



ASIIN Seal

Accreditation Report

Degree programmes
Computer Science and Technology
Internet of Things

Offered by

Zhejiang Shuren University

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A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name
计算机科学与技术	Computer Science and Technology
物联网工程	Internet of Things Engineering
<p>Date of the contract: 07.11.2024</p> <p>Submission of the final version of the SAR: 31.03.2025</p> <p>Date of the onsite visit: 09.-10.06.2025</p> <p>at: Zhejiang Shuren University (Hangzhou, China)</p>	
<p>Expert panel:</p> <p>Prof. Dr. Madhukar Chandra, Technical University of Chemnitz;</p> <p>Prof. Dr. Martin Welsch, formerly IBM Germany R&D;</p> <p>Associate Prof. Haizhou Du, Shanghai University of Electric Power;</p> <p>Xinyu Yi, student at Shenyang Institute of Engineering</p>	
<p>Representative of the ASIIN headquarter: Julia Tohidi Sardasht</p>	
<p>Criteria used:</p> <p>European Standards and Guidelines as of May 15, 2015</p> <p>ASIIN General Criteria as of March 28, 2023</p> <p>Subject-Specific Criteria of Technical Committee 04 – Informatics/Computer Science as of March 29, 2018</p>	

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 ¹	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Computer Science and Technology	Bachelor	n/a	6	Full time	n/a	8 Semester	240 ECTS	Yearly intake in the fall semester; first time offered in September 2003
Internet of Things Engineering	Bachelor	n/a	6	Full time	n/a	8 Semester	240 ECTS	Yearly intake in the fall semester; first time offered in September 2014

B-2 Characteristics and features

The study programmes evaluated in this report are the Bachelor in Computer Science and Technology (CST) and the Bachelor in Internet of Things Engineering (IoT) at the Zhejiang Shuren University (ZSRU). Zhejiang Shuren University is an undergraduate university founded in 1984 with campuses in Hangzhou and Shaoxing. The two study programmes evaluated here are taught at the College of Information Science and Technology in Hangzhou. According to the self-assessment report (SAR), the university was recognized as one of the first “application-oriented pilot universities” in the province Zhejiang in 2015.

The Bachelor in Computer Science and Technology “trains students to meet the needs of the development of the software industry, to develop morally, intellectually, physically, aesthetically and laboriously, to have good scientific literacy and team work ability, to be able to apply the basic theory and knowledge of computer systems, the operation principles and development methods of medical and health information systems, and to use mainstream computer software and hardware systems. Comply with the standards and specifications of medical and health industry informatization, solve complex engineering

¹ EQF = The European Qualifications Framework for lifelong learning

problems in the field of medical and health informatization, and be able to engage in the analysis, design, development, operation and maintenance of computer information systems in the field of medical and health informatization.”

The Bachelor in Internet of Things Engineering “is based in the Yangtze River Delta Digital Economy Belt, relying on the provincial first-class discipline of Computer Science and Technology, and the talent cultivation base for health big data engineering integrating medicine, industry, and information. Through a collaborative education system involving government, industry, academia, research, and application, the program cultivates talents who master technologies such as embedded sensing and communication, intelligent information processing, and system integration development. These talents are capable of analyzing and solving complex engineering problems in IoT technology applications, especially in the development of AI-enabled medical and elderly care IoT systems, including embedded device development, AI-based data perception, transmission, processing, system architecture design, and system software development. They should possess good communication skills, teamwork, and application innovation abilities, as well as an international perspective, a sense of social responsibility, professional ethics, and the awareness and ability for independent and lifelong learning. They should be able to adapt to the progress of new-generation intelligent IoT technologies and meet the needs of regional economic development.”

C Assessment of the Expert Panel

This accreditation report is based on the preliminary evaluation report for the degree programme 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 has taken the statement and additionally submitted documents of Zhejiang Shuren University into account in 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 evaluation lies on an assessment of the study programme under review according to the criteria stipulated in the ASIIN General Criteria. These criteria are 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 programme and the regulatory framework that Zhejiang Shuren University has provided before, during and after the audit.

C-1 Objectives and learning outcomes of the degree programme [ASIIN 1.1]

Description of the current status

Computer Science and Technology

In the SAR submitted by the university prior to the audit and on an English website linked in the SAR, the following five programme objectives are listed:

“Objective 1: Have good humanistic quality and moral sentiment, have a healthy body, honest and trustworthy, dare to assume responsibility, have a strong sense of social responsibility, and constantly improve professional quality;

Objective 2: Have comprehensive engineering knowledge, solid professional knowledge and skills, and be able to discover, analyze, research and solve complex engineering problems in the field of medical and health informatization;

Objective 3: Have good engineering application practice ability, comply with industry professional norms, and be able to become the technical backbone or project management personnel of system analysis, design, development and testing in computer-related fields;

Objective 4: In the research team, product and project development team, not only can complete individual tasks with high quality, but also can participate in the organization, coordination and management of the team;

Objective 5: Have lifelong learning ability and innovative spirit, position, plan and implement personal and career development goals, expand knowledge and improve ability accordingly, be able to adapt to social development, continue to innovate and create in the industry, and achieve individual development.”

Moreover, there are twelve learning outcomes, also called graduation requirements, that students should meet and that relate to the objectives cited above:

1. Engineering knowledge: refers to the ability of applying theories and methods of mathematics, natural sciences and engineering when working with computer software and hardware systems.
2. Problem analysis: refers to the ability of applying mathematical, natural science, and engineering knowledge in the analysis and solving of complex engineering problems through methods such as literature research, experiments, reasoning, or modelling.
3. Design/development solutions: refers to the ability to design solutions for complex engineering problems, considering “social, health, safety, legal, cultural and environmental factors in the design process”.
4. Research: refers to the ability to study complex engineering problems, analysing and interpreting data, and obtaining reasonable conclusions.
5. Use of modern tools: refers to the ability “to develop, select and use appropriate technologies, resources, modern engineering tools and information technology tools for complex engineering problems”.
6. Engineering and society: refers to the ability to analyse and evaluate the impact of engineering practices on society, health, safety, law, and culture, and to understand the responsibilities.

7. Environment and sustainable development: refers to the ability to understand and evaluate the impact of engineering practices on environmental and social sustainable development.
8. Professional Ethics: refers to a humanities and social sciences literacy, an understanding of social responsibility, and an adhering to “professional ethics and norms of the IT industry in engineering practice”.
9. Individuals and teams: refers to the ability to work individually, in a team, or as a team leader in multidisciplinary endeavours.
10. Communication: refers to the ability to effectively communicate one’s research findings with peers, and to master at least one foreign language.
11. Project management: refers to the ability to manage projects and employ economic decision-making methods.
12. Lifelong learning: refers to the awareness for the importance for lifelong and autonomous learning, adapting to developments in the field of IT and engineering.

The relationship between the programme objectives and the graduation requirements (i.e. learning outcomes) is visualized in this table (app. 1-7):

Training objectives	GR1	GR2	GR3	GR4	GR5	GR6	GR7	GR8	GR9	GR10	GR11	GR12
Objective 1						√	√					
Objective 2	√	√	√	√	√							
Objective 3								√				
Objective 4									√	√	√	
Objective 5												√

The SAR furthermore specifies that four years after graduation, students should have “solid basic knowledge of mathematics, natural sciences, humanities and social sciences, systematically master a wide range of professional basic knowledge, receive training in the field of engineering practice related to this major, master the professional knowledge of solving complex engineering problems in the field of computer information system development, and be able to track the development trend of related fields of this major. Students should have the application skills of Internet and artificial intelligence tools, be proficient in reading English literature related to their major, and have effective English communication skills. Students should have the ability of teamwork and enterprise production management. Students can use their knowledge to solve various engineering problems, be competent for various jobs, and have good further learning ability and personal development prospects.”

Internet of Things Engineering

In the SAR submitted by the university prior to the audit and on an English website linked in the SAR, the following five programme objectives are listed:

“Objective 1: Possess good humanistic literacy and moral integrity, have a healthy physique, be honest and trustworthy, willing to take responsibility, and have a strong sense of social responsibility, continuously improving professional quality.

Objective 2: Have comprehensive engineering knowledge, solid professional knowledge and skills, and the ability to discover, analyze, research, and solve complex engineering problems in the field of IoT informatization.

Objective 3: Have good engineering application practice ability, comply with industry professional norms, and be able to become technical backbone or project management personnel in system analysis, design, development, and testing in IoT- related fields.

Objective 4: In research teams, product and project development teams, be able to complete individual tasks at a high quality, and also participate in the organization, coordination, and management of the team.

Objective 5: Have the ability and spirit of lifelong learning and innovation, be able to position, plan, and implement personal and professional development goals, expand knowledge, and enhance capabilities accordingly. Be able to adapt to social development, continuously innovate and create in the industry, and achieve individual development.”

Moreover, there are twelve learning outcomes, also called graduation requirements, that students should meet and that relate to the objectives cited above:

1. Engineering knowledge: refers to the ability of applying theories and methods of mathematics, natural sciences and engineering to solve complex engineering problems in the context of Internet of Things (IoT) systems.
2. Problem analysis: refers to the ability of applying mathematical, natural science, and engineering knowledge in the analysis and solving of complex engineering problems in the conception and design stages of IoT systems through methods such as literature research, experiments, reasoning, or modelling.
3. Design/development solutions: refers to the ability to design solutions for complex engineering problems in the field of IoT engineering, considering “social, health, safety, legal, cultural and environmental factors in the design process”.
4. Research: refers to the ability to study complex engineering problems, analysing and interpreting data, and obtaining reasonable conclusions.

5. Use of modern tools: refers to the ability “to develop, select, and use appropriate technologies, resources, modern engineering tools, and information technology tools for complex engineering problems”.
6. Engineering and society: refers to the ability to analyse and evaluate the impact of engineering practices on society, health, safety, law, and culture, and to understand the responsibilities.
7. Environment and sustainable development: refers to the ability to understand and evaluate the impact of engineering practices on environmental and social sustainable development.
8. Professional Ethics: refers to a humanities and social sciences literacy, an understanding of social responsibility, and an adhering to “IT industry professional ethics and norms in engineering practice”.
9. Individuals and teams: refers to the ability to work individually, in a team, or as a team leader in multidisciplinary endeavours.
10. Communication: refers to the ability to effectively communicate one’s research findings with peers and the general public, and to master at least one foreign language.
11. Project management: refers to the ability to manage multidisciplinary projects and employ economic decision-making methods.
12. Lifelong learning: refers to the awareness for the importance for lifelong and autonomous learning, adapting to developments in the IoT industry.

While the wording and specificity with regard to the study content for some of the objectives and graduation requirements differs between the two programmes evaluated in this report, they generally contain the same information. Therefore, this table, copied from the section above on the Bachelor in Computer Science and Technology, also applies to the bachelor’s in Internet of Things Engineering and illustrates the relationship between the programme objectives and the graduation requirements (i.e. learning outcomes) (app. 1-7):

Training objectives	GR1	GR2	GR3	GR4	GR5	GR6	GR7	GR8	GR9	GR10	GR11	GR12
Objective 1						√	√					
Objective 2	√	√	√	√	√							
Objective 3								√				
Objective 4									√	√	√	
Objective 5												√

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

The expert panel commends the university's strong integration of national and regional labour market needs into the programme objectives. The strong link between the university's applied education model and the local industry – particularly in the fields of digital healthcare, IoT, and smart city infrastructure – ensures that graduates are well prepared for employment and entrepreneurship. The expert panel sees a high employability of graduates in different fields such as hospitals, the digital economy, and civil service.

