analysis and assessment of the expert panel

The reviewers consider the title of the *Network Engineering* programme to be appropriate and accurately reflecting its curricular content. However, in the case of the *Digital Media Arts* programme, they are of the opinion that the current title does not correspond to the actual content of the curriculum. Measured against the programme's design and focus, the name appears misleading, as *digital media* encompasses a much broader field than animation and post-production alone. Key areas such as interactive digital media, virtual reality, and augmented reality are not sufficiently represented in the curriculum. Therefore, the reviewers believe that a more precise title should be considered. They are aware that programme naming in China is subject to strict regulation by the Ministry of Education, yet they emphasise that the title and the academic content of a programme should be more closely aligned to ensure clarity and coherence. The designation, in both the original language and in English, is applied consistently across all relevant materials, including internal university documents, public websites, and student records.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 1.2

Digital Media Arts: The reviewers appreciate the detailed description of the various modules, but note that the content focuses stronlgy on animation, illustration and post-production, with an emphasis on storytelling, character design, modelling, rendering and compositing. These areas fit well with traditional and digital animation pipelines, including 2D/3D animation and visual effects. However, interactive digital media are only indirectly alluded to and not explicitly addressed: there is no clear reference to user interaction, real-time systems, interface design beyond static visual design, or interactive narrative structures. Similarly, virtual reality and augmented reality are not explicitly mentioned in any module. Core competencies typically associated with these areas – such as real-time, spatial interaction, immersive environment design, sensor-based input, or user experience design for immersive media – are missing or only touched upon marginally. Although the subsequent paragraph refers to the increasing integration of programming and 'modern tools,' this remains general and no technologies, platforms or learning outcomes are mentioned. As the name of the programme cannot be changed, the reviewers maintain their requirement that the curriculum needs to be adapted (A 8).

The experts assess the criterion as partially fulfilled.

C-5 Curriculum [ASIIN 1.3]

Description of the current status

Structure of the programme

The *Network Engineering* as well as the *Digital Media Arts* programme at QHUST are both full-time bachelor's degree programmes and structured over eight semesters. The *Network Engineering* programme encompasses 86 courses over eight semesters, representing 198 ECTS. In comparison, the *Digital Media Arts* programme (2D and 3D tracks) comprises 78 courses with a total of 190 ECTS. QHUST provides module handbooks for both degree programmes – Appendix 09.1A (Network Technology), Appendix 09.1B (Digital Media Art) and Appendix 09.2 (General Education Modules). The module descriptions provide comprehensive information about the structure, content, workload, examination requirements, module-related literature and the latest changes to the module.

Content

The Academic Affairs Office set a unified institute-wide template for the talent learning programme and curriculum, organizing courses into five groups: general education, professional education, entrepreneurship & innovation, concentrated practice, and co-curricular activities. General education comprises ideological-political, military/physical education, comprehensive quality, and cross-general courses to cultivate healthy, well-rounded citizens. Most are Ministry of Education (China)-mandated and compulsory. Cross-general courses include limited electives in humanities & arts, natural sciences, and international literacy totalling 6 ECTS.

In Appendices 07.2A Course Matrix – NE and 07.2B Course Matrix – DMA, the university presents an overview indicating which modules are linked to which learning objectives. Module handbooks for both programmes are provided in Appendices 09.1A (Network Engineering), 09.1B (Digital Media Arts), and 09.2 (General Education), outlining module descriptions, associated learning objectives, and their connections to programme-level outcomes. In the Self-Assessment Report, Figures 1-1 (Network Engineering) and 1-2 (Digital Media Arts), titled "Professional Modules and Course Settings," offer visual representations of each programme's structure. Tables 1-2 and 1-4 show the mapping between modules and learning objectives. Appendices 07.1A TC02 and 07.1A TC04 (for Network Engineering) and 07.1B TC04 (for Digital Media Arts) further present the alignment of programme learning outcomes with the subject-specific criteria and indicate the modules contributing to these outcomes.

Internships

The *Management Rules of Graduation Internship for Undergraduates of Qingdao Hengxing University of Science and Technology* (Appendix 02.9 Graduation Internship) outlines the purpose, structure, and responsibilities governing student internships. It emphasises internships as a vital component of talent cultivation, aiming to strengthen students' practical abilities, innovation, and professional responsibility. The document defines the roles of the Academic Affairs Office, secondary colleges, and internship supervisors, detailing procedures for organising, monitoring, and evaluating internships. It specifies requirements for selecting internship units, ensuring safety, and maintaining academic relevance, while strictly prohibiting unsafe or inappropriate placements. The rules also establish a clear grading system, financial management procedures, and accountability mechanisms to ensure quality and compliance.

Both programmes include a mandatory graduation internship of 4 credits, which corresponds to approximately 2% of the total workload. In addition, each programme features extensive practice blocks: Network Engineering and Digital Media Arts both require 72 credits of concentrated practical training, comprising modules such as basic skills, comprehensive training, and extended practice. These practical components are completed over multiple semesters and constitute around 36–38% of each programme's total credits.

Mobility

In its self-assessment report, the university emphasises the importance of international mobility, which it also plans to expand further. To ensure standardized and orderly international exchanges, the university has established a series of regulations. These include the Outline for International Cooperation and Exchange Management (Appendix 10.1 Outline of International Cooperation), the Detailed Rules for International Exchange Students (Appendix 10.2 Rules and Regulations of Exchange Students), and the Detailed Rules for International Study Tours (Appendix 10.3 Study Tour Rules). Appendix 10.4 presents the mobility statistics. Brief English-language introductions are available on the main programme pages at https://cm.hx.cn/channel/dmart and https://xx.hx.cn/channel/nengin. These introductions primarily consist of the handbooks prepared for ASSIN accreditation.

For *Network Engineering*, in 2024, the School of Information Engineering organised several international exchange activities—primarily online—including an "Online Study" programme with Gdańsk University of Physical Education (Poland), seminars on studying in the UK, guidance sessions on studying in Australia, and related events. Fifteen Network Engineering students enrolled, all participating remotely (no overseas travel). The Department plans to organise in-person study-abroad programmes next.

In 2023, twenty students from the *Digital Media Arts* programme joined a Malaysia Study Tour from 18 to 26 November. Although some staff and students have taken part in international exchanges, overall participation and reach remain limited. The college plans to deepen partnerships with overseas universities, enterprises and research institutes, adopt a diversified co-operation mechanism, and systematically select teachers and students with strong English and clear interest to scale up and normalise exchange programmes.

Periodic Review of the Curriculum

At QHUST, the revision of learning outcomes and curricular content follows a structured and cyclical process aligned with the university's quality assurance framework (see appendix 02.4 Curriculum Evaluation). The review and revision take place every four years under the leadership of the Vice President and the Academic Affairs Office, with participation from deans, programme leaders, members of the professional construction committee, and "dual-qualified" academic staff. Industry representatives and student delegates are also consulted to ensure the relevance of the programmes to labour market needs. Drafts are reviewed by internal and external experts before final approval by the university's Teaching Committee and the President's Office. The process has led to concrete changes such as reducing the number of intended learning outcomes from 12 to 11, increasing the proportion of practice-oriented and industry-related modules, updating course content to reflect technological advances, and adjusting the workload and ECTS structure to meet international standards. This continuous improvement cycle ensures that both the *Network Engineering* and *Digital Media Arts* programmes remain outcome-based, industry-aligned, and pedagogically current.

Analysis and assessment of the expert panel

Structure of the programme

The reviewers consider the overall structure of the study programmes to be coherent and logically sequenced, with modules building appropriately upon one another. However, in light of the university's goal to further strengthen the international orientation of its students, the reviewers note the absence of a structural opportunity for students to spend a study period abroad. They therefore recommend adjusting the curriculum to facilitate international study experiences.

Content

Based on the audit discussions, the expert panel commends the clear curricular overview presented in Appendices 07.2A *Course Matrix – NE* and 07.2B *Course Matrix – DMA* as useful tools for demonstrating the achievement of the intended learning outcomes. However, they note that the content and purpose of the modules *Digital Intelligence English I–IV* in

both programmes are unclear, as no module descriptions have been provided. It also remains uncertain how these language modules contribute to Learning Outcome 5, which concerns the ability to "develop, select and use appropriate technologies, resources, and modern engineering tools". The reviewers believe this represents a curricular inconsistency in both programmes and strongly recommend revising the mapping of learning outcomes accordingly. In response to questions, the teaching staff indicated that artificial intelligence is used as a didactical means in parts of the study programmes. While the reviewers appreciate this openness to innovative teaching approaches, they strongly recommend introducing a dedicated introductory module on the responsible and systematic use of AI. Finally, for the *Digital Media Arts* programme, the reviewers advise including a *Fundamentals of Programming* course to enable students to adapt and develop relevant applications through programming to meet specific project needs.

Mobility

The reviewers consider student mobility to be an area with significant potential for improvement, both in terms of outgoing and incoming students. To strengthen this aspect, concrete partnerships with international universities are needed to facilitate study abroad opportunities and ensure the recognition of credits earned at partner institutions. At the same time, suitable conditions must be created to attract and support incoming international students. In particular, the expert panel recommends offering a sufficient number of English-taught modules to enable foreign students to complete a meaningful and academically coherent semester. These measures are considered necessary for both study programmes. The experts further remarked that the absence of an English-language online profile diminishes the programme's visibility among potential international partners and incoming students, thereby impeding the development of mobility pathways and international activities.

Periodic Review of the Curriculum

The reviewers acknowledge that a regular review of learning outcomes and curricular content is in place and follows clearly defined procedural steps. They welcome the active involvement of students and industry representatives in this process and note that the university has provided evidence of concrete improvements resulting from previous evaluations, including the structured integration of internships within the curriculum. Overall, the reviewers find the processes well organised and effectively implemented. They encourage the university to continue this positive development and, in future revisions, to further expand opportunities for student mobility as part of its continuous enhancement efforts.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 1.3

The expert panel thanks QHUST for its explanations of the 'Digital Intelligence English I-IV' module and understands that the use of AI tools is promoted both in teaching and in practice. The reviewers also thank QHUST for submitting *Annex X.15*. Based on the documentation provided, they are able to identify the use of artificial intelligence and the learner-centred approach underlying the software and commend this innovative concept. Based on Appendix 09.2, the experts confirm that the relevant module descriptions are available. However, with regard to Learning Outcome 5, which applies to both programmes and requires students to develop, select, and effectively use appropriate technologies, modern engineering and IT tools for solving, predicting, and simulating practical problems, the expert panel finds that the current curriculum does not yet demonstrate a sufficiently coherent and plausible alignment with this objective. In particular, it remains unclear how individual modules systematically build the competencies necessary to achieve this outcome. The panel therefore reiterates its requirement that the programme more explicitly articulate the constructive alignment between specific modules, their learning activities, and the intended learning outcomes, especially with respect to Learning Outcome 5 (A 1).

The expert panel takes note of QHUST's comment that there is a university-wide general education course entitled '*College Digital Literacy' (Appendix 09.2)*, which has been made available as a new appendix. In addition, the reviewers note that the *Network Engineering* programme has its own module explicitly entitled 'Introduction to Artificial Intelligence' which covers relevant content. For the Bachelor's degree in *Digital Media Arts*, the reviewers note that there is no longer a single module that teaches the basics of artificial intelligence, but that relevant content is covered in various modules, such as the "*Digital Image Processing"* course or "*Animation Director and Script*" and "*Appreciation of Animation*" (Appendix 09.1B). However, the reference to artificial intelligence cannot be clearly understood from the module descriptions, as artificial intelligence is not explicitly named. Therefore, although the reviewers understand that the Digital Media Arts programme lays the foundations of artificial intelligence in its modules, they believe that this needs to be emphasised more clearly in the module descriptions. For this reason, the requirement is only specified for the Bachelor's programme in *Digital Media Arts* to the effect that introductory content on the subject of artificial intelligence must be made clear in the module descriptions. A 2 was deleted accordingly and transferred to A 9.

The assessors welcome QHUST's explanations regarding the planned curricular adjustments to simplify and improve international study experiences. Until the planned measures are implemented, the assessors stand by their recommendation (E 1).

The reviewers welcome QHUST's plans to continuously introduce further modules in English and to recruit staff members from abroad in order to promote internationalisation. Until this is implemented, the reviewers stand by their recommendation (E 2).

The assessors welcome the reference to an English website for the university but point out that so far only the home page exists, with no further content. Although this is a first step, the assessors believe that a comprehensive English website is necessary in order to meet the international aspirations of QHUST. The expert team therefore stands by their recommendation (E 3).

Digital Media Arts: The experts welcome QHUST's intention to include appropriate content on programming and application development in the curriculum. Until this is implemented, they stand by their recommendation (E 7).

The experts assess the criterion as partially fulfilled.

C-6 Admission requirements [ASIIN 1.4]

Description of the current status

Admission to QHUST follows the national college entrance examination system of China, ensuring that only students who meet or exceed the annual undergraduate admission score are accepted. This means that admitted students typically rank within the top 40% of all candidates in the national examination. Applicants must have completed upper secondary education (or equivalent), taken the national entrance exam, and achieved the minimum score required for their chosen programme. For *Network Engineering*, students must have studied science subjects—particularly physics—at school, while applicants to *Digital Media Arts* must meet the entrance standards for arts programmes. All candidates must also meet national health and physical examination requirements. The university's Admissions Office oversees the entire process, including outreach, counselling, and coordination with partner schools. It provides professional guidance and information through public platforms to ensure transparency and accessibility.

The report explains that admission to QHUST's undergraduate programmes is regulated solely through the national higher-education entrance examination, which does not foresee alternative admission routes based on prior learning. After enrolment, externally obtained competences—such as professional skills certificates, participation in innovation projects, social practice, or international activities—may be recognised within the university's extracurricular quality credit system. This recognition contributes to students' merit

evaluations and scholarship eligibility but does not replace curricular coursework or formal programme requirements.

Analysis and assessment of the expert panel

The reviewers understand that the admission of students to Chinese universities follows national regulations. They acknowledge that this process is fair and transparent, providing equal opportunities for all applicants to study at the institution.

The expert panel notes that there are no procedures in place for the recognition of prior learning (RPL), particularly from international institutions. According to ASIIN Criterion 1.4, "Rules for the recognition of qualifications achieved externally [...] are clearly defined. They facilitate the transition between higher education institutions and with non-university places of learning without jeopardising the achievement of learning outcomes at the desired level." While the experts acknowledge that national regulators set the admission criteria, the institution needs to develop and implement a recognition regime that adheres to the mentioned ASIIN standard to allow for more academic mobility and internationalization. This would also be logical and consequent regarding the internationalization objectives of the institution in general and the programme in particular.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 1.4

The expert panel confirms that the centrally regulated admission requirements ensure transparent and equitable access to the programme. They also acknowledge that regulations for the recognition of extra-curricular achievements are in place. The assessors express their appreciation to QHUST for providing the supplementary documentation on admission requirements and cooperation agreements with other universities (Appendices 21.5A and 21.5B). Nevertheless, based on the additional information submitted, the panel concludes that ASIIN Criterion 1.4—requiring that rules for the recognition of qualifications achieved externally be clearly defined—is not yet fulfilled in a comprehensible manner. In the experts' view, clear and binding regulations governing the recognition of academic achievements obtained at other higher education institutions are currently lacking. In order to effectively support the internationalisation strategy of QHUST and to establish attractive framework conditions for student mobility, the expert panel therefore reiterates its requirement that transparent and well-defined rules for the recognition of externally acquired knowledge, skills, and competences are necessary (A 2).

The experts assess the criterion as partially fulfilled.

C-7 Workload and credits [ASIIN 1.5]

Description of the current status

Chapter 1.5 of the SAR outlines the principles and implementation of the workload and credit system for the *Network Engineering* and *Digital Media Arts* bachelor's degree programmes. Traditionally, Chinese universities calculate credits based solely on contact hours, with the expectation that students will devote approximately three hours of independent study for each hour of instruction. To align with the European Credit Transfer and Accumulation System (ECTS) for ASIIN accreditation, QHUST has undertaken a comprehensive adaptation and conversion process, formalised in the institutional document *Management of ECTS (02.7)*.

The *Network Engineering* programme comprises 86 courses distributed over eight semesters, amounting to 198 ECTS, while the Digital Media Arts programme (2D and 3D tracks) includes 78 courses totalling 190 ECTS. Each credit corresponds to an estimated 25–30 hours of total student workload, encompassing classroom instruction, self-study, assignments, and examination preparation.

Workload evaluation combines teacher estimations and student feedback. Course leaders initially estimate self-study requirements based on teaching experience, which are later verified through semesterly student questionnaires. If average workloads deviate from the 25–30 hours/credit range, course leaders are required to adjust teaching methods, content, or homework volume; if deviations exceed 10%, the curriculum committee may alter the credit allocation.

In terms of workload distribution, the auditors calculated the following ECTS credit points per semester for both degree programmes based on the official credit conversion tables:

Network Engineering (Bachelor of Engineering) Total: 198 ECTS over 8 semesters

Year	Semester	ECTS per Semester	Notes
1st Year	Semester 1	**24–25 ECTS**	General education, mathematics, English, and basic computing
	Semester 2	**25–26 ECTS**	Continuation of general education and foundational science
2nd Year	Semester 3	**25 ECTS**	Core professional foundation courses (programming, logic, data structures)
	Semester 4	**24–25 ECTS**	Operating systems, networks, and lab practice

Year	Semester	ECTS per Semester	Notes
3rd Year	Semester 5	**25 ECTS**	Advanced network courses, electives, and innovation training
	Semester 6	**24–25 ECTS**	Practical training, project work, and entrepreneurship
4th Year	Semester 7	**24 ECTS**	Advanced labs, internships, and thesis preparation
	Semester 8	**20 ECTS**	Graduation internship and thesis (design)
Total	8 Semesters	**≈198 ECTS**	25 ECTS average per semester

Digital Media Arts (Bachelor of Arts) Total: 190 ECTS over 8 semesters

Year	Semester	ECTS per Semester	Notes
1st Year	Semester 1	**23–24 ECTS**	General studies, basic drawing, art and ideology courses
	Semester 2	**23–24 ECTS**	Digital tools, media theory, and early design courses
2nd Year	Semester 3	**24–25 ECTS**	Core digital media courses and animation techniques
	Semester 4	**24–25 ECTS**	2D/3D production and compositing courses
3rd Year	Semester 5	**24 ECTS**	Advanced project-based animation and elective modules
	Semester 6	**24–25 ECTS**	Applied animation projects and industry-oriented practice
4th Year	Semester 7	**23 ECTS**	Internship, innovation practice, and final design
	Semester 8	**20 ECTS**	Graduation internship and thesis (design)
Total	8 Semesters	**≈190 ECTS**	23–24 ECTS average per semester

Credit assignment takes into account course duration, difficulty, learning objectives, and disciplinary characteristics, ensuring that all compulsory, elective, theoretical, and practical components—including internships, graduation projects, and co-curricular activities—are credited appropriately. Both programmes have established mechanisms to monitor workload consistency and have reported that recent surveys confirm close alignment between planned and actual student workloads.

Finally, the university acknowledges that systematic workload evaluation under ECTS standards is a relatively new practice and expresses commitment to further refinement of data collection and feedback mechanisms, recognising that these measures enhance programme quality, student well-being, and the achievement of educational outcomes.

Analysis and assessment of the expert panel

The auditors want to know why the *Network Engineering* programme carries 198 ECTS while the *Digital Media Arts* programme comprises 190 ECTS. The university explains that the *Network Engineering* curriculum contains a slightly higher proportion of compulsory technical and laboratory-based courses, which typically require more contact hours and structured practice. The *Digital Media Arts* curriculum, by contrast, integrates artistic and project-based learning with greater flexibility through independent creative work and personalised training modules, which may demand fewer formalised credit hours. However, both programmes adhere to the same institutional workload standard—25–30 hours per ECTS credit—and follow identical methods for workload calculation and verification. Thus, the numerical difference reflects disciplinary characteristics and total course volume rather than a distinct policy or conversion factor. The differing total number of ECTS credits in the two programmes has been plausibly explained by QHUST from the reviewers' perspective. Since the minimum requirement of 180 ECTS for a Bachelor's degree is clearly exceeded, the reviewers do not consider the difference in the overall number of credits to be problematic."

In short, both programmes maintain a similar workload distribution across eight semesters, which appears to be appropriate and bearable for the students. The *Network Engineering* programme includes slightly more compulsory technical and lab-based components, which accounts for the 8-ECTS difference between the two curricula.

The expert team acknowledges QHUST´s approach to monitoring the student workload and welcomes the announcement to further refine the instruments put in place for this.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 1.5

As the university did not address this criterion in its statement, the experts confirm their previous evaluations and consider the criterion to be fully fulfilled.

C-8 Didactics and teaching methodology [ASIIN 1.6]

Description of the current status

The didactic and teaching methodologies at QHUST are outlined as student-centred and outcome-oriented, with approaches differentiated according to the characteristics of the *Network Engineering* and *Digital Media Arts* programmes. In Network Engineering, the teaching format includes lectures, discussions, experiments, and project-based tasks to address both theoretical and practical aspects of the discipline. In Digital Media Arts, the teaching format incorporates lectures, workshops, simulations, and studio-based collaborative work to reflect the programme's focus on creative and design-related activities. Both programmes make use of laboratories, digital studios, and industry-linked training environments to support practical components. The distribution of contact hours and self-study is organised according to ECTS-based workload planning. Independent academic and creative work forms part of the curriculum, particularly in final projects, theses, and internship components. The applied teaching and learning methods are reviewed through internal evaluation processes, feedback mechanisms, and oversight by the Quality Evaluation Office.

Analysis and assessment of the expert panel

The experts confirm that all required aspects of didactics and teaching methodology are fully met. A broad range of teaching methods and didactic approaches is employed, effectively supporting the achievement of the intended learning outcomes and fostering student-centred learning. Digital and face-to-face teaching formats are well integrated, with both forms of infrastructure complementing one another and enriching the overall learning environment. The programmes demonstrate an appropriate balance between contact hours and self-study time, ensuring that students can engage meaningfully with course material. Independent scientific or creative work is embedded as a core element of the curriculum, particularly through project work, internships, and final theses. Moreover, the learning and teaching methods used in both programmes are subject to regular review to ensure their continued alignment with, and contribution to, the achievement of the programme objectives.

The analysis of the English-language provision shows that the content and purpose of the modules *Digital Intelligence English I–IV* remain unclear, as no module descriptions have been provided. In the *Network Engineering* programme, the only confirmed English-taught course is the elective *Computer Professional English*. Overall, this provision is considered insufficient to ensure that students attain an adequate level of English to pursue studies abroad. This was also evident in discussions with students, whose English-language competences were noticeably limited.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 1.6

As the university did not address this criterion in its statement, the experts confirm their previous evaluations and consider the criterion to be fully fulfilled.

C-9 Exams: System, concept and organisation [ASIIN 2]

Description of the current status

The SAR and the module descriptions (appendices 09.1A and 09.1B) show that both programmes use a broad range of examination formats, including written closed-book exams, practical or computer-based assessments, internship reports, project work, and creative or achievement presentations. In many modules—particularly in Digital Media Arts—grades are typically split between regular performance and a final exam or project, often at a 50/50 ratio. *Network Engineering* modules similarly combine continuous assessment with a written or practical final exam.

Oral examination components play only a very minor role in the overall assessment system. In *Network Engineering*, assessment is conducted almost exclusively through written exams, computer-based or practical tests, reports, and project demonstrations. In *Digital Media Arts*, only one module clearly requires an oral presentation as part of the final assessment, while other modules include creative or achievement presentations that focus primarily on the display of artistic work rather than on oral examination skills. Overall, the examination structure in both programmes is strongly oriented towards written and practical assessments, with very limited opportunities for students to develop and demonstrate formal oral communication skills within the examination context.

The university's examination regulations (Appendix 17.1) clearly define procedures for make-up examinations, non-attendance, illness, and forms of disadvantage compensation. Make-up exams are formally provided for: each course must prepare two versions of the exam (A and B), with the B-version specifically used for deferred or repeat examinations.

Cases of non-attendance are documented on the official exam attendance sheet, where absences must be recorded and justified; unjustified absences result in a zero grade. If students miss an exam due to illness, they may apply for a deferred examination, provided they submit appropriate documentation. In addition, where students experience confirmed disadvantage or exceptional circumstances, the regulations allow for grade review procedures, exam deferrals, or additional opportunities, such as a second defence for graduation theses when warranted.

While the module-level assessment methods are well documented, the report does not clearly explain how the final overall degree grade is calculated. The only formula provided relates to *graduation requirement achievement*, not the student's final programme grade.