The panel further acknowledges that the university has developed a structured and transparent set of intended learning outcomes aligned with international benchmarks, such as those defined by the Washington Accord. The focus on problem analysis, use of modern tools (including AI), and cross-disciplinary knowledge (notably the integration with healthcare topics in learning outcomes 3 and 6) is seen as particularly forward-looking and well-aligned with future societal and industrial demands. However, the expert panel did not see the aspects of interdisciplinarity and specifically health and environmental knowledge sufficiently and explicitly mirrored in the learning outcomes stated in the module handbook. The expert panel suggests that the strategic orientation of the programmes could be further developed to deepen interdisciplinary collaboration, for example through dedicated cross-disciplinary electives that relate medical topics to computer science topics (e.g. through the revision of the course “Medical Information Technology”) and explicitly include topics such as Big Data, AI, and digitisation in industrial processes.

Overall, however, both degree programmes do meet the subject specific criteria of a bachelor's degree as the programme objectives cited above meet the following: “The Bachelor's programme conveys a broad spectrum of specialist knowledge and the fundamentals necessary for entry into professional practice. Graduates must be able to implement the scientific findings and problem-solving concepts in application areas. [...] They work on the solution of complex problems and can further develop concepts, methods, procedures, techniques and tools of computer science [...]” (ASIIN-SSC 04, 2.1 Requirements on Bachelor's Degree Programmes).

Students demonstrated an awareness of the intended learning outcomes and articulated how the programmes helped them achieve their academic and professional development goals. The involvement of industry partners in co-teaching and internship supervision also reinforces the practical relevance of the intended competencies.

Based on the review of documents and audit discussions, the expert panel concludes that the programme objectives and learning outcomes are transparent to students and other interested parties.

C-2 Name of the degree programmes [ASIIN 1.2]

Description of the current status

Computer Science and Technology

The degree programme is called 计算机科学与技术 in Chinese and “Computer Science and Technology” in English. The name adheres to the naming conventions prescribed by the Ministry of Education of China. The designation is used consistently in the SAR, the programme handbook, and on the university’s official website. As per national regulations, the programme name is aligned with a standardized list of degree titles, which ensures its recognition and acceptability across Chinese higher education institutions

Internet of Things Engineering

While the Chinese title of the study programme 物联网工程 translates to “Internet of Things (IoT) Engineering”, some parts of the SAR refer to the study programme only as “Internet of Things” or for short IoT. The submitted appendices are consistent in the use of “Internet of Things Engineering”.

The name adheres to the naming conventions prescribed by the Ministry of Education of China. Apart for some references in the SAR, the designation (“Internet of Things Engineering”) is used consistently in the programme handbook, and on the university’s official website. As per national regulations, the programme name is aligned with a standardized list of degree titles, which ensures its recognition and acceptability across Chinese higher education institutions.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

The expert panel acknowledges that the programme titles conform with national standards and do not present any legal or formal inconsistencies. The naming follows the Ministry of Education’s official taxonomy and is thus accepted within China’s academic and professional systems. The English names used in all submitted documents is a literal translation of the Chinese programme names.

The expert panel summarises that the titles of the degree programme do reflect the intended objectives and learning outcomes as well as the teaching and learning content. The designation (both in the original language and in English) is used consistently in all relevant documents such as internal university documents, public websites, and student records.

C-3 Curriculum [ASIIN 1.3]

Description of the current status

Aspects applicable to both study programmes

Content and structure

Both study programmes are composed of six modules each: general education platform courses, disciplinary foundation platform courses, major foundation platform courses, major direction courses, major elective courses, and concentrated practical teaching.

According to the SAR, the general education platform courses, also called public basic platform courses, “typically include humanities and social sciences, physical education, and ideological and moral education. These courses help students develop good humanistic literacy, moral integrity, and physical health, and strengthen their sense of social responsibility and professional quality. They also provide students with the foundation for team collaboration and communication skills, enabling them to better complete individual tasks within a team and participate in team organization and management.” These courses are not thematically linked to the study programme students choose but are the same (and mandatory) for students in both study programmes evaluated here.

The disciplinary foundation platform courses “cover a broad range of engineering knowledge, providing students with a comprehensive engineering knowledge system”, serving as the basis for the chosen study programme and differ for each study programme.

The major foundation platform courses, also called professional foundation courses, “further deepen students' knowledge and skills in the professional field”.

The major direction courses, also called specialized direction courses, “focus on in-depth learning in specific directions, enabling students to conduct more professional analysis and solutions for complex engineering problems”.

The major elective courses, also called professional elective courses, “provide students with a wider range of knowledge and skill choices, enabling them to further expand their engineering knowledge and professional skills according to their interests and career goals”.

Lastly, the concentrated practical courses allow students to “apply theoretical knowledge to practical engineering problems through actual projects and practice links, enhancing their engineering application practice capabilities”. Internships are part of the concentrated practical courses and place students in companies or organisations where they work on projects, collaborating with professional teams.

Overall, students take general education platform courses and disciplinary foundation platform courses in the earlier semesters, and major/specialized direction courses and major elective courses in later semesters, indicating a sequence of knowledge and specialization throughout the course of the study programmes.

Student mobility

The SAR understands ‘student mobility’ not in the sense of (international) exchange programmes to study part of the degree at another institution but rather as the capability or practical possibility of transferring from or to another university. In 2024, 16 new students transferred to Zhejiang Shuren University in the Computer Science and Technology bachelor’s while no students transferred to another university. In the same year, four new students transferred to Zhejiang Shuren University’s Internet of Things Engineering programme while one student transferred to another university.

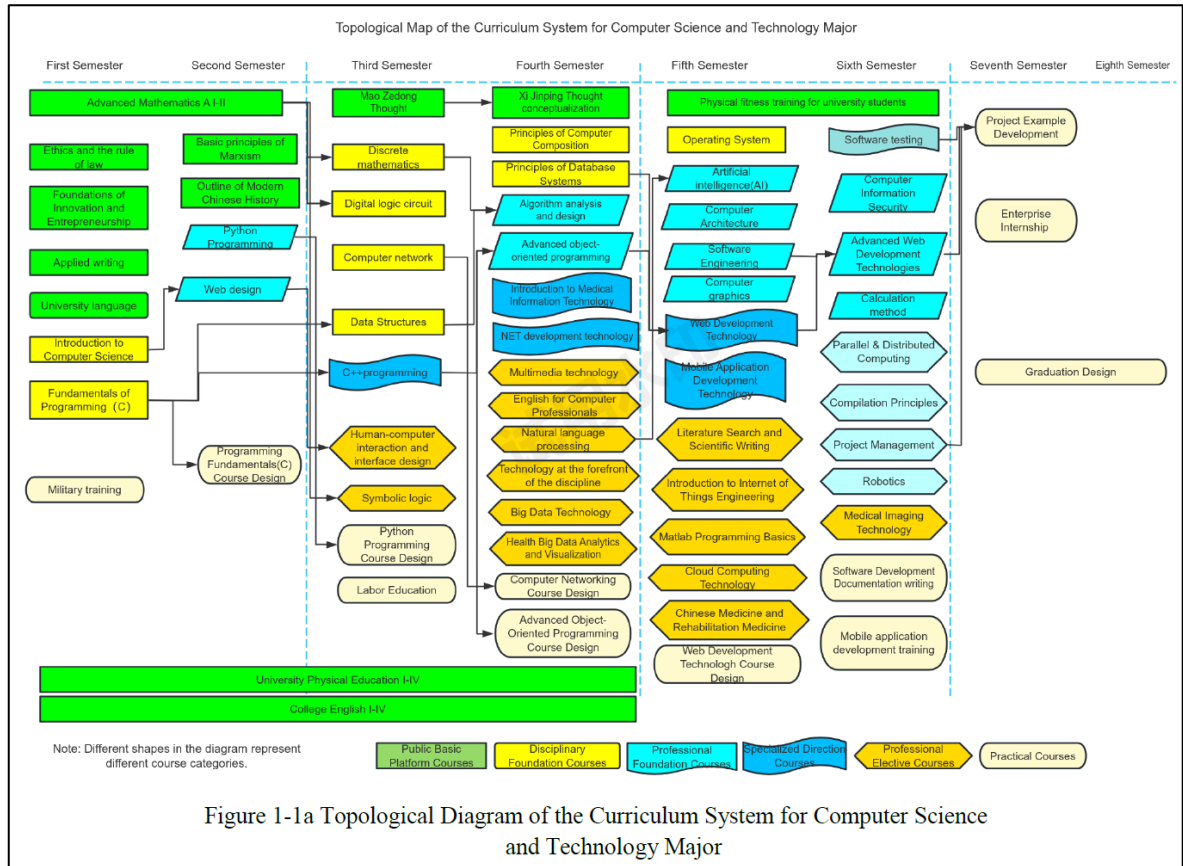
While the university states in the SAR’s introduction that it maintains “friendly cooperation with over 80 international universities and institutions in countries such as Britain, France, America, Canada, Belarus, Japan, South Korea, Australia, Sri Lanka and Thailand as well as in regions such as Hong Kong, Macau and Taiwan”, there is no indication in this part of the SAR on whether students are able to study part of their degree at another (international) university.

Periodic review of the curriculum

The university has a process for the review of the curricula in place (app. 1-5). The curricula of both programmes evaluated here have been adjusted in the past, based on the college’s research direction and industry demands: “Specifically, to meet the societal demand for medical information technology professionals and in line with the school’s research focus on the integration of medicine and information technology, both programs have introduced basic medical knowledge into their talent cultivation. Students are required to be familiar with the operating principles and development methods of medical and health information systems, such as the course “Introduction to Medical Information Systems” offered in both programs. Additionally, with the development of artificial intelligence technology and the increasing demand from enterprises for AI-related skills, both programs have also increased the offering of courses related to artificial intelligence.”

Computer Science and Technology

The university presents the following curriculum in its SAR. It follows the module structure outlined above:



The training plan (app. 1-7) specifies how many credits are awarded for each course. Students therefore have to take 52.5 credits worth of public basic platform courses, 28 credits worth of disciplinary foundation courses, 24 credits worth of professional foundation courses, 16 credits worth of specialized direction courses, and 20 credits worth of elective courses. The number of credits for the practical courses and specifically for the thesis are not specified in the training plan. This allocation does not add up to 240 ECTS that are stated as the total amount of credits of this study programme in the beginning of the SAR. This will be further discussed below in the section on workload and credits.

The content of the courses is specified in the module descriptions (app. 1-8, 1-9). In the disciplinary foundational courses, students are introduced to the fundamentals of programming with C, computer networks, database system principles, principles of computer organization, operating systems, software engineering, and computer architecture. In later courses, students can build upon that knowledge. Furthermore, the specialization in medical information technology should be highlighted.