Analysis and assessment of the expert panel

Following the on-site revision, the experts confirm that the final theses and projects in both the *Network Engineering* and *Digital Media Arts* programmes meet the expected academic standards and demonstrate students' ability to work independently at the required level. The examination system reliably assesses the achievement of the defined learning objectives, with each exam clearly linked to its corresponding module and providing students with feedback on the competencies they have acquired.

Examination types are specified for every module, and students are informed of all assessment conditions at the start of the semester. However, given the very limited use of oral examination components, the reviewers conclude that the current forms of assessment are not always fully aligned with the intended learning outcomes – particularly those that emphasize communication, presentation, teamwork, and interaction. It is therefore recommended that the examination formats be more closely matched to the competencies the modules aim to develop. In practice, this may involve integrating more oral examinations, presentations, or interactive assessment formats, ensuring that students can adequately demonstrate the full range of skills outlined in the learning outcomes.

However, while the structure of *individual* modules is clearly documented, the calculation of the overall final programme grade is less transparent. The report provides a formula for calculating graduation requirement achievement, not the student's cumulative final grade for the degree.

Overall, the expert panel confirms that the rules ensure that alternative examination opportunities and compensatory measures are systematically regulated and transparently implemented.

The number and distribution of assessments support an appropriate workload and allow sufficient preparation, and the organisation of examinations ensures a smooth study progression. Examinations are marked according to clear and transparent criteria, and students may consult lecturers regarding their results. When final theses or projects are completed off campus, the university remains responsible for academic oversight and the suitability of the working environment. Regular reviews verify that examinations remain aligned with the intended learning outcomes, the degree level, and reasonable timeframes for preparation.

Finally, the experts note two minor issues in the *Network Engineering* programme—namely, that in the module *Data Structures and Algorithms* the total score of Paper B is incorrectly listed as 95 instead of 100, and that in the module *Computer Networks* Structure of examination papers (number and type of questions) of paper A and paper B do not match. The experts assume that both issues will be addressed by those responsible for the programme.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 2

The experts view it positively that QHUST has corrected the errors in the examination documents identified in the report. They also welcome the fact that QHUST intends to critically review and adapt its examination practices with a view to the desired learning outcomes. The experts stand by their recommendation until implementation (E 4).

The experts assess the criterion as substantially fulfilled.

C-10 Resources [ASIIN 3]

Description of the current status

Staff and staff development [ASIIN 3.1]

The composition and qualification structure of the teaching staff vary between the two programmes. In Network Engineering, 8 full-time teachers hold a doctoral degree, corresponding to 22.2% of the teaching staff, while in Digital Media Arts one full-time staff member holds a PhD, representing 4.2% of the team. The university reports that it is taking steps to further develop its academic staff profile through recruitment and professional development activities. Measures to support lecturers in obtaining doctoral qualifications include flexible arrangements for study, such as reduced teaching loads and approved study leave, as well as access to full-time or part-time doctoral programmes. Additional financial and policy-related support is available, including subsidies for tuition and research, and the

attainment of higher academic degrees is integrated into promotion and career development frameworks.

Student support and student services [ASIIN 3.2]

QHUST provides a range of student support and services that includes academic advising, psychological counselling, administrative assistance, library and laboratory access, and career development services. Additionally, across both programmes, the university offers general support—such as orientation activities, mental-health counselling, study-skills guidance, and access to shared learning resources—but the SAR remains unclear whether the available personnel and structures are sufficient to guarantee tailored support for all students throughout their studies.

Funds and equipment [ASIIN 3.3]

The financial and infrastructural conditions of the BA Network Engineering (NE) and BA Digital Media Arts (DMA) programmes differ in scope, funding levels, and resource allocation. According to the submitted income data, the Digital Media Arts programme has generated stable tuition-based revenue over the past five years, ranging from approximately RMB 2.16 million (2020) to RMB 2.71 million (2024) (Appendix X.5). The School of Information Engineering, which oversees Network Engineering, reports higher overall annual income, increasing from approximately RMB 10.25 million (2020) to RMB 15.44 million (2024) (Appendix X.8). Expenditure records show that, between 2020 and 2024, the School of Information Engineering allocated around RMB 12.86 million to teaching activities, alongside additional multi-year investments in programme development, practical training, and industry–education cooperation. The School of Art and Media reports lower annual budgets—e.g., RMB 2.73 million for teaching-related expenses in 2022, rising to RMB 7.03 million in 2025—while maintaining steady funding for programme development, teaching reform, and practical components.

In terms of facilities, the Network Engineering programme utilises specialised laboratories, networking and cybersecurity equipment, and various external training partnerships. The Digital Media Arts programme operates dedicated studios and engages in industry collaborations, and the SAR notes that the fast-evolving technical requirements in digital media fields (such as high-performance graphics systems, rendering capacity, and VR/AR technologies) may require ongoing updates. Both programmes maintain cooperation structures that support teaching and practical training, with future effectiveness linked to the regular renewal and expansion of technical equipment.

Analysis and assessment of the expert panel

Staff and staff development [ASIIN 3.1]

According to the university's response, the low number of PhD-holding lecturers in *Digital Media Arts* (DMA) – is primarily justified by the practice-oriented and industry-based nature of the field. The programme emphasises hands-on creative production, animation workflows, digital tools, and project-based studio work, and the university therefore highlights the importance of "dual-qualified" teachers with substantial industry experience rather than academic research backgrounds. Many DMA lecturers are practitioners drawn from film studios, animation companies, and digital media enterprises, and the university argues that their professional expertise offers students direct insight into current industry standards and real-project environments.

At the same time, the university acknowledges this emphasis on practice cannot fully compensate for the lack of academically qualified staff, and it recognises that its current staff profile falls short of typical university-level expectations. It therefore states that it is actively attempting to recruit additional PhD holders, encourage current staff to pursue doctoral qualifications, and strengthen cooperation with other universities and industry partners to raise the academic level of teaching.

The reviewers understand the university's argument that, given its close cooperation with industry and its strong focus on professional competencies, a practice-oriented approach to teaching is appropriate. They consider it reasonable that the institution prioritises the recruitment of lecturers with substantial practical experience to support this orientation. Overall, the reviewers regard the quality and scope of teaching as adequately ensured. They also acknowledge that the university has already introduced a number of measures aimed at reaching the threshold of at least 25% of teaching staff holding a doctoral degree in the medium term.

Student support and student services [ASIIN 3.2]

During the on-site visit the auditors come to the conclusion that in the *Network Engineering* programme, the above-mentioned services are generally well structured: students benefit from a comparatively large and experienced teaching team, clear academic guidance, and strong technical support, which helps them address academic difficulties and stay on track to achieve the intended learning outcomes. The frequent use of tutors, laboratory supervisors and programme-level academic advisers ensures that students can obtain individual assistance when required.

In the *Digital Media Arts* programme, the auditors conclude that the support structures in place can be considered acceptable, yet they operate at a more limited level compared to those in other programmes. Although students do have access to practical studios, internship support and the university's general support services, the comparatively small number of senior academic staff and the reliance on part-time practitioners mean that individual academic and technical guidance is available but not always consistently.

Funds and equipment [ASIIN 3.3]

Following the on-site review of the facilities, the reviewers expressed overall satisfaction with both the quantity and quality of the infrastructure available to the two programmes. However, in the *Digital Media Arts* programme they observed that certain equipment and software were no longer up to date, indicating a need for more regular renewal to ensure alignment with current industry standards. Additionally, based on the discussions held during the on-site interviews, the expert panel gained the impression that the university's data centre does not yet fully support the talent cultivation objectives of the *Network Engineering* programme. Some uncertainties remain as to whether the existing facilities can adequately meet the specific learning needs of students in this field.

Overall, while both programmes benefit from secure financing, reliable annual budgeting, and adequate infrastructure, the significantly higher investment levels in *Network Engineering* signal a stronger financial buffer and greater capacity for equipment renewal. The *Digital Media Arts* programme – more dependent on rapidly evolving technologies – operates on comparatively tighter resources, making continued investment crucial to sustain industry relevance. Both programmes have established cooperation frameworks, but sustained alignment between programme-specific funding and technological development remains essential to ensure long-term viability.

With regard to both student and staff mobility, the reviewers identify considerable scope for further development. Throughout the discussions, the university's strong aspiration for greater *internationalisation* became evident. However, meaningful mobility requires adequate financial and organisational resources, which, in the reviewers' view, need to be strengthened in order to support these ambitions.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 3

The assessors praise QHUST's ongoing efforts to gradually enhance the qualifications of its teaching staff. They also note positively that more than 25% of the teaching staff for the **Network Engineering** programme now hold doctoral degrees. They also see positive

progress in the **Digital Media Arts** programme. The evaluators maintain their recommendation to continue promoting the professional development of its teaching staff (E 5).

The experts praise QHUST's efforts to promote the internationalisation of the university and also bear fruit. They stand by their recommendation to continue supporting this commitment in the future (E 6).

The experts understand that fixed budgets are planned for both programmes, which will secure basic funding and maintain equipment. The university provides more detailed figures for 2026. Based on these documents, it is clear to the reviewers that there is a solid financial basis that is highly likely to continue into the future, so that the corresponding recommendation E 16 can be omitted from the reviewers' point of view.

The experts assess the criterion as substantially fulfilled.

C-11 Quality management: Quality assurance and development [ASIIN 5]

Description of the current status

QHUST operates a comprehensive quality management system that combines institutional regulations, structured evaluation procedures, and continuous monitoring mechanisms (compare several appendices under 02.Quality Management Handbook). The university has established a Quality Evaluation Office and a school-wide supervision structure that oversees programme quality, course delivery, teaching performance, and student learning outcomes. Quality assurance is organized through interlinked components, including leadership and organizational structures, teaching quality standards, resource management systems, and regular evaluation cycles. Teaching supervision is carried out at both school and college level, supported by systematic feedback from students, peers, and supervisory staff, while course evaluations, programme evaluations, and teacher performance assessments follow defined procedures and scoring criteria. These processes form a closed-loop system in which findings are documented, communicated to responsible units, and followed by required rectification measures, ensuring the ongoing monitoring and development of teaching and learning across the institution.

Analysis and Assessment

The expert panel notes that, although QHUST has established a formally structured quality assurance system that outlines cyclical evaluation procedures and refers to the intention of operating a closed feedback loop, the documentation does not provide sufficient

evidence that these mechanisms are fully implemented in practice. In particular, while student evaluations are systematically collected, it remains unclear how these results inform programme-level revisions, as no concrete examples or records of actions taken based on student feedback are presented. Likewise, the panel finds no indication that students receive feedback on the outcomes of their evaluations or on subsequent improvement measures, leaving the final step of the feedback loop undocumented. As a result, the panel concludes that the quality assurance system, although comprehensive in design, lacks demonstrable proof of a fully functioning, closed-loop process, especially with regard to student participation and follow-up communication.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 5

The expert panel recognises the significant efforts made by QHUST to systematically close feedback loops in quality management. They welcome the measures already taken and believe that the further measures planned are a step in the right direction. Until these additional measures are implemented, the experts maintain their requirement (A 5).

The experts assess the criterion as partially fulfilled.

C-12 Transparency and documentation [ASIIN 4]

Description of the current status

Module descriptions [ASIIN 4.1]

The module descriptions are publicly accessible in both English and Chinese on the university's website: for *Network Engineering* at https://xx.hx.cn/channel/aszyrz and for *Digital Media Arts* at https://cm.hx.cn/channel/dmart.

A review of the available module handbooks for *Network Engineering* and *Digital Media Arts* shows that the majority of module descriptions are provided, yet several important gaps and inconsistencies remain. Notably, the *Digital Intelligence English I–IV* modules listed in the General Education Curriculum Handbook do *not* contain full module descriptions, despite appearing in the curriculum of both programmes; only their titles are provided, with no information on content, learning outcomes, workload, assessment, or responsible staff. It is also unclear what exactly the name "Digital Intelligence English" is intended to mean.

By contrast, the professional and general education modules that *are* documented generally include the required elements—module title, teaching methods, workload, credits,

intended learning outcomes, module content, examination methods, and recommended literature—as evidenced in the Network Engineering and Digital Media Arts module handbooks. However, none of the handbooks consistently record the *date of last amendment,* which is required for transparency and quality assurance. Furthermore, some modules lack clarity regarding *admission requirements* or fail to explicitly state how the module mark is calculated.

Diploma and Diploma Supplement [ASIIN 4.2]

According to the Self-assessment report, QHUST confirms that Diploma Supplements are issued to all graduating students. In section 4.2 "Diploma and Diploma Supplement" of the report, the university explains that students receive an undergraduate diploma and a bachelor's degree certificate, and that a Diploma Supplement is issued as supplementary documentation.

For both *Digital Media Arts* and *Network Engineering*, the university provides a diploma and an English-language Diploma Supplement, as shown in the complete samples included in Appendix 21.5A (NE) and 21.5B (DMA). The supplements present information on the qualification profile, programme structure, and national education system, thereby situating the degree within the wider higher-education context. Each supplement references an accompanying Transcript of Records, and the sample transcripts included in the documents list all completed modules, corresponding marks, credits, and GPA calculations (e.g., the transcripts on page 10 of the DMA and NE supplements). The Diploma Supplements also outline the grading system and classification procedures applied. The transcripts contain individual grades for each module, although they do not include ECTS grading-table statistics as recommended in the ECTS Users' Guide for illustrating grade distribution.

Relevant rules [ASIIN 4.3]

QHUST's regulations and published documentation formally and bindingly define the rights and duties of both the institution and its students, primarily through the university's official guidelines and statutes, which are publicly accessible via the institutional website at *www.hx.cn*. The detailed information about graduation requirements, degree awarding, examination rules and programme administration are listed at https://jw.hx.cn/channel/xuejiyuxuewei. The student's handbooks are listed at https://xx.hx.cn/channel/wlgcbkzy (NE) and https://cm.hx.cn/channel/zezyrz (DMA). The Self-assessment report further shows that policies governing graduation requirements, degree awarding, examination rules, and programme administration are codified in dedicated regulations (e.g., Graduation Management Regulations, Degree Award Regulations, Examination and Thesis System). These documents outline institutional responsibilities and student obligations. At

the same time, course-related information—including module handbooks for both *Network Engineering* and *Digital Media Arts*—is available in the language of instruction (Chinese) and accessible to students online, with English-language versions also provided.

Analysis and assessment of the expert panel

Module descriptions

The auditors conclude that overall, while the *Network Engineering* modules tend to be more complete and systematically structured, the *Digital Media Arts* documentation shows greater variability and several missing components. For both programmes, a more consistent and comprehensive approach to module documentation—especially ensuring that all modules listed in the curriculum are fully described—remains an essential improvement step. The reviewers also point out that module titles should clearly reflect their content. Titles such as *"Digital Intelligence English"* do not provide a transparent indication of what the module actually covers. In addition, module names should not be based on specific software products, as the tools used may change over time. The reviewers therefore recommend choosing broader, more neutral titles that allow for the use of different software applications and remain valid even as technologies evolve.

Diploma and Diploma Supplement

The reviewers acknowledge that for both Digital Media Arts and Network Engineering, the university provides complete English-language Diploma Supplements, which include the qualification profile, programme structure, national education context, and accompanying transcripts listing modules, grades, credits, and GPA calculations. While the supplements appropriately describe the grading and classification system, the reviewers note that the transcripts do not include ECTS grading-table statistics as recommended by the ECTS Users' Guide, limiting the contextualisation of grade distribution.

Relevant rules

On the basis of the above-mentioned analysis, the auditors confirm that the formal requirements concerning clarity, accessibility, and binding character of student-related rules and course information are fulfilled.

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 4

The reviewers thank QHUST for its critical reflection on the naming of certain modules and for the thorough revision of the module descriptions. They commend the intention to

revise the titles of selected modules in the **Digital Media Arts** programme and to submit these changes to the relevant committees for approval. Until these revisions are formally implemented, the reviewers maintain the proposed strong recommendation (A 3).

The expert panel welcomes the explanations regarding the Diploma Supplement and confirms that the submitted copy largely complies with the requirements. However, statistical data that would enable readers to evaluate individual grades is not included in the attached certificate. The ECTS User Guide requires higher education institutions to include information on the grade distribution of the reference group in the certificate. The experts emphasise that the required statistical data must be presented in anonymised form so that no personal or sensitive data is disclosed. If this information is already presented in the Teaching Management System, it is recommended to simply include it in the Diploma Supplement. Including this information in the Diploma Supplement is advisable in any case, as the document is intended for recipients who may not be familiar with the Chinese higher education system. The expert panel therefore maintains its strong requirement (A 4).

The experts assess the criterion as partially fulfilled.

D Additional Documents

No additional documents needed.

E Statement of the Higher Education Institution (17.12.2025)

The institution provided a detailed statement:

We have thoroughly reviewed the preliminary draft of the Evaluation Report dated December 9th, 2025, prepared by the ASIIN expert panel. After carefully studying each expert's comments one by one and re-examining our Self-Assessment Report, we would like to provide the following statements in response:

We acknowledge all observations raised by the experts and appreciate their detailed feedback on programme strengths and areas for improvement. Each comment has been systematically analyzed against the ASIIN accreditation criteria1 and responded as following.

Major recommendations

For both degree programmes

R 1. (ASIIN 1.3) It is strongly recommended to articulate more clearly how specific modules contribute to the achievement of the intended learning outcomes (this applies particularly to the modules Digital Intelligence English I-IV with regard to Learning Outcome 5).

The Module Handbook we have submitted provides the descriptions of how each course contributes to achieving the intended learning outcomes. With the continuous deepening of teaching practice and research, we will continuously make improvements to ensure the courses are more closely aligned with intended learning outcome.

We encourage the use of AI tools in both teaching and students' practice. In the series of courses "Digital Intelligence English I-IV", digital intelligent methods are utilized to help students achieve the intended learning outcomes and satisfy R5's requirement which is able to use appropriate technologies, resources, modern engineering tools and information technology tools for practical problems. Our school has adopted the Neo English teaching platform (see Attachment X.15 Digital Intelligent English Teaching and Neo Software Instruction). Students can independently use this digital tool for reading comprehension, listening, and speaking practice in English. This not only helps improve their practical English skills and enables personalized foreign language learning but also allows them to utilize various AI technologies and tools provided by the platform. The following screenshot shows some of the features of the Neo English teaching platform.

R 2. (ASIIN 1.3) It is strongly recommended introducing a dedicated introductory module fundamentals as well as on the responsible and systematic use of Artificial Intelligence.

Both programmes have offered the university-wide general education course "College Digital Literacy" (see Appendix 09.2 General Education Curriculum Handbook, p.137), which covers the basic knowledge and ethics of computers in the digital era. One of the units is "Artificial Intelligence Fundamentals" which includes AI ethics and basic applications of AI. Due to negligence, this course was not translated and edited in the English version of the "General Education Curriculum Handbook". It is now supplemented. Please refer to the new version of Appendix 09.2 General Education Curriculum Handbook.

The Network Engineering programme has introduced "Introduction to Artificial Intelligence", which primarily covers topics such as knowledge and knowledge representation, deterministic reasoning, uncertain reasoning, search strategies, deep learning neural networks, machine learning, genetic algorithms, and AI ethics. Through this course, students can gain the understanding of the development and research contents of artificial intelligence, comprehend some systematic ideas and methods of AI, learn how to apply the basic principles and core algorithms of AI in practical scenarios, and understand the correct usage of AI in application scenarios as well as AI ethics. (See Appendix 09.1A Module Handbook - NE P132 for details.) Based on the experts' advice, we strongly acknowledge that enhancing the construction of AI is highly beneficial for improving the quality of talents cultivation. We plan to further strengthen the construction of AI courses in the future and intend to add 3-5 AI elective courses.

The Digital Media Arts programme introduced the course 'Artificial Intelligence Technology Applications' in the 2022 programme Handbook for Digital Media Arts. However, due to the extensive application of AI technology in this field, rapid technological updates, and the varying modules integrated with each course, the 2024 programme Handbook for Digital Media Arts no longer offers it as a standalone course. Instead, AI teaching modules have been integrated into 3 to 5 specialized courses, where instructors incorporate AI applications, guidance, and practical implementations. For instance, in the 'Digital Image Processing' course, hands-on training is conducted using AI technologies such as image generation and style transfer. In 'Animation Director and Script', AI tools are employed to assist with creative script brainstorming and storyboard visualization design. Additionally, in 'Appreciation of Animation', students are required to analyze the application logic of AI in the restoration of classic works and modern adaptations, while concurrently addressing data ethics, copyright norms, and responsible creation concepts. This approach helps students develop a systematic understanding of AI tools and lays a solid foundation for the integration of AI technology and art. For details, please refer to the attachments, X.20B Animation Director and Screenplay Writing - Teaching Calendar-DMA, X.21B Digital Image Processing-Teaching Calendar-DMA.

R 3. (ASIIN 1.4) It is strongly recommended that the university establish and implement rules for the recognition of acquired knowledge, skills or competences from outside the Higher Education Institution for up the credits of one semester.

On the one hand, our university has established relevant regulations that recognize knowledge, skills, and abilities acquired at higher education institutions out-side the university for further studies. In addition to the college entrance examination system mentioned in the SAR, according to the regulations of the Ministry of Education and Shandong Provincial Department of Education on upgrading from junior college to undergraduate level (referred to as "upgrading from junior college to undergraduate"), junior college graduates who have obtained the recommendation qualifications from their graduated institutions can enter undergraduate institutions for further studies through the upgrading examination. The relevant education departments stipulate the majors and number of students admitted for upgrading from junior college (which varies from year to year). Our university is approved by Shandong Provincial Department of Education to accept students who upgrade from junior college, and we have established regulations and enrollment guidelines for upgrading from junior college (Appendix 11.3 Enrollment Regulations for College -to-Bachelor's Degree Year 2025). Junior college students from other institutions can enter our university after passing the upgrading examination. The university recognizes the knowledge, skills, or abilities that students have mastered at their original institutions, as well as the credits they have earned there, and allows them to continue their studies. Upon completing the required courses according to the university's teaching plan and passing the exams, students will also receive a graduation certificate. For graduates who meet the conditions for degree conferral, the university will issue a bachelor's degree certificate.

Our university accepts students who have upgraded from junior college to university in some programmes. Network Engineering started recruiting such students in 2021, with 121 admitted in 2024 and 135 admitted in 2025. Digital Media Arts started recruiting such students in 2018, with 70 admitted in 2024 and 78 admitted in 2025.

Besides, the university attaches great importance to opening up and international exchanges. In recent years, it has established stable cooperative relationships with more than 70 universities from 16 countries including Canada, Australia, France, Russia, Malaysia, and South Korea. It carries out multi-level and wide-ranging educational cooperation. Through joint training, teacher-student ex-changes, academic exchanges, and other forms, it has accumulated experience in international project management and operation, possessing strong project execu-tion capabilities and institutional guarantees. By partnering with ASIIN and obtaining ASIIN programme accreditation, including the introduction of the European ECTS, the university will be greatly assisted in conducting high-quality, extensive, and in-depth educational cooperation with foreign HEIs such as mutual recognition of credits and

student exchanges, thereby advancing its internationalization process. See newly added Appendix 10.5 Regulations on the Administration of Sino-Foreign Cooperative Education Programmes and and 10.6 QHUST cooperation with University Sains Malaysia, 10.7 QHUST cooperation with Matana University of Indonesia, and 10.8 QHUST cooperation with Honam University of South Korea.

R 4. (ASIIN 4.1) It is strongly recommended that complete module descriptions be provided for all modules included in the curriculum, and that a consistent approach be ensured across all descriptions, explicitly documenting the date of the most recent amendment, the admission requirements, and the assessment criteria. Module titles should accurately reflect the academic content they rep-resent. It is therefore advisable to employ neutral and content-related titles ra-ther than names derived from specific software applications.

Our Module Handbook is compiled in a unified format, referring to the template of the Module Handbook provided by ASIIN. The content includes module name, semester, contact person, teaching language, type of teaching, contact hours, workload, credit points, ETCS, recommended prerequisites, learning outcomes and their corresponding PLOs, content, study and examination requirements and forms of examination, reading list, revision Date.

Most course names are designated or named according to the undergraduate teaching standards issued by the Ministry of Education. Based on expert opinions, we have reviewed the provided course manual and confirmed that none of the course names in Network Engineering are derived from the names of specific software.

Digital Media Arts. After a detailed comparison of the course names in both Chinese and English, it was discovered that there was an error in the translation of the course "UE". The translation has been corrected, and the updated course name is "Dynamic Visual Design".