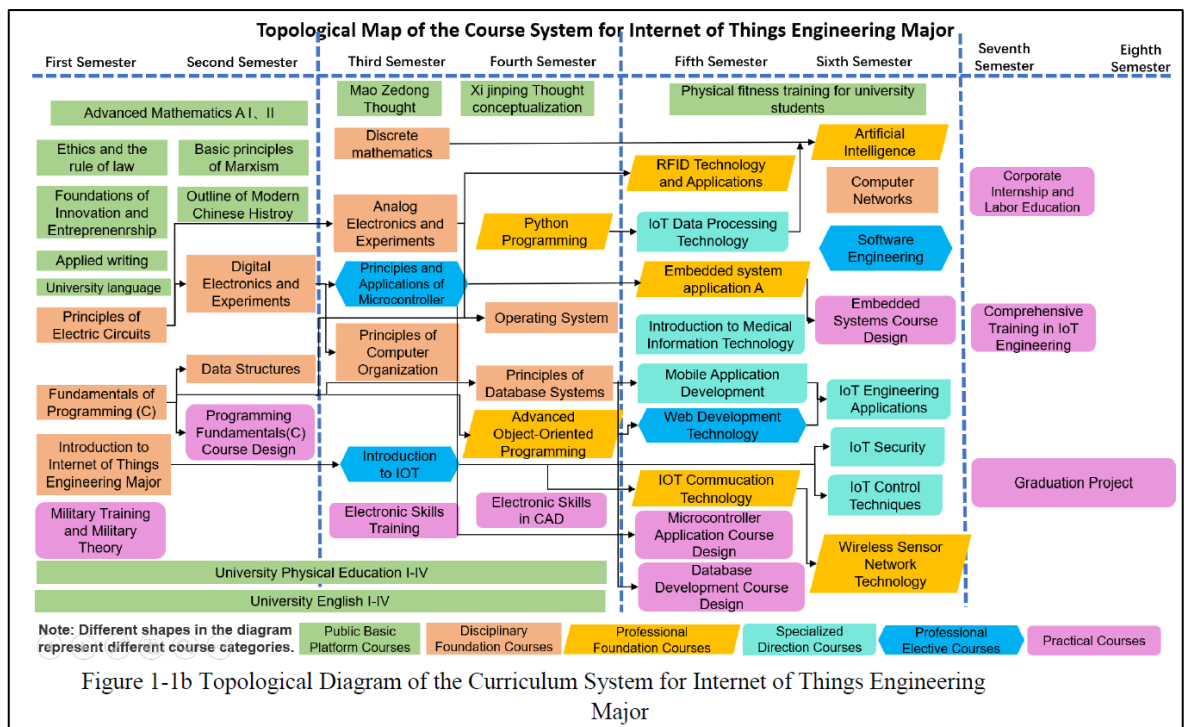
C Assessment of the Expert Panel

The courses listed in the teaching syllabus include, for example, courses that cover formal and mathematical competencies (“Linear Algebra” and “Discrete Mathematics”), analytic and implementation competencies (e.g. C and Python programming, “Software Engineering”), technological competencies (“Operating System”, “Computer Information Security”), and methodological competencies (“Software Development Document Training”, “Project Case Development”).

The standard duration of the study programme is four years. However, the training plan (app. 1-7) also states that a flexible duration of three to six years is possible.

Internet of Things Engineering

The university presents the following curriculum in its SAR. It follows the module structure outlined above:



The training plan (app. 1-7) specifies how many credits are awarded for each course. Students therefore have to take 52.5 credits worth of public basic platform courses, 36 credits worth of disciplinary foundation courses, 20 credits worth of professional foundation courses, 14 credits worth of specialized direction courses, and 20 credits worth of elective courses. The number of credits for the practical courses and specifically for the thesis are not specified in the training plan. This allocation does not add up to 240 ECTS that are stated as the total amount of credits of this study programme in the beginning of the SAR. This will be further discussed below in the section on workload and credits.

The content of the courses is specified in the module descriptions (app. 1-8, 1-9). In the disciplinary foundational courses, students are introduced to the fundamentals of programming with C, database system principles, artificial intelligence, advanced object-oriented programming, RFID technology and applications, IoT control technology, information security in the IoT, and IoT engineering applications. In later courses, students can build upon that knowledge. Furthermore, the specialization in medical information technology should be highlighted.

The courses listed in the teaching syllabus include, for example, courses that cover formal and mathematical competencies (“Linear Algebra” and “Discrete Mathematics”), analytic and implementation competencies (e.g. C and Python programming, “Software Engineering”), technological competencies (“Computer Networks”, “Information Security in Internet of Things”), and methodological competencies (“Embedded development course design”).

The standard duration of the study programme is four years.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

Content and structure

The expert panel finds that the curricula of both the Computer Science and Technology (CST) and Internet of Things (IoT) programmes are well-structured, pedagogically sound, and reflective of the institution’s applied mission and regional economic context. The programmes overall show a progression from foundational knowledge to applied competencies, supported by regular updates in response to graduate and industry feedback. While general curricular frameworks are determined by national guidelines, Zhejiang Shuren University adapt the curricula to some degree. Curriculum oversight is managed by the college’s Committee for Teaching Affairs, with programme-specific updates driven by the programme directors and teaching teams. Course-level coordination is ensured through collaborative planning and evaluation meetings held throughout the semester, during which faculty align course content and assessment with intended programme outcomes using a programme-outcomes matrix. While it is possible to link certain courses to certain learning outcomes and also to the ASIIN subject specific criteria for informatics and computer science (ASIIN-SSC 04), the expert panel requests a matrix for both study programmes that clearly shows which courses correspond to which SSC in a concise manner.

Both programmes offer a range of electives and encourage participation in student competitions and innovation projects. While these aspects support curricular flexibility and

exposure to new technologies, the expert panel finds that the elective offerings could be better aligned with the overarching learning objectives. In particular, topics related to Artificial Intelligence (AI), Big Data, and digital transformation in industrial processes should be more explicitly integrated, especially in elective modules. In a similar vein, students expressed interest in deeper engagement with emerging technologies, such as large language models and generative AI (e.g., ChatGPT, DeepSeek). The panel encourages the university to integrate such contemporary tools and frameworks into elective modules and practical projects. It generally recommends these themes be strengthened in the teaching curriculum.

The expert panel positively notes that the module handbooks for both programmes reference the relevant standard literature.

The university has made efforts to support English language acquisition through bilingual instruction and courses such as “Scientific English.” Students reported valuing English courses and teaching materials, and the expert panel supports expanding this approach. According to the programme coordinators, courses such as “Operating Systems” and “Computer Networks” are already taught in English, and students demonstrated readiness and enthusiasm for additional foundational-level English-taught classes. The panel therefore recommends strengthening the international orientation of the programme and English proficiency of students and staff through mandatory and regularly offered English-taught modules. Blended bilingual teaching approaches are seen as particularly suitable.

Regarding hands-on and lab experiences, the expert panel acknowledges the internship component that is part of both programmes. Internships are well integrated into the curriculum, with dual supervision from university faculty and company mentors, and opportunities for thesis alignment. The university also facilitates collaboration with industry through job fairs and lab sharing agreements such as with Huawei. Students are encouraged to take initiative in selecting internships and participating in competitions, further reinforcing employability and self-directed learning.

Finally, regarding the courses on socio-political and moral education, the expert panel acknowledges that those are part of national regulations. However, as these courses take up a non-insignificant amount of the curriculum, the expert panel suggests that those courses be retained as qualifying modules that are not examined to give students more room to focus on their core disciplinary content in computer science or IoT.

Student mobility

While approximately 50 ZSRU students have participated in study-abroad programmes and some international students (currently 14) are enrolled at ZSRU, overall outbound student

mobility remains limited and there was no accessible data demonstrating structured student mobility, despite references to cooperation agreements with international institutions. In this regard, the panel also feels that the very premise of accelerating the mobility of students and teachers, at least in terms of proficiency in spoken English, is limited. Consequently, it sees significant scope for improvement in this area.

Periodic review of the curriculum

The expert panel acknowledges that Zhejiang Shuren University has a system in place for the periodic review of its curricula. A major curriculum revision is conducted every four years, complemented by minor annual updates. The Office of Teaching Affairs oversees this process at the university level by providing a general framework, which is further adapted by the individual colleges to fit their programme-specific needs.

Feedback from various stakeholders is systematically incorporated into the review process. This includes data from the national graduate employment and satisfaction surveys conducted by the Ministry of Education, as well as more targeted, qualitative feedback gathered directly by the university from alumni and industry partners. The expert panel positively notes that companies engage with faculty leadership and provide input on current industry needs, which has led to concrete curricular changes—such as the removal of outdated courses.

Teaching staff and programme coordinators are also actively involved in identifying technological trends and suggesting updates, particularly in areas such as blockchain, large language models, and big data. However, while some emerging technologies are introduced through existing courses or seminars (e.g. course *Disciplinary Frontiers*), the expert panel finds that key topics such as quantum computing, high-speed networking, and cybersecurity are currently underrepresented.

Overall, while the review process is robust and responsive to industry feedback, the panel agrees with internal stakeholders that the current feedback mechanisms could be further improved, especially in terms of systematically capturing forward-looking technological developments.

Computer Science and Technology

The expert panel acknowledges the integration of applied industry-relevant content, particularly in the areas of smart manufacturing and medical digitalization. The CST programme is notable for its specialization in medical technology, supported by cross-faculty cooperation with the university's medical school. Courses such as "Introduction to Medical Information Technology" and electives related to medical imaging provide valuable interdisciplinary training. However, these modules currently remain underdeveloped relative to

their potential. The panel strongly recommends that such interdisciplinary courses be further revised and deepened, for example introducing topics such as Digitisation of Environmental Management or Signals and Systems. Moreover, as the medical courses are currently designated as elective courses, it has to be ensured that students do take at least some courses in that field as the medical specialization directly links to the programme objectives.

Internet of Things Engineering

The IoT programme, meanwhile, responds effectively to regional industry needs by emphasizing software and device development. Adjustments to lab hours have been made to increase the practical orientation of the programme, a change that was welcomed by both students and company representatives. Nonetheless, the panel notes that key emerging standards in the IoT field – such as the “matter” protocol for smart home interoperability – are currently absent from the curriculum. The integration of such content is recommended to improve the programme’s alignment with international developments.

The experts positively assess that the module *Enterprise Internship and Labor Education* is a mandatory module, offering students an opportunity for practical application of their knowledge.

C-4 Admission requirements [ASIIN 1.4]

Description of the current status

Aspects applicable to both study programmes

The SAR states that students need to take the National University Entrance Examination of the People’s Republic of China or the Unified University Entrance Examination held in the relevant provinces and municipalities in order to get admission to a bachelor’s degree at Zhejiang Shuren University. The SAR does not specify the admissions requirements for each study programme and only links to a university website in Chinese.

In general, the admission process to Chinese universities works as stated in the SAR: “The enrollment of Chinese universities is determined by the provinces and municipalities according to the number of candidates and examination results. According to the score, it is divided into the first batch and the second batch, according to the score order (from high to low). [...] In the admission stage, the admission department of Zhejiang Shuren University, based on the scheduled enrollment plan, comprehensively measures the candidates’ morality, intelligence and physique, and selects the best candidates according to their

scores. The typical admission process is: filing, reading, pre-admission, admission inspection, issuance of admission notice, etc.”

The university provides the following data on admissions in the SAR:

Year	2024	2023	2022
CST program	125(Zhejiang province:72, other province:53)	125(Zhejiang province:72, other province:53)	125(Zhejiang province:75, other province:50)
IoT program	80(Zhejiang province:51, other province:29)	80(Zhejiang province:51, other province:29)	80(Zhejiang province:52, other province:28)

Further information on the admission of incoming foreign students for short term language courses is provided on the university website, linked in the SAR. It is unclear under which conditions (or if at all) foreign students are admitted to the programmes.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

The expert panel recognizes that the university’s admission system is compliant with national Chinese standards and provides a fair, transparent, and competitive process for student selection. The centralized Gaokao system ensures that students admitted to the programme possess a minimum academic level suitable for undergraduate studies. The number of students that can be admitted to both programmes (125 for CST, 80 for IoT) is limited due to national regulations.

The expert panel furthermore recognizes that there is a credit recognition system in place for credits acquired externally, in accordance with the accreditation criteria, and the Lisbon Convention in particular, albeit rarely applied.

C-5 Workload and credits [ASIIN 1.5]

Description of the current status

Aspects applicable to both study programmes

The university differentiates between theoretical module courses and practical training courses with regard to how many contact hours correspond to one (1) Chinese credit. For

theoretical module courses it is 16 contact hours that make up one Chinese credit and for practical training courses (except the thesis) it is 28 contact hours. Self-study hours do not count towards the credit points.

For both courses, the submitted appendices are referring to Chinese credits as the numbers used in appendices such as 1-7, 1-8, and 1-9 do not add up to the 240 ECTS stated in the beginning of the SAR. Furthermore, there is no coherent conversion factor indicated.

The SAR states that “the effectiveness of students’ independent study is evaluated by the course instructors to ensure that the actual learning workload of the students is consistent with the planned workload”.

Computer Science and Technology

While the curriculum discussed above does not specify how many credits are allocated to each module, the university provides the following table on the credit allocation for the different modules (app. 1-7):

Table 3 Summary List of Curriculum Setting and Credit Allocation

Course category	Compulsory courses				Elective courses				Practice			
	Public foundation courses	Subject foundation courses	Major foundation courses	Subtotal	University-level electives	Electives of the study directions of the major	Electives of the major	Subtotal	Practice weeks	Experiments in class	Innovative practice	Subtotal
Credits	52.5	28	24	104.5	8	16	12	36	28.0	35.1	4	67.1
% in total credits	30.4%		16.2%		13.9%		60.6%	4.6%	9.3%	7.0%		20.9%
Class hours	992	448	384	1824	128	256	192	576	Total credits	172.5	Total class hours	2400
% in total class hours	41.3%		18.7%		16.0%		76.0%	5.3%				

However, the number of credits listed here adds up to 207.6 credits which is at odds with the total given in the table itself as 172.5 and the number of total credits stated for the study programme as 240 (ECTS) in the beginning of the SAR. It is likely that the credits in this table refer to Chinese credits and not ECTS.

Internet of Things Engineering

While the curriculum discussed above does not specify how many credits are allocated to each module, the university provides the following table on the credit allocation for the different modules (app. 1-7):

C Assessment of the Expert Panel

Table 2 Summary of course offerings and credit allocation by category

academic program categorization	compulsory course				optional course (in school)				fulfill			
	Public Foundation Platform Courses	Academic foundation platform courses	Specialized Basic Platform Courses	Subtotal	School-level elective courses	Specialty Orientation Electives	specialized elective	Subtotal	intensive week	In-class experiments	Innovative practices	add up the total
student fraction	52.5	36	20	108.5	8	14	12	34	27	30.0	4	61.0
Percentage of total credits	30.3%	20.7%	11.5%	62.5%	4.6%	8.1%	6.9%	19.6%	15.6%	17.3%	2.3%	35.2%
lesson time	960	576	320	1856	128	224	192	544	total credits	173.5	total lesson time	2400
Percentage of total hours	50.0%	23.9%	13.0%	87.0%	4.3%	8.7%	8.7%	21.7%				

However, the number of credits listed here adds up to 203.5 credits which is at odds with the total given in the table itself as 173.5 and the number of total credits stated for the study programme as 240 (ECTS) in the beginning of the SAR. It is likely that the credits in this table refer to Chinese credits and not ECTS.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

The expert panel concludes that the structure of both programmes reflects a logical sequence of foundational courses in the early semesters, followed by more advanced and application-oriented content. The final semester is dedicated to the graduation project and internship, allowing students to focus fully on practical experience and thesis writing.

Workload calculation is based on a combination of contact hours, homework, MOOC participation, and other assignments. One Chinese credit is based on 16 contact hours, and the university estimates an equal amount of self-study time, resulting in a conversion ratio of approximately 1:2 when translated into ECTS. Course-specific workload data, including non-contact elements, is outlined in the module handbooks and estimated by instructors.

The expert panel notes that the credit allocation reflects the relative importance of each course. Input from industry partners is used to adapt the content and credit weight of relevant modules – for example, adjusting course credits in response to evolving technologies

or changing employer expectations. However, no indication has been made towards the systematic inclusion of student feedback on workload and credit allocation.

Students confirmed that the workload is manageable and appropriately distributed. They appreciated the reduced course load in later semesters, which supports internship participation and preparation for postgraduate entrance exams. However, the expert panel reiterates that courses in political and moral education – while mandatory due to national regulation – could be handled as non-examined qualifying modules to ease the scientific workload.

To improve transparency, the expert panel requests a detailed overview of course distribution by semester, including credits (Chinese and ECTS), contact and self-study hours, and course categories.

C-6 Didactics and teaching methodology [ASIIN 1.6]

Description of the current status

Aspects applicable to both study programmes

Regarding the didactics and teaching methods, the university states in its SAR: “The theoretical courses of all kinds of courses are mainly taught in large classes (about 60-70 students), and the experimental courses and practical training courses are usually taught in small classes (about 30-35 students).” The course syllabi (app. 1-8, 1-9) furthermore mention discussions, projects, lab work, case studies, experiment, and online assignments as teaching and learning methods. Regarding the latter, lecturers use the MOOC Course Platform where online courses are made available to students.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

The expert panel acknowledges that Zhejiang Shuren University has established a variety of didactic methods that are both learner-centred and technologically supported. Teaching practices in the CST and IoT programmes are closely aligned with the programme objectives and learning outcomes, and are adapted dynamically based on continuous student feedback and assessment.

A particular strength is the integration of frequent formative assessments. Teachers use short digital quizzes, often at the beginning of a session, to assess students’ retention of previously covered content. The results guide adjustments to the teaching methods used in the session. These quick-feedback mechanisms are supported by in-house and third-

party platforms, such as MiaoMiao and ChaoXing XueXiTong, and allow students to submit questions or receive instant feedback. Additionally, virtual exams and AI-supported course assistants help gauge understanding and provide support outside of class.

The expert panel commends the institution's efforts to promote active learning through project work, group assignments, and hands-on programming activities. Teachers are encouraged by the university to foster classroom interaction and regularly integrate practical examples into their lessons. Laboratory sessions are capped at around 30 students per session and are supported by two instructors, which supports intensive guidance and interaction. The average class size in theoretical courses is 60–80 students.

The panel positively notes that interdisciplinarity is principally encouraged through project work and university-supported competitions at various levels. Every student is required to earn four credits through participation in innovation projects or competitions, thereby promoting self-directed and interdisciplinary learning. Furthermore, university policy mandates that engineering students take elective courses outside their field—such as in literature, arts, or general sciences—which fosters a broader educational perspective.

The expert panel also notes that independent scientific work is systematically encouraged through both curricular structures and a dedicated student support system. However, regarding the bachelor's theses, the panel recommends a stronger focus on scientific analysis, including data interpretation, error analysis, and critical discussion to further the students' independent research.

Lastly, regarding the use of English in teaching, the expert panel notes that while some courses are taught bilingually or in English, students expressed interest in more English-taught content. The panel supports expanding English-medium instruction to better prepare students for international opportunities (see also section C-3).

Overall, the expert panel concludes that the didactic approaches are adaptive and effective in supporting the achievement of intended learning outcomes. However, more focus can be placed on furthering the level of independent research and the use of English. The integration of interdisciplinary content could be further enhanced in teaching and assessment formats by requiring students to synthesize knowledge across disciplines, particularly in more advanced courses (see also sections C-1 and C-3).

Final assessment of the experts after the statement of the Higher Education Institution regarding criterion 1:

The experts assess the criterion as partially fulfilled.

Learning outcomes and curriculum: The experts acknowledge the university's detailed outline of how which electives correspond to which programme outcomes and learning objectives, illustrated especially through the newly submitted Learning Outcomes Matrices. For example, for the Computer Science and Technology programme, Zhejiang Shuren University outlines that the electives have been set up around the core objective of "cultivating interdisciplinary application-oriented talents in the field of medical and health informatization" and specifies which course meets which learning objectives. Moreover, Zhejiang Shuren University is continuously developing its study programmes by revising the elective courses and focusing on ensuring that each elective has some correspondence in the programme outcomes. The experts welcome these planned measures but maintain their requirement until implementation is realized and the level of elective and mandatory course content, examinations, and thesis and project work conforms with the stated learning outcomes (see chapter E, A 1).

Learning outcomes and curriculum: Furthermore, the experts acknowledge the university's focus on interdisciplinary application in the field of medical and health informatization. Courses in the Computer Science and Technology programme such as Introduction to Medical Information Technology show students the intersection of medical information systems, health big data analysis, and visualization. The university furthermore aims to revise the interdisciplinary modules to align them more directly with the programme objectives. In the Internet of Things programme, similar measures and the introduction of new courses, such as Medical Service Robot Practice and Medical Image Processing are planned. The experts welcome these planned measures, but decide to retain their requirement until the measures are fully implemented (see chapter E, A 2).

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

Curriculum: Regarding English proficiency in staff and students, the experts acknowledge that there are two mandatory bilingual or English-taught courses in each degree programme. Moreover, the experts welcome that Zhejiang Shuren University encourages its teachers to deliver elective courses in English. However, these efforts can be deepened and formalized. Therefore, the experts maintain their recommendation (see chapter E, E 1).

Curriculum: Regarding the modules on political education, military training, and ethics, the experts acknowledge that these courses are mandatory under the regulations of the National Ministry of Education. Nevertheless, the experts maintain their recommendation that, within the scope permitted by governmental guidelines, examinations in these modules should be suspended or converted into non-graded qualifying assessments (see chapter E, E 2).

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

Workload: Zhejiang Shuren University has designed a 'Mechanism for Regular Monitoring of Student Workload'. This mechanism outlines how the different stakeholders (Academic Affairs Office, programme directors, course instructors, and students) are involved in tracking and comparing planned workload with actual workload, identifying discrepancies, and ensuring that credit points accurately reflect the time and effort required for learning. Moreover, the newly submitted course distribution tables illustrate the workload distribution adequately. The experts welcome this structured five-step mechanism and with these measures in place, the requirement is considered fulfilled.

Didactics: The experts acknowledge that the topic of the theses often determines the content of the different sections in them. However, as no new evidence on implementation of systematic measures to ensure an adequate academic level in the theses could be identified, the experts maintain the requirement (see chapter E, A 3).

C-7 Exams: System, concept and organisation [ASIIN 2]

Description of the current status

Aspects applicable to both study programmes

According to the SAR and submitted documents, courses are generally assessed in three parts: a regular performance grade, a mid-term assessment, and a final assessment.

The regular performance grade is based on "student attendance, classroom performance (including classroom questioning), group discussion, regular homework, course quizzes, major assignments, experimental practice activities (such as short papers, reports, experimental operations, computer operations), etc." The regular performance grade should account for 30–50% of the final grade in pure theoretical courses or theoretical courses with in-class experiments and should be made up of at least three of the aforementioned items. For separate experimental courses, it is up to the instructor to determine the percentage of the final grade that is based on the regular performance grade. Either way, the proportion of the regular performance grade and its items should be clearly stated in the syllabus and teaching plan and be made available to students.

The SAR furthermore expands on the mid-term and final assessments which are generally closed book written exams. Other examination forms mentioned in the syllabi (app. 1-8, 1-9) are open-book exams, papers, reports, and online exams. The course description in the syllabus specifies which examination method will be used in the course.

Examinations are graded on a 100-point scale with the following correspondence to a five-grade system: “90 – 100 points for excellent, 80 – 89 points for good, 70 – 79 points for medium, 60 – 69 points for passing, and 59 points for failing.”