In accordance with the experts' recommendations, we will carefully review and revise the module titles and descriptions to ensure that they accurately reflect the academic content they represent. The proposed revisions will be submitted for university approval through the prescribed procedures at the next revision of the talent cultivation programme.

R 5. (ASIIN 4.2) It is strongly recommended providing statistical data according to the ECTS-Users' guide in addition to the final grade.

We have constructed a standardized diploma supplement that fully incorporates core information such as the educational objectives, intended learning outcomes, course structure, academic proficiency, and individual student performance of the degree, enabling comprehensive traceability of academic credentials from a single result presentation to "process + result". We have provided information such as average scores and grade point

in accordance with the requirements of ASIIN. We have adopted the ECTS system since the application for ASIIN professional certification from the 2024 class. So far, the 2024 class students only have scores for two aca-demic years. Therefore, the transcript provided in the diploma supplement is not a real transcript, but a template based on the transcript of a 2020 class student who completed all subject assessments over four years. Appendix 21.5A DIPLOMA SUP-PLEMENT - NE 21.5B DIPLOMA SUPPLEMENT - DMA

Regarding the comment that "it should also include statistical data specified in the 'European Credit Transfer and Accumulation System (ECTS) User Guide'," firstly, China's educational management institutions do not advocate the random provision of sensitive data such as students' professional rankings and statistical data. The supplementary materials provided by our university for diplomas include the basic in-formation required by the European ECTS User Guide. At the same time, the students' statistical data is also included in the university's teaching management system LMS. Students can obtain these additional sensitive data by applying in accordance with the regulations.

R 6. (ASIIN 5) It is strongly recommended to formalize the feedback process to systematically gather and use student feedback and to inform students of pro-gramme changes as results of the evaluations.

We have learned the ECTS concept through this certification process and agree with the expert panel's views on the student workload feedback mechanism. In fact, we already have a relatively systematic monitoring and feedback mechanism for student academic progress and its management system. This will include regularly publishing updated and refined versions of the undergraduate talent development plan via multiple official channels—namely the School website, the official WeChat account, and the Hengxing Competency Platform. Furthermore, mechanisms such as student representative forums, biannual programme-level faculty-student assemblies (held at the beginning and end of each academic year), student information liaisons, the Student Union, and the aforementioned orientation programme will be leveraged to ensure that both faculty and students are timely informed of how student feedback has been addressed and what actions have been taken in response.

Appendix X.16 HXDSCX2S Hengxing Petition Procedures and X.17 HXDSXZ2S Detailed Rules for Petition Work of Hengxing University both stipulate that for issues requested to be resolved by petitioners, we must respond seriously or provide explanations, and must not make things difficult or discriminate against them, nor ignore them, act perfunctorily, or shuffle off responsibilities and delay. Here, "petition" refers to activities where our faculty, students, and other individuals and organizations report situations, offer opinions, suggestions, or complaints to our school through channels such as the school's official website,

LMS, letters, phone calls, emails, and visits (including the aforementioned correspondence forwarded by the competent authority), and the relevant undertaking units of the school are responsible for handling them in accordance with relevant regulations. The Evaluation Office is the competent department overseeing the petition work. Opinions related to courses need to be comprehensively evaluated and approved according to the relevant regulations of the school. The results of any changes will be issued in official documents and announced on the Hengxing official website and official account.

We will take student-centered strategy, continuously improve the existing monitoring and feedback system, further clarify the methods for monitoring, evaluating, and adjusting student workload, and constantly optimize institutional management measures on a regular basis.

For Bachelor programme Digital Media Arts

R 7. (ASIIN 1.1) It is strongly recommended to ensure that Learning Outcome 5 ("use modern tools…") is clearly and demonstrably reflected in the curriculum.

All professional courses necessitate creative outputs as final assignments, constituting 50% of the course assessment (entitled 09.1B Course Handbook - DMA). Throughout the creative process, students are required to utilise the latest software, online platforms and other contemporary tools, providing documentation of their usage. Assignments that employ innovative workflows, cutting-edge technologies, or develop original scripts and independent AI models are actively encouraged. For in-stance, in the course entitled "Basic 3D Animation", students are encouraged to explore the latest rigging plugins and utilise artificial intelligence tools in conjunction with them. In the "Compositing" course, students explore optimising NUKE rendering workflows through scripting. Meanwhile, the "Editing" course covers relevant technologies in editing software such as Premiere, Final Cut, and Jianying. It is a prerequisite that students undertake courses in order to operate on digital intelligent platforms such as Wisdom Tree and Stellar Competency Platform. Furthermore, students are encouraged to utilise AI video tools like Doubao, Jimeng, and Haieruo in order to enhance the quality of their final coursework submissions. The course content will continue to be refined in alignment with teaching objectives, with expert feedback incorporated into this refinement. Pedagogical approaches will also be optimized, with the aim of enhancing students' proficiency with contemporary tools. The result of these refinements and optimizations will be empowered students who are able to apply cutting-edge disciplinary theories in designing appropriate methodologies and tools for solving practical problems.

R 8. (ASIIN 1.1) It is strongly recommended to define the soft skills in the in-tended learning outcomes in a more concrete and comprehensive.

The Digital Media Arts programme's core soft skills encompass six key dimensions, namely teamwork, communication, problem-solving, adaptability, accountability, and time management.

These soft skills are deeply integrated into the programme's curriculum and teaching practices. In the AI era, they manifest primarily as follows: collaborative project skills within small teams; human-machine communication abilities; innovative problem-solving capabilities; adaptability in employing cutting-edge technologies; and the use of technological tools to optimize time management.

For instance, in courses such as “2D Animation” and “3D Animation Practice”, students are engaged in creative projects undertaken within project teams. The collaboration across roles (pre-production, mid-production, post-production modules) serves to strengthen students' teamwork capabilities. Furthermore, during creative workshops and proposal presentations, students refine their ability to articulate artistic concepts with precision and communicate effectively in order to meet project requirements. In the event of encountering creative bottlenecks (such as technical compatibility issues or challenges pertaining to stylistic consistency), students are guided to explore solutions in a proactive manner, thereby enhancing their problem-solving skills and adaptability. Simultaneously, assignment milestones are established in accordance with industry project timelines, requiring students to balance creative quality with delivery deadlines. This approach cultivates responsibility and time management skills, while instilling aesthetic empathy and proficiency in advancing projects through standardized workflows.

Henceforth, the evolving talent requirements of the industry shall be integrated with pedagogical feedback in order to continuously refine the development pathways and assessment criteria for soft skills across a broader range of courses and through diverse teaching methodologies. This will further enhance their clarity and practical applicability within learning outcomes.

R 9. (ASIIN 1.2) It is strongly recommended to align the title of the programme more closely with its curricular content.

Digital Media Arts, programme code 130508, degree category: Arts, duration: 4 years. Please refer to the Catalogue of Undergraduate Programmes in General Higher Education Institutions (2024), page 63, serial number 811, for more detailed information on the program. In accordance with the curriculum standards for the Animation specialization within

the Digital Media Arts programme, as stipulated in the National Quality Standards for Undergraduate Programmes in Higher Education Institutions, the course structure must encompass public foundation courses, general education courses, foundational professional courses, and core professional courses. The course has been designed to meet the following requirements. Please refer to the attached document, entitled X.19B National Standards for Teaching Quality in Design Studies-DMA P943-P964, for further information on this subject.

For instance, Requirement 1 is addressed by the Animation Fundamentals Module, which covers the principles and techniques of traditional and digital animation, digital colour theory, animation scriptwriting fundamentals, animation design fundamentals, animation performance fundamentals, and animation sound fundamentals. This module is addressed through courses such as Introduction to Animation. The second requirement is the Animation Story Module, which encompasses such disciplines as animation planning, story creation, animation scriptwriting, animation storyboard design, animation sound design, animation music composition, and the fundamentals of animation creation. The courses offered under this module include Animation Director and Script and Storyboard Design. The third requirement pertains to the Animation Design Module, which encompasses a range of skills including dynamic sketching and memory drawing, visual concept design, character design, environment design, sculpting and digital modelling, as well as animation and game merchandise design and development. Within this module, we offer courses such as Animation Sketch and Digital Character Design. The fourth requirement is the Animation Movement Design Module, which encompasses the principles of animation, key animation creation, 3D character animation, stop-motion animation design, and animated performance. The course offerings in this module include Twelve Principles, Stop Motion, and 3D Animation Design. Requirement 5: Comic Illustration Module (a comprehensive survey of comic principles, illustration fundamentals, techniques of comic illustration, comic editing and layout design, the craft of comic scriptwriting, and the creation of comics). The course offerings under this module include Digital Illustration and Comic Design. The sixth requirement pertains to the Digital Animation Module, which encompasses the fundamentals of animation soft-ware, the utilisation of paperless animation production techniques, the application of digital animation modelling, texturing, rigging, animation, lighting, rendering, the simulation of special effects, character effects, digital compositing, and workflow management. Within the purview of this module, we offer a selection of courses, including: 2D Animation, Graphic Animation, 3D Modelling, Texturing and Rendering, Basic 3D Animation, and Compositing.

In the self-directed learning modules of the curriculum, a universal requirement to integrate programming content has been introduced, thereby enabling students to design and

develop programme scripts. This approach more fully realises the educational objective of 'using modern tools'. Following expert recommendations, the proportion of programming content will continue to be increased. Research will be conducted into relevant disciplines at domestic and international universities, industry enterprises, market demands, and graduate feedback. By incorporating new technological developments, the objective is to optimise the integration of arts education with programming education, with this progress being demonstrated through tangible practical outcomes.

Minor recommendations

For both degree programs

R 10. (ASIIN 1.3) It is recommended adjusting the curriculum to facilitate in-ternational study experiences.

Some courses at our university adopt a block scheduling model, which is divided into courses delivered in the first eight weeks, the second eight weeks, or the full sixteen weeks. This arrangement enables both faculty members and students to complete teaching and learning tasks within a period of one to two months, while allowing the remaining time to be used for overseas academic visits, participation in conferences, study, and academic exchange.

At the same time, for international students, the university will, in accordance with the signed cooperation agreements, provide exchange students with teaching plans that are conducive to the successful completion of their studies. International-ization is a strategic priority of the university. The institution will fully draw on the high quality concepts and extensive practical experience of educational Internation-alization represented by ASIIN and similar bodies, and will continue to advance work that supports Internationalization , including the design and implementation of cur-ricula.

The Network Engineering programme has already incorporated courses on in-ternational competence and activities related to international competence within the cross disciplinary general education module (Appendix 08.1A Teaching Plan-NE,p3). Network Engineering itself is a highly internationalized field. Its tech-nical foundations, such as TCP IP, and its standards organization, including IETF and IEEE, are global in nature. Therefore, almost all core courses inherently embody an international perspective. During teaching, students are guided to engage in interna-tional interaction through participation in open source communities and internation-al forums. As a next step, an elective course in international project management is planned, in order to familiarize students with internationally recognized project management approaches, such as agile development and Scrum.

Following the experts comments, the Digital Media Arts programme will continuously update its curriculum. The course "Appreciation of Animation" will be optimized, with the addition of modules analyzing European digital animation works and Southeast Asian folk animation series, and incorporating bilingual teaching elements. The course "Animation Practice" will be upgraded. By establishing cooperation with overseas institutions, students will collaborate with overseas students to complete short animation films centered on the theme of "Digitization of Global Cultural Heritage", and align with international digital arts competition standards, thereby helping students accumulate cross-cultural learning and practical experience.

R 11. (ASIIN 1.3) It is recommended offering a sufficient number of Eng-lish-taught modules to enable foreign students to complete a meaningful and academically coherent semester at the university.

Starting from 2024, the university requires each academic programme to add at least two English taught courses each academic year, in order to accelerate the process of internationalization and to gradually enable international students to complete meaningful and academically coherent semesters at the university.

The Network Engineering programme currently has one foreign faculty member and twelve faculty members with overseas study or work experience, all of whom are capable of delivering courses bilingually. At present, the Network Engineering programme offers four courses taught in English, namely Computer English for Computing Majors, Java Programming, Network Device Configuration and De-bugging, and Network Programming Technology. Among these, Computer English for Computing Majors is taught by a foreign faculty member, and Java Programming adopts an English language textbook. These arrangements are well suited to international students.

The programme will further strengthen the recruitment of foreign faculty and actively encourage faculty members to participate in overseas academic exchange and visiting programmes. The programme plans to incorporate courses such as Computer Networks, Network Management, and Network Security into the English taught curriculum, with the aim of attracting a greater number of international students to study at the university.