Examinations usually take place in the middle (9th week) and the end (17th week) of each semester with time and place of the examinations published in the teaching management systems. Students have to present their ID card or student ID in order to take part in the exam. There are regulations for re-sits in place that are set up in accordance with the Academic Affairs Office.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

The expert panel finds that Zhejiang Shuren University has developed a comprehensive examination and assessment system designed to reflect the intended learning outcomes of the CST and IoT programmes. The examination structure combines continuous assessment—through homework, quizzes, class participation—and final examinations, with typical weighting of 40–50% for coursework and 50–60% for the final exam. Students are informed of examination methods and grading schemes at the beginning of each course and through the course syllabus.

Digital tools play a key role in facilitating assessment and feedback. Assignments and quizzes are distributed and collected through dedicated platforms, with timely feedback provided. Students confirmed that the submission and evaluation process is transparent. Furthermore, teachers use a matrix to correlate each exam question to specific learning outcomes, aiming to ensure alignment between assessments and programme objectives. As the experts did not see an example of such a matrix during the onsite visit or in the submitted documents, the panel requests a sample.

Despite these strengths, the panel observed several issues in the consistency and transparency of examination practices. Exam formats vary widely between courses—some begin with multiple-choice questions, others with true/false or essay-style questions. This lack of uniformity in structure can create unnecessary confusion for students and complicate comparisons of performance across courses. A more standardized approach to exam design would support clarity and fairness.

Grading practices also lack consistency. Some exam scripts are signed by the teacher, others are not. In several cases, the same individual serves both as the course instructor and the approving dean. This dual role poses a clear conflict of interest and undermines the credibility of the assessment process. The panel strongly recommends introducing a “four-

eyes” principle, whereby grading is independently reviewed and validated by a second academic not involved in teaching the course.

Appendix 2-21, which according to the SAR “provides the itemized score registration forms for one course in both Computer Science and Technology and Internet of Things Engineering majors” has not been submitted. For the sake of completeness, the expert panel would like ZSRU to submit this document.

In regard to final graduation theses, the panel notes a structured and transparent process for topic selection and supervision. Students choose their topic in consultation with their advisor, and the proposed topic is reviewed by a committee to ensure it aligns with the programme’s learning outcomes. The process includes a literature review, methodology planning, regular supervisory meetings, and a final defense. However, as stated above, the panel finds that many theses lack academic depth. They often emphasize system deployment or software implementation over analytical rigor. Key components such as data interpretation, error analysis, and scientific discussion are frequently underdeveloped. The panel therefore recommends enhancing the academic quality of bachelor theses.

Internships are closely integrated with the final thesis, especially in the final semester, and often overlap in timing. While students benefit from rich practical experiences, the panel finds that assessment criteria for internships are insufficiently defined. Competencies such as teamwork, problem-solving, and independent project management should be formally assessed and contribute to the final grade. Industry partners also noted the need for clearer structure and evaluation procedures.

Finally, the panel reiterates that government-mandated courses in moral and political education, while important, should be considered as qualifying modules assessed on a pass/fail basis rather than through graded examinations. This would allow students to dedicate more focus and effort to their core scientific and professional studies.

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

The experts assess the criterion as partially fulfilled.

As stated above, the experts acknowledge that the topic of the theses often determines the content of the different sections in them. The submitted thesis grading matrices outline how the thesis grade is composed. However, as no new evidence on implementation of systematic measures to ensure an adequate academic level in the theses could be identified, the experts maintain the requirement (see chapter E, A 3).

Moreover, Zhejiang Shuren University has updated the grading criteria for internships to explicitly include soft skills in the assessment of students' performances. The experts welcome these measures and consider the recommendation to be fulfilled.

Regarding consistent grading schemes, the experts acknowledge that the university has a uniform question and answer template in place for each exam. This template is provided to each reviewer for each exam, so the grading is consistent. With these measures in place, the requirement is considered fulfilled.

The experts acknowledge that Zhejiang Shuren University uses 'chief examiner' and 'head examiner' interchangeably, denominating the same person. Nevertheless, the experts maintain that grading responsibilities should clearly be separated, and a system of checks and balances be in place. The experts therefore maintain their requirement that a person who is not the course examiner checks the grading (see chapter E, A 4).

As stated above, regarding the modules on political education, military training, and ethics, the experts acknowledge that these courses are mandatory under the regulations of the National Ministry of Education. Nevertheless, the experts maintain their recommendation that, within the scope permitted by governmental guidelines, examinations in these modules should be suspended or converted into non-graded qualifying assessments (see chapter E, E 2).

C-8 Resources [ASIIN 3]

Description of the current status

Aspects applicable to both study programmes

Staff and staff development [ASIIN 3.1]

There are 36 full-time teachers in the Computer Science and Technology programme and 22 full-time teachers in the IoT Engineering programme. For the former, the student to teacher ratio is given as 15.4 to 1. In both programmes, 91% of the teachers have a master's degree of PhD, and the majority of the teachers are between 36 and 45 years old. In the CST programme, there are 4 professors, 20 associate professors, and 12 lecturers. In the IoT programme, there are 2 professors, 8 associate professors, and 12 lecturers.

Furthermore, the SAR states that in both programmes, industry experts are also employed as part-time teachers. They also advise the university of the formulation of the training objectives, graduation requirements and curriculum settings, and teach courses such as *Enterprise Practice* (internship) and *Graduation Design*.

In the SAR, the university states that teachers have “have undertaken or participated in various teaching and research projects at all levels, such as curriculum construction”. Professional full-time teachers teach 360 hours per year, however, “the actual workload requirements vary slightly according to different positions and titles”.

Regarding the training of teachers, the SAR states: “The university has set up a teaching quality monitoring center (teacher teaching development center), which mainly carries out the supervision and monitoring of teaching work, and carries out teaching evaluation and teacher training development. The institution has a management office attached to the Office of Academic Affairs. It aims to carry out teaching quality evaluation and diagnosis through teacher training, teaching communication, teaching evaluation, teaching research and teaching consultation, to provide services for the improvement of teachers’ teaching ability, to promote teaching reform and innovation, and to promote the continuous improvement of teaching quality. At present, a series of activities have been organized, such as different forms of teaching training, teaching forums, teaching demonstration and observation.” Furthermore, the university regularly reviews the teachers’ teaching of the courses and so-called course-leaders conduct class assessments. New teachers have to participate in a pre-job training and on-the-job training organized by the Department of Education, and then pass the examination and obtain the Certificate of Qualification for Pre-job Training of Teachers in Institutions of Higher Learning. To further enhance their professional development, the university encourages teaches to participate in domestic and international teaching exchange seminars and provides some financial support for that.

Student support and student services [ASIIN 3.2]

The university offers the following resources to its students: The Office of Academic Affairs, the teaching quality monitoring center, the Division of Student Development and Services, counsellors and head teachers, digital teaching resources, and document information retrieval training.

The Office of Academic Affairs manages the teachings plans, teaching operations, teaching quality and evaluations, and conducts education research.

The teaching quality monitoring center assists the Office of Academic Affairs in managing teaching quality by setting up and conducting the teaching evaluations.

The Division of Students Development and Services organizes social practice activities and supports students with the “management of work-study programs, national student loans, poverty and special hardship subsidies, the evaluation of national scholarships and grants, the management of student status, and the education and consultation of students’ mental health”.

In each study programme and each class, students have full-time counsellors and head teachers who are responsible for “morning and evening self-study, employment and entrepreneurship, mental health education counseling and psychological crisis intervention guidance”. Furthermore, counsellors organize events for students from different years to meet, and innovation and entrepreneurship training seminars.

The university uses digital teaching resources, such as an English learning platform and a platform for massive open online courses.

Lastly, the SAR references the document information retrieval training in which students are trained in literature retrieval and scientific writing as part of their curriculum.

Funds and equipment [ASIN 3.3]

The university states in its SAR that “there are sufficient teaching funds to ensure normal teaching activities”. In 2023, the Computer Science and Technology programmes received 1.08 million yuan from the provincial government; the IoT Engineering programme 0.52 million yuan respectively. In the past, the programmes have also received funding from the central government. The expenses in both programmes are: curriculum construction (100,000 yuan in each programme in 2023), teaching expenses (738,000 yuan in CST; 198,000 yuan in IoT), educational reforms (100,000 yuan in each programme), and student support (139,000 yuan in CST; 121,000 yuan in IoT).

Regarding the available equipment in the study programmes, the SAR mentions the university’s laboratories. The “Computer Science and Technology Experimental Center of Zhejiang Shuren University” has 14 laboratories with big data servers, microcomputers, development and sensor kits, cloud storage platforms, servers, smart home training platforms, graphic workstations, computer composition principle test boxes, digital audio and video platforms, oscilloscopes, and other instruments. Before students can work in the laboratories, they have to participate in a laboratory safety education training and pass an exam. Moreover, the university has a library with over ten computers rooms where programming courses take place and computer rooms for self-study.

The primary teaching locations of both programmes are the university's teaching building, the Information Science and Technology College's experimental center (laboratories), and off-campus practical education bases (internships in companies). The SAR states: “The university teaching building has classrooms with capacities of 50, 90, and 120 seats, divided into ordinary and smart classrooms. Ordinary classrooms are equipped with multimedia computers and projectors, controlled via a network central control system. Smart classrooms, featuring multiple subsystems, are designed for special courses and flipped classrooms [...]” Moreover, the university facilities include “canteens, supermarkets, clinics,

courier services, indoor and outdoor sports venues, swimming pools, auditoriums, and student activity centers”.

The university has cooperation agreements with “more than 90 institutions and institutions in more than 20 countries and regions, such as Japan, Korea, the United States, Canada, Britain, France, Australia, Thailand, Taiwan, Hong Kong and Macao”, undertaking inter-school visits, curriculum cooperation, double degree joint education, research cooperations, and cultural exchanges.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

Staff and staff development [ASIIN 3.1]

The expert panel commends the staff’s commitment to the programme and their students. The expert panel finds that Zhejiang Shuren University has implemented a structured and supportive system for the recruitment, qualification, and professional development of teaching staff in the CST and IoT programmes. Most lecturers possess relevant academic qualifications and many bring valuable prior industry experience, aligning well with the applied orientation of the university, which the experts highlight positively. Moreover, in the Computer Science and Technology programme, it is 15 of 36 staff members and in the Internet of Things Engineering programme it is 13 of 22 who have recently participated in industry projects.

Staff undergo structured onboarding and training processes. New teachers participate in a semester-long didactic training programme, followed by a qualification phase including trial teaching. Ongoing support is provided through a mentorship system and regular didactics workshops, offered once per semester. The university also encourages participation in academic conferences and promotes continuous learning through internal and external forums.

To support academic progression, the university offers funding for teachers pursuing doctoral studies. Staff are also supported in visiting other institutions in China and collaborating with external academic and industry experts. A total of 26 external lecturers complement the teaching teams, contributing current industry insights.

The expert panel positively notes the institution’s mechanism for keeping teaching staff informed about new technological developments, including guest lectures and collaboration opportunities with industry and academic partners. However, faculty research activities, while present, could be further strengthened and more visibly integrated into the academic profile of the programmes.

Student support and student services [ASIIN 3.2]

The expert panel finds that Zhejiang Shuren University offers a supportive and interactive learning environment. Students benefit from close contact with faculty through WeChat groups, in-class engagement, and regular office hours, both individually and in groups. Lab classes are well-integrated with theoretical instruction and provide hands-on learning in small groups, supported by faculty guidance.

The campus and library offer good study conditions, and access to relevant scientific resources is available. While academic support is strong, the panel sees room for improvement in career services. Industry representatives noted that graduates often lack long-term career planning. Enhanced career advisory services could help students better align their skills and interests with evolving job market expectations.