The Digital Media Arts programme has established two courses taught entirely in English: "Editing" and "Design Composition". The teaching plans for these courses are attached as X.22B Course Syllabus and Classroom Teaching Design Schedule for Design Composition-DMA and X.23B Film and Television Editing Technology - Outline and Lesson Plan-DMA. In 2024, Professor Zheng Hui's course "Three Dimensional Model" has completed the construction for its overseas dissemination on MOOC platforms.

R 12. (ASIIN 1.3) It is recommended to set up an English website to further the internationalization of the programme and university.

Some English language content for the two programmes has already been made available on the website linked in the application report. The university has established an English language website at https://english.hx.cn/. As the university accelerates its internationalization process and expands international exchange and cooperation in a deep and comprehensive manner, including two way mobility for students and faculty, it is strengthening the development of the English website, with its content and timeliness being aligned with those of the Chinese language website.

In fact, the university has long been committed to building an internationalized faculty team and enhancing faculty quality, and has recruited a number of high qual-ity teachers with overseas study experience. In the Network Engineering programme, the head of the computer science discipline, Professor Li Jinhua, graduated from the Stuttgart University in Germany and obtained his doctoral degree there. Lecturer Zhou Xuan studied in Germany, and Lecturer Xu Shaojun studied in Thailand. For Digital Media Arts programme, faculty members with overseas study experience include Lecturer Liu Yafei and Lecturer Mao Xiangyi, who studied in the United Kingdom; Lecturer Wang Xinye and Lecturer Zhang Dingwu, who studied in the Republic of Korea; Lecturer Jiang Houzhi, who studied in Russia; and Lecturer Yang Yuyao and Lecturer Zheng Hui, who studied in Malaysia. With their overseas educational back-grounds, these faculty members will serve as important bridges linking the university with international educational resources.

At the same time, the university will deepen international exchange in two main ways. First, it will promote the regularization of two way study visits for students and faculty. Each year, the university plans to select students and teachers to undertake one to two semesters of study or teaching and research at partner institutions in the United Kingdom, the Republic of Korea, Russia, Malaysia, and Southeast Asia, while establishing dedicated scholarships to cover part of the associated costs. Second, by working with returnee faculty members, the university will invite professors from overseas universities to deliver short term courses and to organise inter-national academic seminars, with a focus on areas such as digital and intelligent education and the cultivation of application oriented talents, thereby deepening re-search cooperation.

R 13. (ASIIN 2) It is recommended to stronger align the form of examination with the intended learning outcomes of the respective module.

The examination forms of Network Engineering programme include: closed -book, computer operation, practical operation, internship report, and achievement demonstration.

The examination forms of Digital Media Arts programme include: closed-book (written) examinations, end-of-course self -designed questions, and achievement presentations .

As described in the provided Module Handbook, full consideration is given, when determining assessment methods, to the alignment between the forms and content of assessment and the intended learning outcomes of the courses.

We will draw on the recommendations of the experts, analyse the actual operation of teaching practice, and, through in depth teaching research, study modern educational concepts, teaching methods, including assessment methods, and technological approaches. In this way, more accurate, diverse, and comprehensive assessment methods will be adopted to better match the achievement of the intended learning outcomes of each module.

In addition, with regard to the minor errors mentioned on page 21 of the evaluation report, the Network Engineering programme has already made the necessary corrections. At the same time, both programmes have conducted a comprehensive review of all examination papers from the past two years, documented the issues identified, required the relevant teachers to implement corrective measures, and organized follow up verification. The construction of the question bank on the Hengxing Competency Platform has been completed. In September 2025, the university put into operation the system based examination paper generation function. Similar errors will not occur in the future.

R 14. (ASIIN 3.1) It is recommended that QHUST improve the continuous professional development of its staff in order to raise the proportion of PhD holders in teaching positions to at least 25% in the medium term and, in the long term, to a level above this threshold.

As stated in the SAR, the Network Engineering programme has a total of 36 faculty members, among whom eight hold doctoral degrees, accounting for 22.2 percent. With the recent appointment of two additional full time doctoral faculty members, the proportion has increased to 26.3%.

The university has consistently attached great importance to the development of a high level faculty team and has issued policies to support faculty members in pursuing further academic qualifications. For those undertaking doctoral studies at domestic or overseas universities, the university provides reimbursement and subsidies for tuition and related fees. In 2024, during the period of material writing, the school initiated the application to the Ministry of Education for the right to confer master's degrees, and accelerated the cultivation and recruitment of teachers such as doctoral students and young and middle-aged professors.

Besides Dr. Chen Mo Bai, the Digital Media Arts major has recruited two more doctoral teachers, Dr. Du Min and Dr. Liu Wen Bai. Currently, there are three teachers with doctoral degrees in the Digital Media Arts major. Additionally, four teachers, namely Mr. Jiang Hou Zhi, Mr. Zheng Hui, Ms. Yang Yu Yao, and Mr. He Zi Jun, are pursuing their doctoral studies and are expected to obtain their doctoral degrees next year.

R 15. (ASIIN 3.1) It is recommended that QHUST provides additional mobility funds for students and staff to realize the envisaged expansion of international cooperation effectively

The university has established policies and allocated dedicated budgetary re-sources to consistently encourage faculty members and students to participate in international exchange activities. Faculty related activities include overseas advanced study, such as pursuing master's and doctoral degrees, participation in international conferences, collaborative projects, and visiting and exchange pro-grammes. Student activities include study tours, overseas study programmes, and exchange schemes. All of these activities are supported by institutional funding and are incorporated into the annual budgets of the respective schools.

In advancing its internationalization strategy, the university continues to pro-vide increased financial resources to support effective and substantive international cooperation and exchange. For 2026, the Network Engineering programme has al-located a working budget of RMB 250,000 for international exchange projects, while the Digital Media Arts programme has allocated a budget of RMB 200,000.

R 16. (ASIIN 3.1) It is recommended that QHUST ensures that sufficient financial resources are allocated to guarantee the regular updating of equipment and software.

The university conducts centralized procurement and replenishes consumables in all laboratory facilities before the semester begins. Equipment is updated or supplemented in a timely manner according to actual teaching needs, and software versions are updated promptly in line with the requirements of course delivery.

Both the university and the college (not any programme) allocate dedicated budgetary funding each year for the procurement, renewal, and upgrading of teaching and laboratory equipment, in order to ensure the routine updating of laboratory hardware and software. Details are provided in Appendix X.18A, Budget Table for Experimental Teaching Funds School of Information Engineering Year 2026, and Ap-pendix X.18B, Budget for Experimental Teaching Expenditure of the School of Arts and Media for 2026.

In addition, one month prior to the start of each semester, each school is required to submit a procurement list for laboratory consumables for the forthcoming semester to the university.

For Bachelor programme Digital Media Arts

R 17. (ASIIN 1.3) It is recommended including a Fundamentals of Programming course to enable students to adapt and develop relevant applications through programming to meet specific project needs

It is intended that appropriate programming and application development content shall be incorporated in accordance with expert recommendations, including the introduction of a foundational programming course to enable students to design and develop tools tailored to specific project requirements. A comprehensive investigation will be conducted into the realm of digital media arts programmes, encompassing various academic institutions, industry enterprises, prevailing market demands, and student perspectives. This endeavour aims to assess the efficacy, strengths, weaknesses, suitability, and complexity of existing programming courses. Subsequent to the analysis of these findings, a meticulously designed foundational computer programming course will be formulated and implemented, catering to the specific developmental needs of our programme. This course will endow students with a profound comprehension of the underlying logic of substantial AI models and the foundational principles of scripting languages. Moreover, students will be empowered with the capacity to leverage AI platforms to formulate and implement rudimentary scripts, thereby nurturing programming development concepts and cultivating project development competencies grounded in AI-assisted programming.

F Summary: Expert recommendations (15.02.2026)

Taking into account the statement given by QHUST, the experts summarize their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Network Engineering	With requirements for one year	30.09.2031	/	/
Ba Digital Media Arts	With requirements for one year	30.09.2031	/	/

Requirements

For both degree programmes

A 1. (ASIIN 1.3) It is required to articulate more clearly how specific modules contribute to the achievement of the intended learning outcomes. This refers particularly to Learning Outcome 5.

A 2. (ASIIN 1.4) It is required that the university establish and implement rules for the recognition of acquired knowledge, skills or competences from outside the Higher Education Institution for up the credits of one semester.

A 3. (ASIIN 4.1) It is required that complete module descriptions be provided for all modules included in the curriculum, and that a consistent approach be ensured across all descriptions, explicitly documenting the date of the most recent amendment, the admission requirements, and the assessment criteria. Module titles should accurately reflect the academic content they represent. It is therefore advisable to employ neutral and content-related titles rather than names derived from specific software applications.

A 4. (ASIIN 4.2) It is required providing statistical data according to the ECTS-Users‘ guide in addition to the final grade.

A 5. (ASIIN 5) It is required to formalize the feedback process to systematically gather and use student feedback and to inform students of programme changes as results of the evaluations.

For Bachelor programme Digital Media Arts

A 6. (ASIIN 1.1) It is required to ensure that Learning Outcome 5 ("use modern tools…") is clearly and demonstrably reflected in the curriculum.

A 7. (ASIIN 1.1) It is required to define the soft skills in the intended learning outcomes in a more concrete and comprehensive way.

A 8. (ASIIN 1.2) It is required to align the title of the programme more closely with its curricular content.

A 9. (ASIIN 1.3) It is required that the module descriptions accurately and comprehensively reflect the actual content of the respective modules. This applies in particular to the representation and specification of artificial intelligence–related content within these modules.

Recommendations

For both degree programmes

E 1. (ASIIN 1.3) It is recommended adjusting the curriculum to facilitate international study experiences.

E 2. (ASIIN 1.3) It is recommended offering a sufficient number of English-taught modules to enable foreign students to complete a meaningful and academically coherent semester at the university.

E 3. (ASIIN 1.3) It is recommended to set up an English website to further the internationalization of the programme and university.

E 4. (ASIIN 2) It is recommended to stronger align the form of examination with the intended learning outcomes of the respective module.

E 5. (ASIIN 3.1) It is recommended that QHUST improve the continuous professional development of its staff in order to raise the proportion of PhD holders in teaching positions to at least 25% in the medium term and, in the long term, to a level above this threshold.

E 6. (ASIIN 3.1) It is recommended that QHUST provides additional mobility funds for students and staff to realise the envisaged expansion of international cooperation effectively.

For Bachelor programme Digital Media Arts

E 7. (ASIIN 1.3) It is recommended including a *Fundamentals of Programming* course to enable students to adapt and develop relevant applications through programming to meet specific project needs.

G Comment of the Technical Committee 02 – Electrical Engineering/Information Technology (10.03.2026)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee discusses the procedure and adopts the experts' assessment without changes.

The Technical Committee 02 – Electrical Engineering/Information Technology recommends the award of the seals as follows:

Degree Programme	**ASIIN Seal**	**Accredited by German Engineers**	**Maximum duration of accreditation**	**Subject-specific label**	**Maximum duration of accreditation**
Ba Network Engineering	With requirements for one year		30.09.2031	-	-
Ba Digital Media Arts	With requirements for one year		30.09.2031	-	-

Vote: unanimous

H Comment of the Technical Committee 04 – Informatics/Computer Science (09.03.2026)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure and proposes only a minor editorial amendment to requirement A3; otherwise, it follows the experts' assessment without any changes.

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

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Network Engineering	With requirements for one year	30.09.2031	-	-
Ba Digital Media Arts	With requirements for one year	30.09.2031	-	-

Vote: unanimous

A 3. (ASIIN 4.1) It is required that complete module descriptions be provided for all modules included in the curriculum, and that a consistent approach be ensured across all descriptions, explicitly documenting the date of the most recent amendment, the admission requirements, and the assessment criteria. Module titles should accurately reflect the academic content they represent. It is therefore ~~advisable~~ mandatory to employ neutral and content-related titles rather than names derived from specific software applications. [FA 04]

I Final Decision of Accreditation Commission (27.03.2026)

The Accreditation Commission discussed the procedure and came to the requirement that requirement 1, which calls for a stronger alignment of curricular content with the intended learning outcomes, already encompasses requirements 6 and 7, since both of these requirements likewise concern the substantiation of the curriculum in order to achieve the intended learning outcomes. Accordingly, requirements 6 and 7 are removed.

Furthermore, the Commission deletes requirement 2, as the recognition of extracurricular achievements is not possible in all countries due to statutory regulations and therefore cannot be imposed within the framework of this procedure.

The Accreditation Commission follows the wording proposed by the Technical Committee 4, which emphasizes not merely the advisability but the necessity of ensuring that module titles are formulated as neutrally as possible and do not refer to specific software programmes or company names.

With regard to the recommendations, the Commission fully endorses the proposals made by the expert panel. The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Accredited by German Engineers	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Network Engineering	With requirements for one year	With requirements for one year	30.09.2031	-	-
Ba Digital Media Arts	With requirements for one year		30.09.2031	-	-

Vote: unanimous

Requirements and recommendations for the applied labels

Requirements

For both degree programmes

A 1. (ASIIN 1.3) It is required to articulate more clearly how specific modules contribute to the achievement of the intended learning outcomes.

A 2. (ASIIN 4.1) It is required that complete module descriptions be provided for all modules included in the curriculum, and that a consistent approach be ensured across all descriptions, explicitly documenting the date of the most recent amendment, the admission requirements, and the assessment criteria. Module titles should accurately reflect the academic content they represent. It is therefore mandatory to employ neutral and content-related titles rather than names derived from specific software applications.

A 3. (ASIIN 4.2) It is required providing statistical data according to the ECTS-Users‘ guide in addition to the final grade.

A 4. (ASIIN 5) It is required to formalize the feedback process to systematically gather and use student feedback and to inform students of programme changes as results of the evaluations.

For Bachelor programme Digital Media Arts

A 5. (ASIIN 1.2) Ensure that the name of the degree programme, its intended learning outcomes and its content correspond with each other.

A 6. (ASIIN 1.3) It is required that the module descriptions accurately and comprehensively reflect the actual content of the respective modules. This applies in particular to the representation and specification of artificial intelligence–related content within these modules.

Recommendations

For both degree programmes

E 1. (ASIIN 1.3) It is recommended adjusting the curriculum to facilitate international study experiences.

E 2. (ASIIN 1.3) It is recommended offering a sufficient number of English-taught modules to enable foreign students to complete a meaningful and academically coherent semester at the university.

E 3. (ASIIN 1.3) It is recommended to set up an English website to further the internationalization of the programme and university.

E 4. (ASIIN 2) It is recommended to stronger align the form of examination with the intended learning outcomes of the respective module.

E 5. (ASIIN 3.1) It is recommended that QHUST improve the continuous professional development of its staff in order to raise the proportion of PhD holders in teaching positions to at least 25% in the medium term and, in the long term, to a level above this threshold.

E 6. (ASIIN 3.1) It is recommended that QHUST provides additional mobility funds for students and staff to realise the envisaged expansion of international cooperation effectively.

For Bachelor programme Digital Media Arts

E 7. (ASIIN 1.3) It is recommended including a *Fundamentals of Programming* course to enable students to adapt and develop relevant applications through programming to meet specific project needs.

Appendix: Learning objectives and curricula

Expected Learning Outcomes for Network Engineering

R1 **Engineering knowledge**: Able to apply mathematics, natural science, engineering foundation and professional knowledge to solve problems in network engineering and related fields.

a) Demonstrate an understanding of mathematics and natural science and apply them to solve problems in network engineering and related fields;

b) Acquire foundational knowledge of computer network planning and design, network system development, network operation management and maintenance, and apply it to solve problems in network engineering and related fields;

c) Develop professional knowledge of network engineering, and apply it to solve engineering problems such as network engineering analysis and overall optimization in network engineering projects.

R2 **Problem Analysis**: Be able to apply the basic principles of mathematics, natural science and engineering science to identify, articulate, and analyze the problems in network engineering and related fields through literature research to obtain effective conclusions.

a) Be able to apply the basic principles of mathematics, natural science and engineering science to identify and judge problems in network engineering and related fields;

b) Be able to correctly express the problems in network engineering and related fields by applying the basic principles of mathematics, natural science and engineering science;

c) Be able to analyze complex problems in network engineering and related fields through literature research and professional collaboration, and get effective and reasonable conclusions.

R3 **Design/Development Solutions**: Be able to plan, design and propose solutions for

engineering problems and economic problems, and consider social, health, safety, legal, cultural and environmental factors in the planning and design process to reflect the sense of innovation.

a) In view of engineering problems and economic problems, be able to make use of professional knowledge in network engineering and related fields, comprehensively consider social, health, safety, legal, cultural and other factors for scheme design, structural analysis, planning, etc., and fully reflect the sense of innovation;

b) Be able to use information technology to establish the ability of network engineering, solve the problems related to network engineering by computer, optimize resources, compare and choose schemes and solve them.

R4 **Research**: Based on scientific principles and scientific methods, we can study problems in network engineering and related fields, mainly including collecting data, obtaining data, designing schemes, analyzing and interpreting data, and getting reasonable and effective conclusions through information synthesis and applying them to engineering practice.

a) According to the theoretical knowledge of network engineering and related disciplines, through theoretical analysis, literature research and related methods, the problems in network engineering and related fields can be investigated, and basic information and data can be collected by reasonable methods;
b) Be able to consider the multiple influencing factors and management objectives of problems in network engineering and related fields, use scientific principles and methods for data analysis and processing, and design concrete and feasible research schemes;
c) Be able to implement the specific research scheme and engineering practice, and make reasonable explanations according to the problems in the implementation process and scientific objectives, and get reasonable and effective conclusions and apply them to engineering practice.

R5 **Use Modern Tools**: Be able to develop, select and use appropriate technologies, resources, modern engineering tools and information technology tools for practical problems, including prediction and simulation of practical problems, and understand their limitations.

a) In view of the problems in network engineering and related fields, we can use modern information technology such as various search tools and professional software to carry out literature retrieval and information inquiry of this major;
b) Be able to develop or adopt suitable technologies, modern information tools and resources to predict and simulate problems in network engineering and related fields, while recognizing their limitations.

R6 **Engineering and Sustainable Development**: When solving problems, we can reasonably analyze and evaluate the design, construction and operation scheme of the project based on the background knowledge, standards and norms related to network engineering, including its impact on society, health, safety, law and social sustainable development, and understand the responsibilities we should bear.

a) According to the background knowledge, standards and specifications of network engineering specialty, we can reasonably analyze and evaluate the design, construction and

operation scheme of the project, and judge the impact of the use of new materials, new processes, new technologies and new methods;
b) Be able to analyze and evaluate the impact of practical activities in the field of network engineering on society, health, safety, law and culture, so as to understand the responsibilities that should be undertaken;
c) Be able to understand the national sustainable development strategy in environmental and social aspects, as well as policies, laws and regulations related to environmental and social sustainable development, and have awareness of environmental protection and sustainable development;
d) Be able to understand the impact of network engineering and related field practice on sustainable development, adopt scientific evaluation methods to analyze the impact of engineering practice on environmental and social sustainable development in network engineering and related field practice, and run the concept of sustainable development through engineering practice.

R7 **Ethic and Professional Norms**: Be with the literacy of humanities and social sciences and a sense of social responsibility, be able to understand and abide by the engineering professional ethics and norms in the practice of network engineering and related fields, and fulfill responsibilities.

a) Establish a correct world outlook, outlook on life and values, have good professional ethics and professionalism, and have a strong sense of collective honor and the spirit of unity and cooperation;
b) Be able to understand the professional nature and professional responsibility of network engineering professionals in the practice of network engineering and related fields, pay attention to professional ethics cultivation, abide by professional ethics and fulfill their responsibilities.

R8 **Individual and Teams**: Be able to assume the roles of individuals, team members and leaders in a multidisciplinary team.

a) Understand the meaning of teamwork, have a sense of teamwork, and be able to assume the roles of individual, team member and person in charge in the implementation of network engineering and related field practice;
b) Be able to play its due role in a multi-disciplinary background team according to the role requirements, organize and coordinate the work of team members, and coordinate the relationship with other disciplines to jointly solve problems in network engineering and related fields.

R9 **Communication**: Be able to communicate effectively with peers in the industry and the public on issues in network engineering and related fields, including writing reports and

designing manuscripts, making statements, clearly expressing or responding to instructions. Have a certain international vision and be able to communicate and exchange in cross-cultural background.

a) Be able to communicate effectively with industry peers and the public on network engineering and related issues through written or oral communication, be able to clearly express solutions to network engineering-related issues through writing reports, designing manuscripts, making statements, etc., and answer questions;
b) Have a good foreign language application ability in network engineering, understand the international status of network engineering and related fields, have a certain international perspective, and be able to communicate and exchange in cross-cultural background.

R10 **Project Management**: Understand and master the principles of network engineering, economic decision-making methods and related practical knowledge of network engineering drawing, and be able to apply it in a multidisciplinary environment.

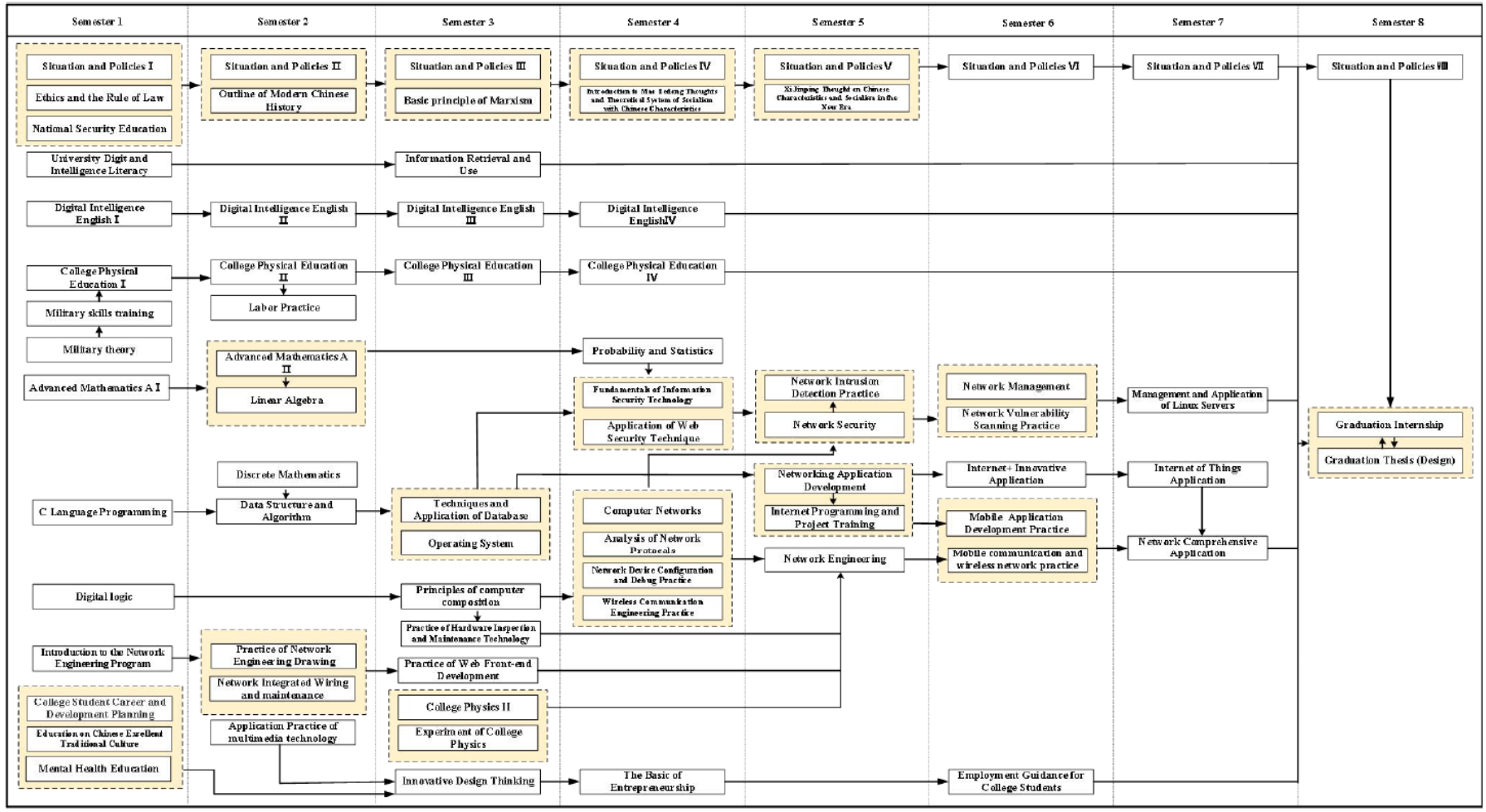
a) Master the principles of network engineering management, have the ability of project management, and be able to choose appropriate management and economic decision-making methods according to the practice of network engineering and related fields;
b) Be able to apply the principles of network engineering, economic decision-making methods and practical knowledge of network engineering drawing to analyze and solve problems such as economic analysis, investment decision-making, cost (cost) control and scheme comparison of engineering projects.