Funds and equipment [ASIIN 3.3]

The expert panel confirms that the existing infrastructure and financial support are adequate to deliver the programmes. Laboratories are well-equipped, and students confirmed their usability, but foundation and intermediate level lab equipment could be modernized. Moreover, students noted the good study conditions given in the library but would wish for longer opening hours.

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

The experts assess the criterion as partially fulfilled.

As stated above, regarding English proficiency in staff and students, the experts acknowledge that there are two mandatory bilingual or English-taught courses in each degree programme. Moreover, the experts welcome that Zhejiang Shuren University encourages its teachers to deliver elective courses in English. However, these efforts can be deepened and formalized. Therefore, the experts maintain their recommendation (see chapter E, E 1).

The experts furthermore acknowledge that the university has assessment regulations for faculty's scientific research, and that the university obliges teachers to undertake research and publish papers. The experts welcome this and therefore no longer consider a corresponding recommendation necessary.

Zhejiang Shuren University has an Employment Guidance Centre, advising students on employment opportunities and entrepreneurship services. Moreover, every student must take the mandatory course 'Career Planning and Practice of College Students'. With these measures in place, the recommendation is considered fulfilled.

The experts acknowledge that the university maintains dedicated funds for routine maintenance and systematically applies for governmental and internal funding to renew equipment based on urgency. While this structured approach is welcomed, the experts encourage investments that go beyond mere maintenance to ensure that facilities keep pace with rapidly evolving technology. As such updates are a continuous necessity, the experts uphold their recommendation (see chapter E, E 3).

C-9 Quality management: Quality assurance and development [ASIIN 5]

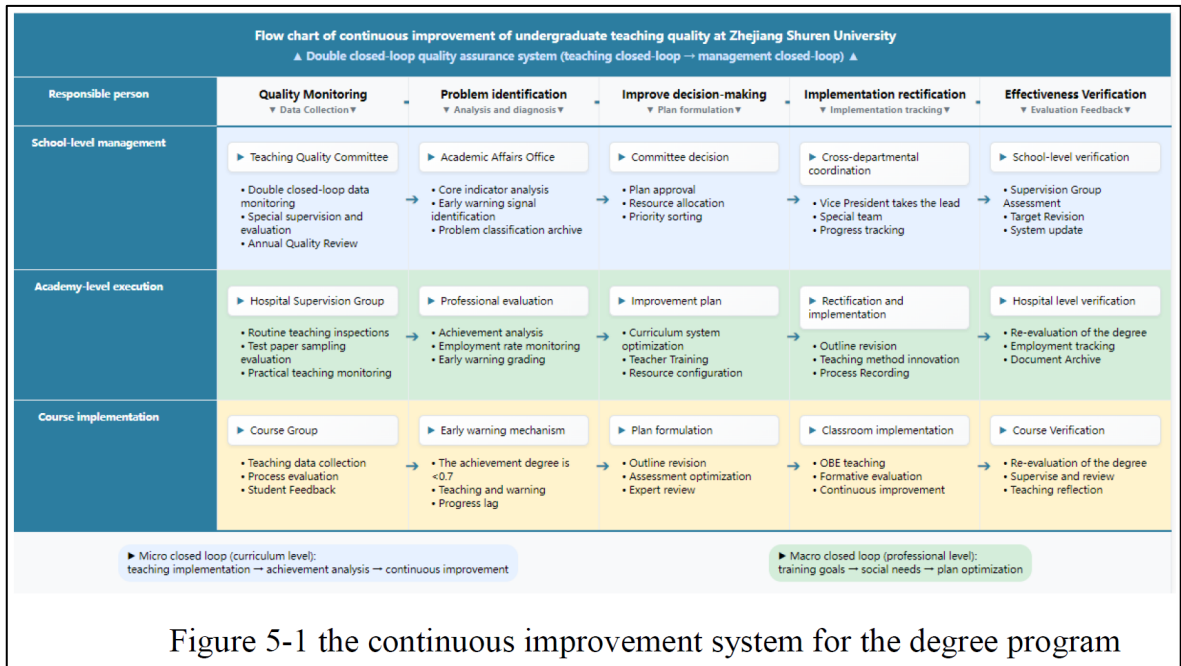
Description of the current status

Aspects applicable to both study programmes

The university provides information on its quality management in the SAR and the submitted documents. The SAR states that the university conducts internal and external teaching quality evaluations. The first contains routine teaching inspections by the teaching dean, director of teaching and research section, teaching supervisor, and teaching secretary of each college and major. There, teachers' classroom instruction, practical sessions, graduation design process, teaching order, teaching plans, and test papers are assessed. Moreover, every semester, "the college will analyze the distribution of teachers' examination results and students' results, and put forward suggestions and requirements for teachers to improve the quality of teaching". External teaching quality evaluations refer to evaluations conducted by the Ministry of Education, employers, and external experts.

Furthermore, the university evaluates the learning outcome achievements. The university describes the process in the SAR as follows: "At the end of each course, the person in charge of the course analyzes the achievement of each goal of the course and formulates corresponding improvement measures accordingly. When the students graduate, we analyze the achievement of the graduation requirements of the major and take the results as one of the bases for the next round of degree program training plan. The evaluation methods of learning achievement include qualitative evaluation and quantitative evaluation."

The university follows a continuous improvement system that evaluates courses, the curriculum, the graduation requirements, and the objectives for each programme. The following table from the SAR illustrates this process:



Analysis and Assessment

Aspects applicable to both study programmes

The expert panel finds that while Zhejiang Shuren University has implemented a range of quality assurance measures at both institutional and faculty levels, these do not yet constitute a fully functional or closed feedback loop – particularly with respect to student and industry input.

At the institutional level, internal regulations and procedures exist for quality assessment, teacher self-evaluation, and curriculum review. The university has introduced elements of outcome-based education (OBE) and promotes an application-oriented system. Tools such as online appraisal platforms and structured assessments of faculty teaching are in use. However, these mechanisms are fragmented and often lack transparency or follow-up processes that ensure feedback leads to measurable improvements.

Faculty members complete self-evaluation forms each semester, covering teaching outcomes, student progress, and research contributions. Peer evaluation and informal feedback collection also occur. However, from the perspective of the expert panel, these processes are insufficiently coordinated or documented to ensure that feedback from students and other stakeholders systematically informs decision-making.

Students confirmed that while teachers are open to receiving feedback – both in person and through digital platforms or class representatives – there is no clear or consistent procedure for processing this input or communicating back what changes have been made as

a result. Improvements, when they occur (e.g., introducing more group work based on student suggestions), are informal and typically communicated through peer-to-peer channels rather than as part of a formal quality assurance process.

The panel also notes that student concerns – such as limited lab access and uniformity in final exams – have not been addressed in a structured or timely way. The current system does not guarantee that student suggestions lead to review, let alone implementation. In the view of the panel, a clearly defined, systematic, and transparent feedback mechanism is missing at the programme and university level.

Likewise, while industry partners do provide occasional input on skills gaps and curriculum relevance, there is no formalized or documented process ensuring that such feedback results in curricular adjustments. The reliance on informal communication channels limits the effectiveness of external stakeholder engagement.

Overall, the expert panel concludes that the current QM framework leaves room for improvement regarding the feedback loop between evaluation, assessment, and change implementation.

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

The experts assess the criterion as partially fulfilled.

The experts acknowledge the university's four-level feedback system that works on the university level, the college level, the degree programme level, and the course level. And while students are informed of evaluation results and resulting changes through bulletin boards, websites, and meetings, the experts maintain their requirement that the feedback loops must also be based on student evaluations in the first place (see chapter E, A 6).

The experts acknowledge that the university hosts an annual symposium of industry representatives, compiling their feedback on interns' and graduates' abilities, and consequently adjusting the courses to train the missing skills. The experts welcome this initiative and therefore consider the recommendation to be fulfilled.

C-10 Transparency and documentation [ASIIN 4]

Description of the current status

Aspects applicable to both study programmes

Module descriptions [ASIIN 4.1]

Regarding the module descriptions, the university references its information portal and teaching management systems. There, the person in charge of each course, teaching methods, credits, expected learning results, admission and examination requirements and other information is listed. Students can access this platform upon log-in.

Diploma and Diploma Supplement [ASIIN 4.2]

The university provides examples of diplomas (app. 4-1, 4-2). The certificates are stamped with the official seal of Zhejiang Shuren University and signed by the president. There is no information on whether the university provides graduates with a diploma supplement in English.

Relevant rules [ASIIN 4.3]

The university attached relevant rules regarding professional training objectives, study plans, exam organization, make-up exams, and related materials. Throughout the submitted documents, the university refers to university guidelines and regulations by the Ministry of Education of the People's Republic of China.

Analysis and assessment of the expert panel

Aspects applicable to both study programmes

Module descriptions [ASIIN 4.1]

The expert panel find the information in the provided in the teaching syllabus to be generally sufficient. However, in the interest of transparency and accessibility, the university should adopt a standardized and consistent layout, structure, and format for all module descriptions. The experts furthermore acknowledge that the module descriptions are accessible to students and other interested third parties through the university website. Moreover, teachers provide students with the course description including all relevant information at the beginning of a course.

Diploma and Diploma Supplement [ASIIN 4.2]

During the on-site visit, the experts could verify that no diploma supplement is issued alongside the diploma. As the accreditation criteria state, the diploma supplement is crucial in “[providing] information on the student’s qualifications profile and individual performance as well as the classification of the degree programme with regard to the respective education system. The marks of individual modules are presented and the way in which the final mark is calculated is explained. In addition to the final mark, statistical data as set forth in the ECTS Users’ Guide is included to allow readers to assess the individual mark.” A

diploma supplement can greatly enhance the international recognition and legibility of the degrees issued by ZSRU. The expert panel therefore strongly recommends that Zhejiang Shuren University introduce a diploma supplement modelled e.g. after the template provided by the European Commission, Council of Europe and UNESCO/CEPES.

Relevant rules [ASIIN 4.3]

In the on-site interviews, the expert panel also finds that the programmes' public documentation, including training objectives and module handbooks, is accessible and transparent to students and third parties. The use of both physical handbooks and oral information in the beginning of courses supports the institutional goal of clarity and transparency.

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

The experts assess the criterion as partially fulfilled.

The experts acknowledge that the university uses a uniform layout for the module descriptions in the Chinese originals and that inconsistencies in the submitted English versions might be due to formatting or translating. They therefore consider the requirement to be fulfilled.

The experts note that the Diploma Supplement has now been prepared in accordance with the European Commission, Council of Europe and UNESCO/CEPES standard. However, it remains essential to ensure that each graduate receives the Diploma Supplement after graduation. Accordingly, the requirement is modified as follows: "It is required to provide each graduate with a Diploma Supplement upon graduation." (see chapter E, A 5).

D Additional documents

Before preparing their final assessment, the panel ask that the following missing or unclear information be provided together with the comment of the Higher Education Institution on the previous chapters of this report:

- (ASIIN 1.3) Please fill out the document “Matrix Learning Outcomes” to show which courses correspond to which learning outcomes in a concise manner.
- (ASIIN 1.5) Please provide an overview (table) of how the courses (grouped into their 5 according categories) are distributed across semesters. The table should show both Chinese credits and ECTS credits awarded for the course, indicate the workload broken down into contact hours and self-study hours, and state in which semester students take the course. Furthermore, the table should show a subtotal of credits per semester. 10
- (ASIIN 2) Example of grading matrix for thesis (that shows the correlation to the programme objectives (‘graduation requirements’)).
- (ASIIN 2) Please submit the missing appendix 2-21 (“itemized score registration forms for one course in both Computer Science and Technology and Internet of Things Engineering majors”). 15
- (ASIIN 4.2) Template of a Diploma Supplement for each degree programme.