R11 **Life-Long Learning**: Possess a commitment to lifelong learning and the ability to engage in continuous self-directed learning to adapt to evolving professional demands.

a) Develop the ability to identify and address knowledge gaps through self-directed learning.
b) Stay updated on advancements in network engineering and related fields, maintaining amultidisciplinary understanding.

Curriculum of Network Engineering based on the SAR:

C. Appendix: Learning objectives and **curricula**



*Specialization Courses and Professional Elective Courses Not Included

Figure2 Topology Diagram of Network Engineering Professional Curriculum

Expected Learning Outcomes for Digital Media Arts

1) **Engineering Knowledge**: Able to apply basic theories, design methods, design foundations, computer-aided design, and design management knowledge to solve project problems in the field of digital media arts and related areas.

a) Master the basic connotations and methods of the discipline of digital media arts, be adept at applying basic principles of digital modeling, digital media arts, and design theory, and apply them to solving complex problems in the field of digital media arts and related areas.

b) Understand national policies, guidelines, and regulations in the cultural and artistic sectors, as well as program skills in the fields of digital media, animation, film and television, and multimedia interaction, and apply them to solving complex problems in the field of digital media arts and related areas.

c) Possess program knowledge and skills in digital media arts, able to combine theory with practice, and have the necessary abilities for design, representation, technical implementation, and management in digital media arts creation work, with a sense of design innovation and innovation capabilities, and strong analytical and practical abilities.

2) **Problem Analysis**: Able to use basic theories and methods of the program field to identify, express, and analyse complex production problems through literature research and the application of modern information technology, to obtain basic methods and effective conclusions.

a) Be able to apply principles and artistic and technical means of animation design, post-production of film and television, and digital media visuals to identify and judge relevant issues in digital media arts.

b) Be able to comprehensively apply historical theories, disciplinary dynamics, and the latest achievements, combined with standards and norms, to conduct domestic and foreign document retrieval and research using computers and other new media, to study and analyze digital media arts creation problems, and form effective analytical conclusions.

c) Be able to express written content accurately through text and images, and have good problem analysis and explanation skills, as well as excellent social communication skills.

3) **Design/Development Solutions**: Able to plan and design for complex projects, considering factors such as society, health, safety, law, culture, and the environment, demonstrating an innovative spirit.

a) For complex projects, be able to use digital media art-related knowledge for reasonable analysis, comprehensively consider social, health, safety, legal, cultural, and environmental factors, design solutions for complex problems in animation and post-production,

formulate production processes for animation and film and television creation, and demonstrate an innovative spirit in the process.

b) Have good design thinking and logical thinking abilities, as well as a strong innovative spirit, be able to analyze and judge program issues through program theoretical knowledge and practical experience, and have the ability to design and innovate targeted special programs.

4) **Research**: Able to master program skills and methods for innovative design in digital media arts, possess independent creative ability, team collaboration practical ability, knowledge update ability, and knowledge innovation ability.

a) Be able to base on basic theoretical knowledge of digital media arts and general principles of social sciences, natural sciences, and art design, adopt scientific research methods to study complex problems in the design process, and propose effective and feasible solutions.

b) Be able to comprehensively apply program knowledge to collect and analyze data through scientific surveys, use relevant methods and means of social sciences and natural sciences, and identify, express, and analyze digital media arts design problems through literature research to obtain effective conclusions.

c) Be able to implement specific project research plans and practices, and based on problems arising during implementation, compare scientific goals, conduct reasonable analysis, and develop reasonable and effective solutions for application in project practice.

5) **Use Modern Tools**: Able to develop, select, and use appropriate technologies, resources, modern tools, and information technology tools for complex work, including program software application skills required for these courses, and understand their limitations.

a) Be able to select and use appropriate technologies, resources, modern platforms, and program software tools for digital media arts projects, and skilfully use relevant software and equipment to design and create digital artworks.

b) Be able to master basic methods for literature retrieval, information query, and the use of modern information technology to obtain relevant information, to address related research, statistics, design representation, new technologies, and new materials, and have the ability to reasonably apply frontier disciplinary theories to design practice to solve related problems.

6) **Engineering and Sustainable Development**: When solving complex project problems, be able to analyze and evaluate the impact of project practices on the environment, society, laws, and economic and social sustainable development based on relevant background knowledge, and understand the responsibilities to be borne.

a) Based on background knowledge, standards, and normative procedures of the digital media arts profession, be able to conduct reasonable analysis and evaluation of project design and practice, and judge the impact of production methods and implementation means.

b) Be able to analyze and evaluate the impact of activities and complex problem solutions in the field of digital media arts on the environment, society, laws and regulations, and culture, thereby understanding the responsibilities to be borne.

c) Understand the country's sustainable development strategy in terms of the environment and society, as well as policies, laws, and regulations related to environmental and social sustainability, and have awareness of environmental protection and sustainable development.

d) Understand and evaluate the impact of digital media arts creation practices on the environment and social sustainable development, and be able to use scientific evaluation methods to analyse the impact of project practices on the environment and social sustainable development in the practice of digital media arts and related fields, and integrate the concept of sustainable development into practice.

7) **Ethic and Program Norms**: Have awareness of serving the country and people with professionalism, possess humanities and social science literacy, a sense of social responsibility, and be able to understand and apply program ethics, and abide by program ethics, norms, and relevant laws in program practice, fulfilling responsibilities.

a) Establish correct worldviews, outlooks on life, and values, have good program ethics and dedication, and a strong sense of collective honour and team spirit.

b) In the creation practice of digital media arts and related fields, understand and abide by program ethics and behavioral norms, focus on program ethics cultivation, abide by program ethics norms, and fulfill responsibilities.

8) **Individual and Teams**: Be able to assume individual, team member, and leadership roles in multidisciplinary teams.

a) Understand the significance of teamwork, have a sense of team cooperation, and possess good collaborative communication and project management skills, able to play an independent and effective role in the team, and have the ability to organize and lead design management project teams.

b) Be able to play the required role in multidisciplinary background teams, organize and coordinate team members to carry out work, and coordinate relationships with personnel from other disciplines to jointly solve complex project problems in the field of digital media arts and related fields.

9) **Communication**: Be able to effectively communicate and exchange with peers in the industry and the public on issues related to digital media arts and related fields, including

good language and writing expression skills, communication, social adaptability, and teamwork skills, and possess certain international perspectives, and be able to communicate and exchange in cross-cultural contexts.

a) Be able to communicate and exchange effectively with peers in the industry and the public on issues related to digital media arts and related fields through written or oral forms, clearly express solutions to digital media arts-related problems through report writing, design manuscripts, presentations, and answer inquiries.

b) Possess good foreign language application skills in the field of digital media arts, understand the international status of digital media arts and related fields, possess certain international perspectives, and be able to communicate and exchange in cross-cultural contexts.

10) **Project Management**: Understand and master the workflow and management methods of digital media work creation projects, and be able to effectively apply them in multiple fields such as cultural media companies, internet companies, and radio and television companies.

a) Have the ability to control and manage overall projects, pay close attention and control each link in the project, and better land the design project.

b) Be able to master and apply design management principles and decision-making methods to conduct technical and economic analysis of digital media work creation projects, propose reasonable solutions, and have certain organizational, management, and leadership abilities.

11) **Life-Long Learning**: Have awareness of autonomous learning and lifelong learning, and have the ability to continuously learn and adapt to development. Be able to understand the impact of extensive technological changes on projects and society, adapt to new technological changes, and possess critical thinking skills.

a) Possess the ability to proactively identify and pose questions, have awareness and requirements for lifelong learning, master methods of autonomous learning, and have ways to expand knowledge and skills.

b) Be able to engage in autonomous learning and lifelong learning, master the ability to adapt to new developments in environmental design, summarize a set of suitable design processes and methodologies, and continuously refine them in practice, possessing comprehensive problem analysis and resolution skills.

Curriculum of Network Engineering based on the SAR:

C. Appendix: Learning objectives and **curricula**

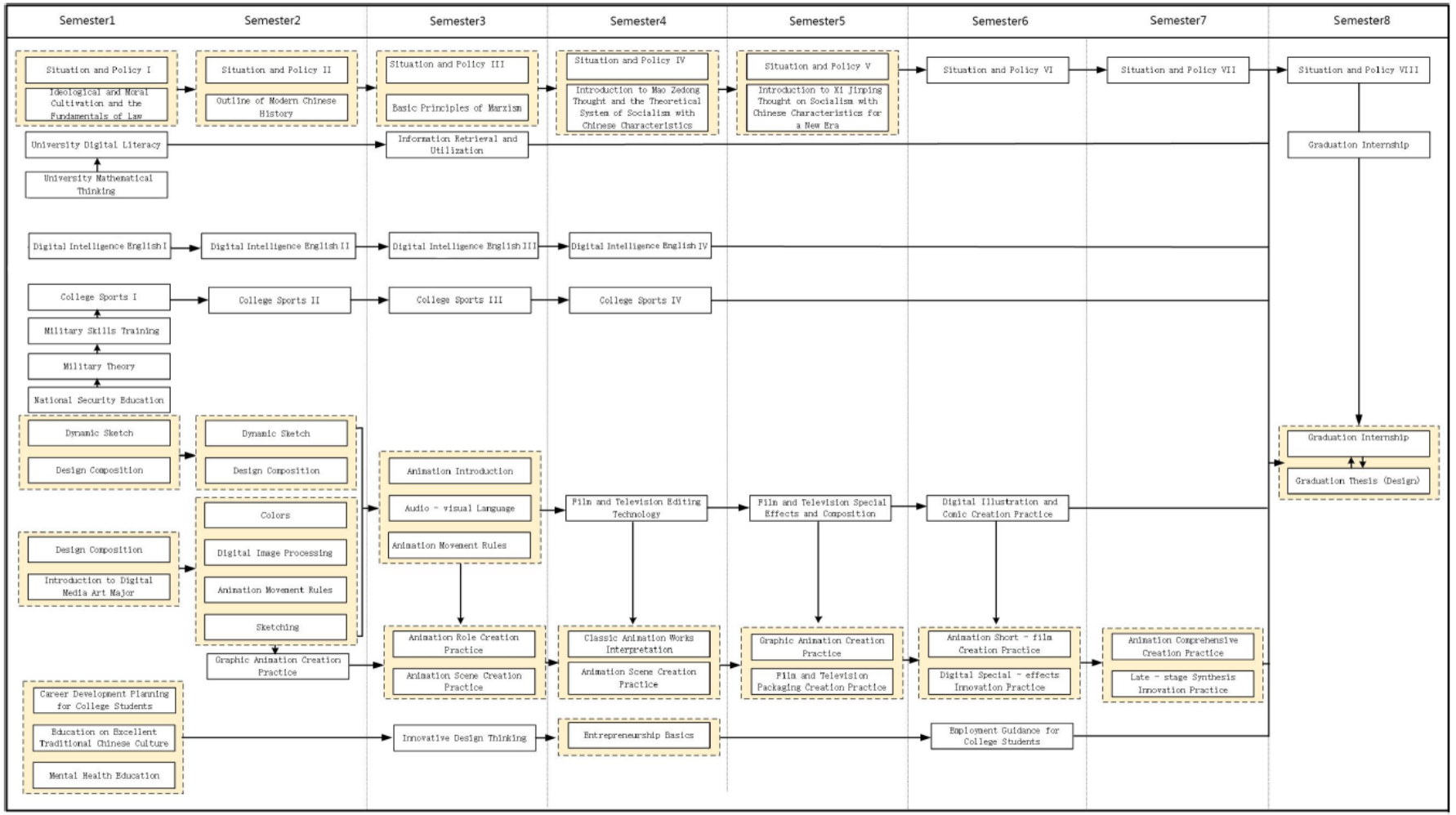


Figure2 Topology Diagram of Digital Media Arts Courses (Specialization Courses and Program Elective Courses not included)