E Statement of the Higher Education Institution (23.07.2025)

The institution provided a detailed statement as well as the following additional documents:

- Appendix 1-8 Part1-Theory courses Syllabus-CST.pdf
- Appendix 1-8 Part2-Theory courses Syllabus-IOT.pdf
- Appendix 1-9 Practical Courses Syllabus (CST).pdf
- Appendix 1-9 Part2-Practical Courses Syllabus-IOT.pdf
- Appendix 2-21 itemized score registration forms.pdf
- Supp.1-Mechanism for Regular Monitoring of Student Workload.pdf
- Supp.2-Grading and Assessment Criteria for Internships.pdf
- Supp.3-Matrix Learning Outcomes-CST.pdf
- Supp.4-Matrix Learning Outcomes-IoT.pdf
- Supp.5-Courses Distribution Table-CST.pdf
- Supp.6-Courses Distribution Table-IoT.pdf
- Supp.7-Grading Matrix for Thesis of CST.pdf
- Supp.8-Grading Matrix for Thesis of IOT .pdf
- Supp.9-SAMPLE OF DIPLOMA SUPPLEMENT-CST.pdf
- Supp.10-SAMPLE OF DIPLOMA SUPPLEMENT-IoT.pdf

The following quotes the comment of the institution (minor adjustments in formatting):

R1 (ASIIN 1.1 & 1.3) It is strongly recommended that the topics of elective courses be revised to better align with programme outcomes and learning objectives.

(1) At present, the elective courses of the Computer Science and Technology major have been set up around the core objective of "cultivating interdisciplinary application-oriented talents in the field of medical and health informatization". From the perspective of existing courses, professional direction elective courses such as Introduction to Medical

Information Technology and Health Big Data Analysis and Visualization directly respond to the requirements of cultivating students' ability to solve complex engineering problems in the medical and health field (Objective 2) and engage in information system development (Objective 3); courses such as Artificial Intelligence and Mobile Application Development Technology provide support for students to improve their lifelong learning and innovation capabilities (Objective 5). On the whole, they are consistent with the core objectives of the training program.

In the next version of the training program, the elective course system will be further revised, with a focus on strengthening the clear correspondence with graduation requirements. For example, the planned new course Medical Data Privacy and Security will more directly support Graduation Requirement 6 (Engineering and Society, focusing on law and safety); Medical AI Application Development will specifically enhance students' ability in terms of Graduation Requirement 3.3 (designing and developing systems that meet specific needs); at the same time, by optimizing the structure of university-level elective courses, it will be ensured that each course can find a clear corresponding point in graduation requirements such as engineering knowledge, teamwork, and project management, making the support of elective courses for training objectives more specific and precise.

(2) The current training program of IOT has set up elective courses such as Information System Analysis and Integration, Medical Data Analysis and Mining, and Cloud Computing and the Internet of Things. These courses are respectively focused on developing the ability to design AI + medical - care Internet of Things systems. Most of the course experimental projects are completed through project - based team collaboration, which to a certain extent supports the training objectives such as Graduation Requirement 6 (Project Management), Graduation Requirement 2 (Problem Analysis), Graduation Requirement 9 (Individual and Team), and Graduation Requirement 12 (Lifelong Learning). Overall, these courses are consistent with the core objectives of the training program.

Going forward, in order to make the support of elective courses for the training objectives more specific and precise, the suggestions of the expert group will be adopted. In the next version of the training program, the elective course system will be further revised. By optimizing the structure of university - level elective courses, it will be ensured that each course can find a clear corresponding point in the graduation requirements.

R2 (ASIIN 1.1 & 1.3) It is strongly recommended that interdisciplinary modules be revised, deepened, and broadened in accordance with the stated programme outcomes and learning objectives.

(1) Currently, the interdisciplinary modules of the Computer Science and Technology program have been designed around the core objective of "cultivating interdisciplinary application-oriented talents in the field of medical and health informatization". For example, Introduction to Medical Information Technology integrates computer technology with basic medical and health knowledge, laying a foundation for students to understand the operating principles of medical information systems; Health Big Data Analysis and Visualization combines big data technology with health care scenarios, supporting students in applying professional computer knowledge to solve practical problems in the medical field. Overall, these modules are in line with the requirements of the training program, such as "solving complex engineering problems in medical and health informatization" (Objective 2) and "possessing innovative capabilities" (Objective 5).

In the next version of the training program, the interdisciplinary modules will be further revised, with a focus on strengthening the clear correspondence with graduation requirements. For instance, the upgraded Medical Imaging Technology, combined with Computer Graphics, will add the practice of "3D reconstruction of medical images", which will more directly support Graduation Requirement 3.3 (designing and developing systems that meet specific needs); the newly added Medical Internet of Things Integration Technology will specifically enhance students' abilities in terms of Graduation Requirement 7 (environment and sustainable development, considering system adaptability in medical scenarios); at the same time, the "Medical-Computer" joint training will be more closely aligned with Graduation Requirement 4 (teamwork) and 11 (project management), ensuring that each interdisciplinary teaching content can find a clear corresponding point in the graduation requirement system, making the connection between interdisciplinary training and graduation requirements more specific and precise.

(2) To cultivate interdisciplinary talents in the field of AI + Medical - Care Internet of Things systems, the subsequent training program of IOT will focus on the integration of Integrate big data, artificial intelligence, and Internet of Things (IoT) technologies deeply. Additionally, knowledge related to medical imaging and ultrasound will be added to enhance the application capabilities of IoT technologies in the medical field. Specifically, new courses such as Medical Service Robot Practice and Medical Image Processing and Machine Vision will be introduced. In addition, we will introduce global emerging alliance standards and technologies, such as the Matter protocol, into the Internet of Things communication technology course

R3 (ASIIN 1.5) It is strongly recommended to establish and implement a mechanism to monitor student workload on a regular basis in order to identify and rectify discrepancies between credit point allocation and workload estimation, if necessary

We have designed the 'Mechanism for Regular Monitoring of Student Workload' which clearly defines the key components and responsibilities, the monitoring procedures. (See Supp.1)

R4 (ASIIN 1.6 & 2) It is strongly recommended to ensure through adequate means that data interpretation, error analysis, and scientific discussion parts in the Bachelor Thesis are at an adequate academic level.

A discussion and conclusion section is included in most of the Bachelor Thesis and the contents of this section is due to the topic of thesis, such as data cleaning, algorithm complexity, test case design, etc.

R5 (ASIIN 2) It is strongly recommended that clear grading and assessment criteria be established for internships, including competencies such as teamwork.

We have already built the grading criteria and now it is renewed much more detailly. (See Supp.2)

R6 (ASIIN 2) It is strongly recommended that a standardized and consistent grading scheme be adopted for all exam scripts. Furthermore, all exams should follow a consistent layout, structure, and format, whenever applicable.

We have uniformed template question and answer sheets for exams. And a reference answer and grading scheme is provided in for each exam so that the reviewers can score the exam scripts according to this strictly.

R7 (ASIIN 2) It is strongly recommended that grading responsibilities be clearly separated between the 'chief examiner' and the 'head examiner'

In our documents, the phrase 'chief examiner' and 'head examiner' are the same, be used interchangeably.

R8 (ASIIN 4.1) It is strongly recommended that the university adopt a standardized and consistent layout, structure, and format for all module descriptions.

We have uniformed module description (course syllabus) template in Chinese.

R9 (ASIIN 5) It is strongly recommended that a clearly defined and transparent feedback loop based on student evaluations be implemented within the faculty.

The feedback loop is defined in 4 levels: the university level, college level, degree program level and course level. The university level feedback is conducted every year which concerns problems within the whole university like campus environment. The college level feedback is conducted every year which concerns problems within the whole college like the lab devices. The degree program level feedback is also conducted every year, which concerns the problems within the corresponding degree program like the curriculum. The course level feedback is conducted officially every semester, which concerns the problems in this course like tutorials, teaching methods, etc. All the actions or changes being taken will inform students through bulletin boards, websites, meetings, etc.

R10 (ASIIN 1.3, 1.6 & 3.1) It is recommended that the international orientation of the programme and the English language proficiency of both students and teachers be strengthened through mandatory and regularly offered foundational-level English-taught courses.

We have 2 mandatory bilingual or English-taught courses in each degree program and we encourage teachers to deliver elective courses, especially those novel technologies, in English

R 11 (ASIIN 1.3 & 2) It is recommended that modules on political education, military training, and ethics be retained as non-examined qualifying modules.

We carry out those modules on political education, military training, and ethics to meet the requirement of National Ministry of Education.

R12 (ASIIN 3.1) It is recommended that faculty research interests and activities be further promoted.

We have clear assessment regulations for faculty's scientific research, and teachers need to undertake scientific research projects and publish academic papers.

R13 (ASIIN 3.2) It is recommended that enhanced career guidance services be provided to graduates.

We provide a mandatory course 'Career Planning and Practice of College Students(Course ID: B211002)' to every student (See Appendix 1-7). Besides, there is an Employment Guidance Center in the university to provide daily help on employment and entrepreneurship services.

R14 (ASIIN 3.3) It is recommended that foundation and intermediate level lab equipment and facilities be modernised.

For experimental equipment, we have special funds for routine maintenance. We systematically apply for funding from the government and university for laboratory renewal according to the urgency.

R15 (ASIIN 5) It is recommended that industry feedback regarding missing student skill-sets be systematically responded to.

We hold a symposium of enterprise representatives every year to listen to the feedback of enterprises on the abilities of interns and graduates, and add the missing skillset to the degree programs' curriculum.

F Summary: Expert recommendations (08.09.2025)

Taking into account the additional information and the statement given by Zhejiang Shuren University, 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 Computer Science and Technology	With requirements for one year	30.09.2031	–	-
Ba Internet of Things Engineering	With requirements for one year	30.09.2031	–	-

Requirements

For all degree programmes

- A 1. (ASIIN 1.1 & 1.3) It is required that the topics of elective courses be revised to better align with programme outcomes and learning objectives. The level of examinations and thesis work (or project work) should be challenging enough to conform with the stated learning outcomes.
- A 2. (ASIIN 1.1 & 1.3) It is required that interdisciplinary modules be revised, deepened, and broadened in accordance with the stated programme outcomes and learning objectives.
- A 3. (ASIIN 1.6 & 2) It is required to ensure through adequate means that data interpretation, error analysis, and scientific discussion parts in the Bachelor Thesis are at an adequate academic level.
- A 4. (ASIIN 2) It is required that grading responsibilities be clearly separated and that an independent second examiner verify the grading.
- A 5. (ASIIN 4.2) It is required to provide each graduate with a Diploma Supplement upon graduation.

- A 6. (ASIIN 5) It is required that a clearly defined and transparent feedback-loop based on student evaluations be implemented within the faculty.

Recommendations

For all degree programmes

- E 1. (ASIIN 1.3, 1.6 & 3.1) It is recommended that the international orientation of the programme and the English language proficiency of both students and teachers be strengthened through mandatory and regularly offered foundational-level English-taught courses.
- E 2. (ASIIN 1.3 & 2) It is recommended that modules on political education, military training, and ethics be retained as non-examined qualifying modules.
- E 3. (ASIIN 3.3) It is recommended that foundation and intermediate level lab equipment and facilities be modernised.

G Comment of the Technical Committee 04 – Informatics/Computer Science (28.11.2025)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure and generally agrees with the assessment of the experts. However, the TC proposes minor editorial changes to requirements A1 and A3 for further clarification. Otherwise, the TC 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 Computer Science and Technology	With requirements for one year	30.09.2031	–	-
Ba Internet of Things Engineering	With requirements for one year	30.09.2031	–	-

Requirements

For all degree programmes

- A 1. (ASIIN 1.1 & 1.3) It is required that the topics of elective courses be revised to align with programme outcomes and learning objectives. The level of examinations and thesis work (or project work) should be challenging enough to conform with the stated learning outcomes and meet EQF-level-6.
- A 2. (ASIIN 1.1 & 1.3) It is required that interdisciplinary modules be revised, deepened, and broadened in accordance with the stated programme outcomes and learning objectives.
- A 3. (ASIIN 1.6 & 2) It is required to ensure through adequate means that data interpretation, error analysis, and scientific discussion parts in the Bachelor Thesis are at an adequate academic level and meet EQF-level-6.
- A 4. (ASIIN 2) It is required that grading responsibilities be clearly separated and that an independent second examiner verify the grading.

- A 5. (ASIIN 4.2) It is required to provide each graduate with a Diploma Supplement upon graduation.
- A 6. (ASIIN 5) It is required that a clearly defined and transparent feedback-loop based on student evaluations be implemented within the faculty.

Recommendations

For all degree programmes

- E 1. (ASIIN 1.3, 1.6 & 3.1) It is recommended that the international orientation of the programme and the English language proficiency of both students and teachers be strengthened through mandatory and regularly offered foundational-level English-taught courses.
- E 2. (ASIIN 1.3 & 2) It is recommended that modules on political education, military training, and ethics be retained as non-examined qualifying modules.
- E 3. (ASIIN 3.3) It is recommended that foundation and intermediate level lab equipment and facilities be modernised.

H Decision of the Accreditation Commission (12.12.2025)

Assessment and analysis for the award of the subject-specific ASIIN seal:

The Accreditation Commission discussed the suggestions by the expert panel and changes proposed by the Technical Committee. To improve clarity and avoid doubling between requirement A1 and A3, the Accreditation Commission decided to shorten A1 to keep the focus here on the alignment with the learning outcomes, and on the academic level in the Bachelor theses in A3. The Accreditation Commission also proposes minor editorial changes to A4. Moreover, the Accreditation Commission decided to remove the (former) recommendation E2. Regarding the inclusion of non-discipline courses such as military training and political education into the final grade, the Commission will discuss how such cases shall be handled uniformly in the future. Therefore, the Commission refrains from issuing a recommendation in this specific case and refers to its future discussion and subsequent decision. In all other requirements and recommendations, the Accreditation Commission follows the suggestions by the Technical Committee.

The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Computer Science and Technology	With requirements for one year	30.09.2031	–	-
Ba Internet of Things Engineering	With requirements for one year	30.09.2031	–	-

Requirements

For all degree programmes

- A 1. (ASIIN 1.1 & 1.3) It is required that the topics of elective courses be revised to align with programme outcomes and learning objectives.
- A 2. (ASIIN 1.1 & 1.3) It is required that interdisciplinary modules be revised, deepened, and broadened in accordance with the stated programme outcomes and learning objectives.

- A 3. (ASIIN 1.6 & 2) It is required to ensure through adequate means that data interpretation, error analysis, and scientific discussion parts in the Bachelor Thesis are at an adequate academic level and meet EQF-level 6.
- A 4. (ASIIN 2) It is required that grading responsibilities are clearly separated and that an independent second examiner verifies the grading.
- A 5. (ASIIN 4.2) It is required to provide each graduate with a Diploma Supplement upon graduation.
- A 6. (ASIIN 5) It is required that a clearly defined and transparent feedback-loop based on student evaluations be implemented within the faculty.

Recommendations

For all degree programmes

- E 1. (ASIIN 1.3, 1.6 & 3.1) It is recommended that the international orientation of the programme and the English language proficiency of both students and teachers be strengthened through mandatory and regularly offered foundational-level English-taught courses.
- E 2. (ASIIN 3.3) It is recommended that foundation and intermediate level lab equipment and facilities be modernised.

Appendix: Learning objectives and curricula

Learning objectives

Computer Science and Technology

The SAR references the website https://xxxy.zjsru.edu.cn/ASIIInrz/Computer_Science_and_Technology/curriculum.htm on which the learning objectives of the Computer Science and Technology programme are listed:

<p>Objective 1: The students are expected to develop good humanistic quality and moral sentiments, shape a healthy body, keep honest and trustworthy, have a strong sense of social responsibility, and constantly improve vocational qualities;</p> <p>Objective 2: The students are expected to be equipped with comprehensive engineering knowledge, solid expertise knowledge and skills, and be able to discover, analyze, explore and solve complex engineering problems in the field of healthcare information;</p> <p>Objective 3: The students are expected to master practical skills in engineering applications, comply with industry and occupation norms, and become qualified technical backbones or project managers of system analysis, design, development and testing in computer related fields;</p> <p>Objective 4: The students are expected to complete individual tasks with high quality and share responsibility for the organization, coordination and management of research teams or product & project development teams;</p> <p>Objective 5: The students are expected to possess lifelong learning abilities and innovative ideas, position, plan and achieve personal and occupational development goals, gain knowledge and ability upon these goals, adapt to social development, and focus on sustainable innovation in the industry to achieve personal development.</p>
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Furthermore, there are learning objectives for each course, listed in the course syllabus (app. 1-8). See attached here the learning objectives of the course “Discrete Mathematics”, which is taught in the third semester, as an example:

<p>Module objectives/intended learning outcomes</p>	<p><i>objectives 1. Students can have scientific and rigorous calculation and analytical thinking, have the spirit of autonomous learning and research; students can establish a sense of innovation; students can establish a sense of social responsibility and national pride.</i></p> <p><i>Objective 2: Students can summarize and explain the basic knowledge of mathematics such as sets and mappings, relations, propositional logic, elementary number theory and graph theory, and can simply apply it to practical problems, with basic logical reasoning ability and inductive deductive ability.</i></p> <p><i>Objective 3: Students can apply the knowledge of discrete mathematics to establish mathematical models for practical complex problems, and have certain ability to analyze problems and solve practical problems.</i></p>
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Internet of Things Engineering

The SAR references the website https://xxxy.zjsru.edu.cn/ASIINrz/INTER-NET_OF_THINGS/Objectives.htm on which the learning objectives of the Internet of Things Engineering programme are listed:

<p>Objective 1: Possess good humanistic qualities and moral sentiments, have a healthy body, be honest and trustworthy, be courageous, have a strong sense of social responsibility, and continuously improve professional qualities.</p> <p>Objective 2: Possess comprehensive engineering knowledge, solid professional knowledge and skills, and be able to identify, analyze, research and solve complex engineering problems in the field of healthcare informatization.</p> <p>Objective 3: Have good practical ability in engineering application, comply with industry professional norms, and be able to become a technical backbone or project manager in system analysis, design, development and testing in IoT-related fields.</p> <p>Objective 4: Perform individual tasks with high quality in research teams, product and project development teams, as well as participate in the organization, coordination and management of teams.</p> <p>Objective 5: Have lifelong learning ability and innovative spirit, to position, plan and implement personal and professional development goals, and accordingly expand knowledge and enhance ability, to be able to adapt to social development, to continue innovation and creation in the industry, and to realize individual development.</p>

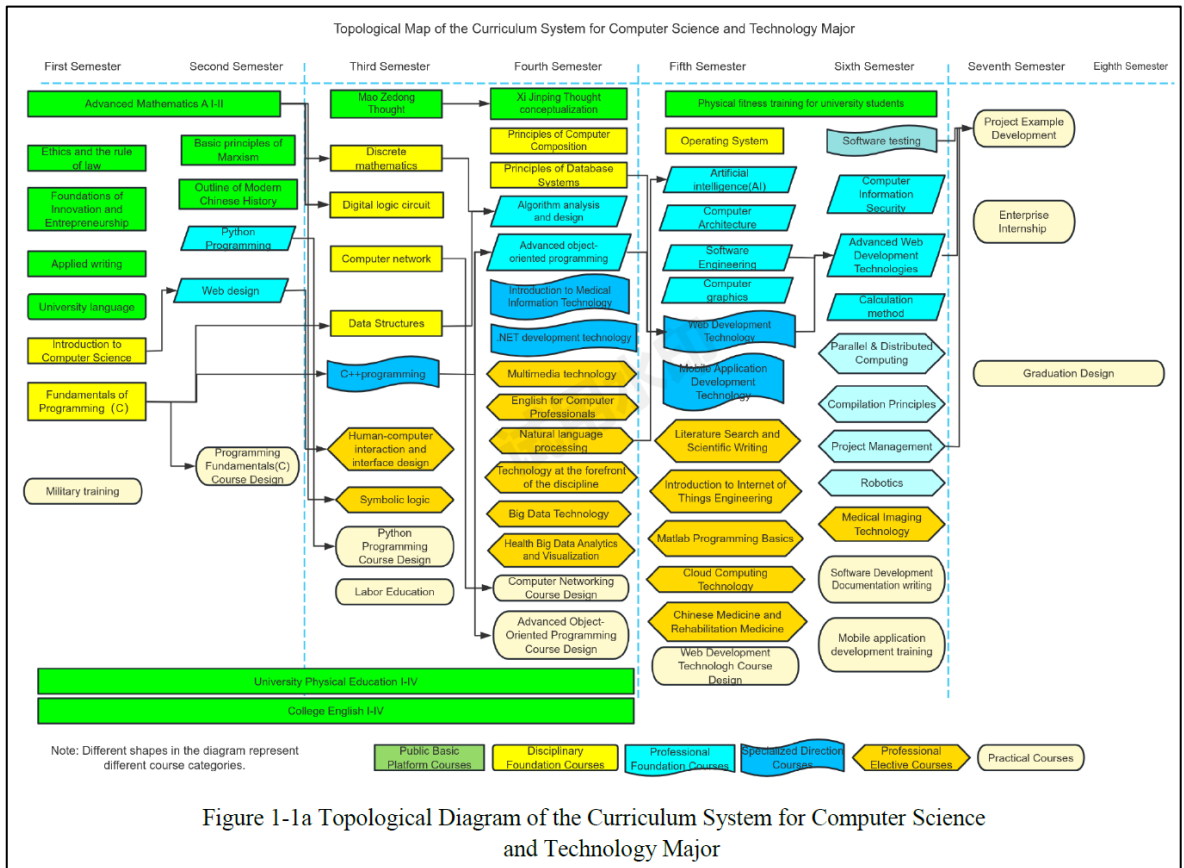
Furthermore, there are learning objectives for each course, listed in the course syllabus (app. 1-9). See attached here the learning objectives of the course “Python Program Training”, which is taught in the third semester, as an example:

<p>Module objectives/intended learning outcomes</p>	<p><i>Objectives 1. Students are able to explain Python concepts, terminology, and standards..</i></p> <p><i>Objective 2. Understand Python programming patterns (imperative programming, functional programming), and skillfully use Python operators, built-in functions, basic data types such as lists, tuples, dictionaries, sets, and related list derivations, slices, and other features to solve practical problems;</i></p> <p><i>Objective 3. Proficiency in Python branch structure, loop structure, function design, class design and use, and proficiency in string methods..</i></p> <p><i>Objective 4. Proficient in reading and writing text files in Python, Python programming and design according to application requirements.</i></p>
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Curricula

Computer Science and Technology

The university presents the following curriculum in its SAR:



Internet of Things Engineering

The university presents the following curriculum in its SAR:

