ASIIN Seal

Accreditation Report

Bachelor's Degree programme:
Computer Science and Technology

Offered by

Chengdu Technological University

Version: 25 September 2026

Status: *final version*

Table of Content

A. Accreditation Status 3
Result Overview 3
Fulfilment of the Accreditation Criteria 3
Requirements 4
Accreditation History 5

B. About the Accreditation Process 6

C. Context of the Degree Programme 7
C-1. Numbers and facts 7
C-2. Characteristics and features 7

D. Assessment of the Expert Panel 9
D-1. Objectives and learning outcomes of the degree programme [ASIIN 1.1] 9
D-2. Name of the degree programme [ASIIN 1.2] 13
D-3. Curriculum [ASIIN 1.3] 14
D-4. Admission requirements [ASIIN 1.4] 20
D-5. Workload and credits [ASIIN 1.5] 22
D-6. Didactics and teaching methodology [ASIIN 1.6] 24
D-7. Exams: System, concept and organisation [ASIIN 2] 27
D-8. Resources [ASIIN 3] 30
D-9. Quality management: Quality assurance and development [ASIIN 5] 35
D-10. Transparency and documentation [ASIIN 4] 37

E. Additionally requested documents 41

F. Statement of the Higher Education Institution (16.08.2026) 42

G. Summary: Expert recommendations (19.08.2026) 44

H. Comment of the Technical Committee 04 (10.09.2026) 46
Technical Committee 04 – Informatics/Computer Science (10.09.2026) 46

I. Decision of the Accreditation Commission (25.09.2026) 47

Appendix: Learning objectives and curricula 49

A. Accreditation Status

Result Overview

The most recent decision for the ASIIN Seal was made by the ASIIN Accreditation Commission on 25.09.2026.

Degree Programmes	ASIIN Seal	Validity
Ba Computer Science and Technology	Accredited with requirements	30.09.2026 - 30.09.2032

Fulfilment of the Accreditation Criteria

ASIIN General Criteria / Subject-Specific Criteria	Ba Computer Science and Technology
1 Degree programme: Concept, Content & Implementation	
1.1 Objectives and learning outcomes (intended qualification profile)	Fulfilled
1.2 Title of the degree programme	Fulfilled
1.3 Curriculum	Not fulfilled Requirement A1
1.4 Admission requirements	Fulfilled
1.5 Workload and credits	Not fulfilled Requirement A2
1.6 Didactics and teaching methodology	Not fulfilled Requirement A3
2 Exams: System, Concept and Organisation	
2 Exams: System, Concept and Organisation	Not fulfilled Requirement A3
3 Resources	

ASIIN General Criteria / Subject-Specific Criteria	Ba Computer Science and Technology
3.1 Staff and staff development	Fulfilled
3.2 Student support and student services	Fulfilled
3.2 Funds and equipment	Fulfilled
4 Transparency and Documentation	
4.1 Module descriptions	Fulfilled
4.2 Diploma and Diploma Supplement	Not fulfilled Requirement A4
4.3 Relevant rules	Fulfilled
5 Quality Management: Quality Assessment and Development	
5 Quality Management: Quality Assessment and Development	Not fulfilled Requirement A5

Requirements

A1. **[ASIIN 1.3]** Further develop the curriculum in content and in course sequence so that students have more opportunities to acquire the disciplinary foundations of computer science — in particular formal languages and automata theory — so as to better support the achievement of the programme-level learning outcomes (graduation requirements) and to strengthen students' disciplinary theoretical foundation.

A2. **[ASIIN 1.5]** Calculate ECTS credits, used in parallel with the Chinese credit system, on the basis of the actual student workload, and implement a systematic process to regularly monitor and evaluate the student workload — involving students in the review and adjusting credits where necessary.

A3. **[ASIIN 2 / 1.6]** Design and document examinations in a competence-oriented manner, so that the achievement of both course-level and programme-level intended learning outcomes can be adequately assessed and reliably traced from the examination items to the reported achievement goals.

A4. **[ASIIN 4.2]** Provide all graduates of the programme with a Diploma Supplement in English in line with the ASIIN criteria, and anchor its systematic issuance in a formal institutional regulation and in a shared understanding among the responsible staff.

A5. **[ASIIN 5]** Further develop the internal quality management system around outcome-based education, so that the achievement of the intended learning outcomes is systematically monitored and documented at both course and programme level, and use the outcomes of these evaluations systematically — closing the overall PDCA loop — to improve the quality of the programme.

Accreditation History

The programme has not been previously accredited by ASIIN.

B. About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for	Involved Technical Committees (TC)
计算机科学与技术	Computer Science and Technology	ASIIN Seal	04

Date of the contract: 15.10.2025

Submission of the final version of the SAR: 22.4.2026

Date of the onsite visit: 21-22.5.2026

at: Chengdu Technological University

Expert panel:

Prof. Dr. Carsten Vogt, Technische Hochschule Köln

Prof. Dr. Zheng Liu, Shandong University of Finance and Economics

Dr. Martin Witte, Siemens AG

Ms. Shumo Wang, Northeastern University, Shenyang, China

Representative of the ASIIN headquarter: Dr. Xin Jiang, Project manager and consultant international, ASIIN Consult GmbH

Responsible decision-making committee: Accreditation Commission for Degree Programmes

Criteria used:

European Standards and Guidelines as of May 15, 2015

ASIIN General Criteria as of March 28, 2023

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

C. Context of the Degree Programme

C-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
计算机科学与技术, Computer Science and Technology	工学学士 B.Engineering	Computer Science and Technology	6	Full time		8 Semester	232 ECTS	Annually / 2012

C-2. Characteristics and features

Chengdu Technological University (CDTU), located in Chengdu, Sichuan Province, is a public application-oriented university with a strong industrial heritage. The institution traces its origins to 1913 and today offers a broad range of undergraduate engineering, science, management and humanities programmes, with a clear positioning toward applied engineering education and toward serving the Chengdu–Chongqing twin-city economic circle.

The programme under review is the Bachelor's degree programme in Computer Science and Technology (Chinese: 计算机科学与技术; major code 080901), offered by the School of Computer Engineering. The programme was first launched in 2012 and is awarded as a B.Eng. with full-time study and an eight-semester duration. According to the SAR, the programme is positioned as a national first-class undergraduate major construction site and as one of the first pilot programmes of the "Excellent Engineer Education and Training Plan" in Sichuan Province; it cites computer systems and hardware, software and information systems as its declared areas of specialisation.

The programme is designed to cultivate application-oriented engineering and technical talents in the computer field, with declared training directions in embedded systems and cloud computing technology, serving the electronic information and intelligent manufacturing industries of the Chengdu–Chongqing region. According to the SAR, the programme

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

also serves industrial digital transformation needs, including mining informatisation through the School's "Mining Intelligence Research Institute" carrier.

The programme is mapped onto the European Qualifications Framework at Level 6 and carries a total workload of 232 ECTS. Intake is annual with a maximum capacity of 180 students; the average starting cohort and the average graduating cohort are each reported as 157 students, and the average time required to complete studies corresponds to the standard four-year duration. The programme operates under a parallel system of Chinese credit points and ECTS, with 170 Chinese credits converting to the 232 ECTS specified in the curriculum.

Practical training is supported by the School's "4+22" laboratory system (four first-level laboratories and twenty-two second-level experimental rooms, with a total laboratory area exceeding 3,100 square metres) and by off-campus practice bases established with industrial partners including Huawei, Loongson Zhongke, Sichuan Changhong, Sichuan Huadi and others; seven jointly built modern-industry colleges further anchor school–enterprise cooperation. The teaching staff serving the programme comprises 37 members (35 full-time teaching staff and two full-time laboratory staff); all hold a master's degree or higher, with about 57 per cent holding a doctorate, and the student-to-staff ratio is reported as approximately 18:1.

The procedure is conducted as a two-step evaluation-plus-accreditation procedure under Technical Committee 04 (Informatics / Computer Science). The programme has not previously held an ASIIN seal; the present procedure is the institution's first international accreditation for this programme.

D. Assessment of the Expert Panel

The following sections of the report are based on the audit discussions held by the expert panel with the relevant stakeholder groups, including the rectorate and college management, programme coordinators, teaching staff, students, and industry (and alumni) representatives.

At this stage of the evaluation, the focus lies on assessing the overall quality level and competence profile of the Bachelor's degree programme(s) under review. In addition to the onsite meetings, the expert panel also relies on the documentation provided by the institute before, during, and after the audit, including programme materials and the relevant regulatory framework.

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

Description of the current status

The objectives and learning outcomes of the Computer Science and Technology programme are defined at two interconnected layers. The programme objectives describe the qualifications that graduates are expected to attain approximately five years after graduation, and are formulated under six headings spanning theoretical mastery and engineering application, problem abstraction and analysis, system design with consideration of social, environmental, health, safety, legal and cultural factors, scientific investigation and use of engineering tools, teamwork and project management, and an international perspective oriented toward lifelong learning. The programme-level learning outcomes (the graduation requirements) are formulated under six headings — Knowledge and Understanding, Engineering Analysis, Engineering Design, Investigation and Evaluation, Engineering Practice, and General Skills — each further specified through three to four sub-indicators that are mapped to courses and modules in the Objective-Module Matrix (Appendix 07-1). Appendix 07-1 works with a parallel formulation of this same outcome layer, presenting it as twelve numbered learning outcomes — Engineering Knowledge, Problem Analysis, Design/Development of Solutions, Research, Use of Modern Tools, Engineering and Society, Environment and Sustainable Development, Professional Norms, Individual and Teamwork, Communication, Project Management, and Lifelong Learning — and maps these both to the competency clusters of the ASIIN Subject-Specific Criteria and to the modules delivering them.

Both the programme objectives and the programme-level learning outcomes are published on the School of Computer Engineering's website and are included in the cultivation plan distributed to students and teaching staff. The institution maintains a regulation framework anchoring the formulation, review and revision of the cultivation plan, including the "Guiding Opinions on the Revision of the 2025 Training Programme" (Appendix 09-3) and the "Implementation Measures for Evaluating the Reasonableness of Professional Training Objectives and Curriculum Settings" (Appendix 07-2). Under these regulations, the curriculum system is required to support the achievement of the training objectives and graduation requirements.

Under the cultivation-plan revision regulations, the revision of the cultivation plan is required to follow a documented multi-stage process — preliminary investigation by the Academic Affairs Office, plan formulation by the major (drawing on comparable-programme analyses, industry and talent-demand information, employer feedback, graduate tracking and current-student opinions), multi-round review by the programme team, the college's professor committee and external experts, and final approval by the Academic Affairs Office. According to the SAR, the 2025 cultivation plan was revised following this process. According to the SAR, the institution passed the undergraduate education and teaching review and evaluation organised by the Ministry of Education in November 2025; the panel notes this as a formal quality confirmation issued by the national authority. The improvement directions arising from that review are taken up under C-7, where they bear on the panel's own findings.

Substantively, the SAR positions the programme as serving the strategic needs of the Chengdu–Chongqing economic circle, with embedded systems and cloud computing technology cited as the core training directions, and with intelligent product design, industrial digital intelligence and mining informatisation referenced as further fields of professional engagement. The programme intends to graduate engineering and technical professionals to undertake product design, system development, application research, technical management, and operation and maintenance in computer-related fields.

Analysis and assessment of the expert panel

Since 2023 the institution has also admitted international students from more than ten countries under the same national major name. According to the institution, these students follow a separate international-student track with its own training objectives and its own curriculum: the curriculum has been substantially restructured to accommodate, among other things, extensive Chinese-language training, and admission is based on prior education and language proficiency rather than on the national entrance examination. It is the institution's own position that this track, differing in its objectives and curriculum from the

provision made for domestic students, is not the subject of the present application; the panel has accordingly treated it as outside the scope of this evaluation, and the objectives and learning outcomes assessed below are those of the programme for domestic students. Where matters arising from that track bear on the programme under review — in particular the English-medium teaching capability of the shared teaching staff — they are taken up under C-8.

The panel's reference framework for assessing the programme-level learning outcomes is the ASIIN Subject-Specific Criteria (SSC) applicable to Technical Committee 04, together with EQF Level 6. Appendix 07-1 documents this alignment directly: it sets the SSC competency clusters — formal, algorithmic and mathematical competencies; analysis, design, implementation and project management competencies; technological competencies; methodological and transfer competencies; interdisciplinary competencies; and social competencies and self-competencies — against the learning outcomes of the programme and against the modules delivering them. On this basis the panel could verify that the learning outcomes defined by the programme are comparable in substance and in level with the SSC reference, and that each SSC competency cluster finds a correspondence in the outcome set. Points at which the curriculum content does not yet carry that correspondence are developed under C-3. As a matter of provenance, the panel notes that the learning outcomes are formulated in the wording of the graduation requirements defined within the Chinese engineering education accreditation framework; this accounts for the structure and terminology of the outcome set, but it is the SSC and not that framework against which the panel assesses the programme.

The panel finds that the regulatory framework supporting the formulation, review and revision of the programme objectives and the graduation requirements is well-developed. The Programme Handbook, the Module Handbook (Appendix 09-1) and the Objective-Module Matrix (Appendix 07-1) together provide a traceable line of sight between programme objectives, graduation requirements (programme-level learning outcomes) and individual modules. The participation of internal stakeholders, graduates and alumni, and employers in the review cycle is provided for in the cultivation-plan revision regulations. The panel could verify that the resulting 2025 cultivation plan has been promulgated and is in implementation.

The panel notes that the formulation of the programme-level learning outcomes broadly reflects an outcome-based orientation and covers, at the level of headings and sub-indicators, the competence dimensions expected at EQF Level 6 for an application-oriented engineering programme. The mapping of graduation requirements to courses through the Objective-Module Matrix is in place, and the SAR describes how this mapping serves as the basis for course-level objective setting and for downstream evaluation of achievement.

At the same time, the panel observes that the formulation of the programme-level learning outcomes does not yet clearly express the distinctive applied-engineering profile that the SAR otherwise attributes to the programme. The SAR identifies embedded systems, cloud computing technology, intelligent product design and the broader field of industrial digital transformation — including mining informatisation through the School's dedicated research carrier — as the directions the programme serves. The learning-outcome formulations, however, remain at a generic engineering level and do not visibly carry these specific profile elements forward into the qualifications the programme commits to deliver. As a consequence, the distinctive character of the programme, which is one of the institution's stated strengths and a key element of its positioning toward the regional industrial environment, is not yet legible at the programme-outcome layer. By way of illustration, none of the twelve learning outcomes set out in Appendix 07-1 refers to embedded systems, cloud computing or industrial digital transformation, and the specialisation modules that carry these directions — Fundamentals of Embedded Systems, Cloud Computing Technology, Intelligent Product Design — are mapped in the matrix to generic outcome headings such as Use of Modern Tools.

During the on-site visit the panel inspected the Mining Intelligence Research Institute and observed substantial research and development output. It noted, however, that only a small number of outstanding undergraduate students currently take part in its work, and that the extent to which this research carrier and the mining-informatisation specialism feed into the talent-training and curriculum systems of the programme — and can benefit a broader cohort of students — was not evident from the materials submitted. The panel returns to this point among the additionally requested documents (D-3).

The panel further notes that, while the cultivation-plan revision regulations foresee the participation of employers and other stakeholders, the documentation accompanying the most recent revision — in particular the labour-market survey data or reports underpinning the revision, and records of stakeholder participation in that revision — was not part of the materials provided with the SAR. This documentation is necessary to substantiate the grounding of the revised programme objectives in the regional industrial demand the programme cites; the further treatment of cultivation-plan and module-handbook documentation quality is developed under C-3. The panel emphasises that such data serve not only to document the revision process but, more importantly, to establish that graduates are able to take up a professional activity corresponding to the level of the qualification awarded. In the interviews, graduates and alumni reported a high degree of professional identification with the field in which they are employed, and employers — asked to compare graduates of this programme with those of other institutions — emphasised their practical, hands-on engineering capability, which is consistent with the applied orientation

the programme declares. The panel regards this feedback as positive; what is absent is the systematic labour-market documentation that would connect it back to the revision of the programme objectives.

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

Based on the preliminary assessment and considering the additional documents and statement of the university, the panel concludes that Chengdu Technological University *substantially fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 1.1.

The panel takes note that the university has acknowledged the recommendation and plans to sharpen the wording of the programme objectives so as to express the applied-engineering profile (embedded systems, cloud computing, industrial digital transformation) and typical graduate career paths more distinctly, and to consult employers and alumni on a regular cycle. The panel considers this an appropriate direction; as the measures are planned rather than yet implemented, they do not alter the assessment at this stage.

The corresponding recommendations are set out in G, E1.

D-2. Name of the degree programme [ASIIN 1.2]

Description of the current status

The official name of the programme is Computer Science and Technology (Chinese: 计算机科学与技术), corresponding to the major code 080901 in the Catalogue of Undergraduate Majors in General Colleges and Universities (2020 Edition) issued by the Ministry of Education of the People's Republic of China. Major names for undergraduate programmes in Chinese higher education are standardised under this catalogue, and the programme is offered under that nationally specified name. The English translation used by the institution is the literal rendering "Computer Science and Technology". The programme is awarded as a Bachelor of Engineering (B.Eng.). According to the SAR, the name covers both the theoretical knowledge layer (computer science) and the practical application layer (technology), with professional courses spanning computer hardware, software, networks and databases. The programme was officially launched in 2012 (Appendix 06-2).

Analysis and assessment of the expert panel

The panel finds the programme name fit for purpose. The name follows the unified nomenclature prescribed by the Ministry of Education's national catalogue of undergraduate majors and is consistent with the content and learning outcomes of the programme. The English translation "Computer Science and Technology" is a direct rendering of the Chinese designation and is unlikely to mislead international stakeholders about the disciplinary scope of the programme or the qualification awarded. The panel notes for completeness that the institution also admits international students under the same national major name; their curriculum has been substantially restructured — among other things to accommodate extensive Chinese-language training — and constitutes the international-student track described under C-1, which is not within the scope of the present evaluation. This parallel track does not affect the fit of the programme name for the programme under review. The panel sees no reason to recommend a change to the programme name. The granularity of internal consistency in the use of course and module names — distinct from the question of the programme name itself — is discussed under C-3.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University *fully fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 1.2.

The panel takes note that the statement of the university does not provide additional information that would affect the assessment of this criterion.

D-3. Curriculum [ASIIN 1.3]

Description of the current status

Content & Structure

The curriculum of the programme is documented in the 2025 cultivation plan (Appendix 08-1, 08-2), the Module Handbook (Appendix 09-1) and the Objective-Module Matrix (Appendix 07-1). It is organised over eight semesters and a total workload of 232 ECTS, structured into nine areas of competence: foreign languages, mathematics and physics fundamentals, informatics, engineering fundamentals, engineering applications, electives, general education, intensive practice, and the bachelor's degree thesis. The credit distribution across these areas is reported in Table 1.1 of the SAR; practical training accounts for approximately 36.5 ECTS, with the graduation thesis adding a further 16 ECTS.

The engineering-fundamentals area (37 ECTS) includes Fundamentals of Programming, Discrete Mathematics, Data Structures and Algorithms, Operating System (Bilingual), Database Principles and Application, Fundamentals of Software Engineering, and Electrical and Electronic Technology B. The engineering-applications area (26 ECTS) carries Object-Oriented Programming, Computer Organization and System Architecture, Computer Network, Principles of Compilers, Fundamentals of Embedded Systems, Intelligent Computing Platform Application Technology, and Principles and Applications of Microcontrollers. The elective area offers Embedded Interface Technology, Intelligent Product Design, Cloud Computing Technology, Data Analysis and Processing Technology, Software Testing, and Machine Learning. Practical training takes the form of engineering practice modules (with Integrative Programming and Information System Design and Development), Computer Organization and System Architecture Course Design, Computer System Integration Practice, Comprehensive Practice of Computer Application Systems, and an Engineering Internship in the final phase.

Practical training and internships are organised under the institution's regulations on the organisation, supervision and assessment of practice and internships (Appendix 02), which assign macro-level management to the Academic Affairs Office and primary responsibility to the colleges; practical credits account for no less than 30 per cent of the curriculum for science and engineering programmes. Internships are delivered in three forms: cognitive internships, which give students a first orientation to the industry; course-related internships, typically held during vacation periods at off-campus practice bases; and the final graduation internship, undertaken at an off-campus practice base or at a prospective employer. Internships are further distinguished as centralised (arranged by the college) or decentralised (applied for by the student and approved by the college). Off-campus internships require a signed agreement and insurance cover. Supervisors are assigned at a student-to-supervisor ratio of 30–40:1 for centralised and 60:1 for decentralised internships; students keep internship logs and submit reports, and the host organisation issues an appraisal. Internship performance is graded on a hundred-point scale taking into account attitude, logs, reports and the host appraisal, and university- and college-level supervisors conduct regular inspections of practical teaching quality.

Module descriptions are provided for each course in the Module Handbook in a standardised format covering responsible person, semester, language of instruction, ECTS, workload, prerequisites, intended learning outcomes (course-level objectives), content, assessment form and reading list. Modules are mapped to specific graduation-requirement sub-indicators through the Objective-Module Matrix (Appendix 07-1), which serves as the basis for the course-level objective setting that underpins downstream achievement evaluation.

Of the modules documented in the Module Handbook, one (Operating System) is listed as bilingual; all other modules are delivered in Chinese.

Mobility

Student mobility is governed by an institutional regulation framework comprising the "Chengdu Technological University Student Overseas Management Measures (Revised in 2022)", the "International Exchange Scholarship Selection and Management Measures (2023)" and the "Measures for Credit Recognition and Student Status Management of Overseas Study Courses (Revised in 2021)" (all collected under Appendix 13). These regulations define application procedures, status management, credit transfer and mutual recognition, and the funding sources supporting outgoing students (school appropriations, corporate donations and foundation support).

According to the SAR, the School has established cooperation with universities and institutions in more than ten countries and regions, including Pennsylvania State University (USA), the University of Cambridge (UK), Swansea University (UK), Nanyang Technological University (Singapore), Daegu University (South Korea), EPF School of Engineering (France), Complutense University (Spain), Universiti Sains Malaysia, and Macau University of Science and Technology, covering short-term exchange, medium- to long-term credit exchange and dual-degree formats.

With regard to incoming students, the institution has admitted international students under the same programme name since 2023; as set out under C-1, these students follow a separate international-student track with its own training objectives and curriculum, which is not within the scope of the present evaluation. Information services and consultation for mobility matters are provided by the institution's International Cooperation and Exchange Office.

Statistics on student mobility are reported in Appendix 10-1, with corresponding student lists provided in Appendix 10-3 and 10-5. In the course of the audit it emerged that the statistics provided refer to students transferring between majors within the institution, rather than to international student mobility; verifiable statistics on the outgoing international mobility of students of the programme were not available to the panel.

Periodic review

The periodic review of the curriculum is anchored in two institutional regulations: the "Implementation Measures for Evaluating the Rationality of Professional Training Objectives and Curriculum Settings in the School of Computer Engineering (Revised)" (Appendix 07-2) and the "Implementation Measures for Continuous Improvement of Undergraduate Teaching Quality" (Appendix 02). The review operates at two levels: a comprehensive review of

the curriculum system, programme objectives and learning outcomes every four years, accompanied by revision of the cultivation plan; and a per-semester review loop at the course level confirming the rationality of course objectives, supervising the teaching process and evaluating course-objective achievement.

The stakeholder engagement model for the curriculum review involves five groups: current students (course-feedback and learning-outcome evaluation), graduates and alumni (job-fit and learning-outcome achievement feedback), employers and industry experts (evaluation of training objectives, graduation requirements and curriculum), programme teachers and teaching supervisors (course objectives, teaching process and improvement plans), and internal and external evaluation experts (formal review). The labour-market demand analysis mechanism, formalised in the regulation, is intended to translate industry and job-competency findings into revisions of training objectives, graduation requirements, learning outcomes and curriculum.

Operational outputs from the per-semester loop include the Course Objective Reasonableness Confirmation Form (Appendix 17-1), the Evaluation Report on Achievement of Course Objectives (Appendix 17-3) and the Course Analysis Table (Appendix 17-4), the SAR cites the course "Principles and Applications of Databases" as an illustrative case.

Analysis and assessment of the expert panel

Content and Structure

The panel finds the regulatory framework anchoring the curriculum structure, module description and curriculum review to be in place. The cultivation plan, the Module Handbook and the Objective-Module Matrix together provide a workable basis for an outcome-oriented programme architecture, and the standardised module-description format covers the elements expected by ASIIN.

At the same time, the panel notes several substantive points where the curriculum content does not yet fully support either the programme's distinctive applied-engineering profile or the consistent achievement of the programme-level learning outcomes. The panel cautions that the breadth and depth of selected content areas — in particular the disciplinary foundations of computer science such as formal languages and automata and computing complexity — are not addressed in the current curriculum and module descriptions. While individual application-oriented courses, notably Principles of Compilers, touch upon some of these foundations, they are not offered as dedicated theoretical modules and are not visible as such in the module descriptions. These foundations underpin the higher-order analytical and problem-abstraction competences claimed under the graduation require-

ments, and their absence at the curriculum-content layer weakens the line of sight between the programme-level learning outcomes and the courses delivering them. A comparable observation applies to information system security. The SSC expects graduates to understand the basic concepts, common threats and protection mechanisms of information system security and to be able to incorporate security considerations into system design and implementation; Appendix 07-1 assigns this expectation to the security-related chapters of the Computer Network module and to Career Planning and Employment Guidance. No dedicated module addresses the field, and the second of these mappings does not, in the panel's view, carry the expectation assigned to it. The panel notes, however, that in the Chinese undergraduate catalogue Information Security is established as a separate degree programme in its own right, so that a Computer Science and Technology programme is expected to provide a foundational awareness of the field rather than its comprehensive coverage; the panel therefore treats this point as a minor recommendation, addressed together with artificial intelligence under C-6 (recommendation [ASIIN 1.3 / 1.6]).

The panel further notes a recurring lack of internal consistency in the naming of courses and modules across the programme documentation. The Module Handbook (Appendix 09-1) lists "Literature Retrieval and Scientific Paper Writing", "Intelligent Product Design" and "Principles of Compilers"; the curriculum chart embedded in the SAR (Figure 1.1, also referenced in Appendix 08-1) uses "Literature Search and Scientific Paper Writing", "Smart Product Design" and "Fundamentals of Compiling" for the same modules. As a consequence, the same module appears under different English names depending on the document a reader consults, which negatively affects the documentary clarity expected of an internationally legible programme.

The panel observes that outcome-based education needs further strengthening at the operational level beyond the formal mapping in the Objective-Module Matrix. A shared understanding among the programme team of how OBE principles translate into course design, instructional delivery and the achievement-evaluation chain is necessary for OBE-related practices to be implemented consistently and traceably across courses, rather than being executed at variable depth depending on the individual teacher.

The panel also notes, from its direct exchanges with students during the audit, that the students' ability to communicate in English is limited. Within the curriculum, exposure to professional English is confined to the College English sequence and the single bilingual module (Operating System); the opportunities for students to work with English-language professional material in their subject courses are correspondingly narrow.

The panel further observes that the range of elective courses is comparatively narrow. The elective area of the curriculum lists six professional elective courses; the opportunities for

students to shape an individual specialisation — for example toward the declared directions of embedded systems and cloud computing — are correspondingly limited.

Mobility

The panel finds the regulatory framework for student mobility to be well-developed. The set of institutional measures covering overseas study management, exchange scholarships and credit recognition is in place, and the portfolio of partner institutions spans Europe, North America and the Asia-Pacific region. The institution acknowledges in its own self-reflection that the scale of outgoing student participation remains a point for improvement.

The panel notes, however, that the operational uptake does not yet match the framework. Verifiable statistics on the outgoing international mobility of students of the programme were not available: the figures submitted refer to students transferring between majors within the institution rather than to international mobility. In the interviews, students expressed clear interest in studying abroad; the obstacle they identified was financial — the share of the cost that families are required to bear constitutes a practical threshold, notwithstanding the funding sources provided for in the regulations (school appropriations, corporate donations and foundation support) and the International Exchange Scholarship. The panel therefore identifies no deficiency in the design of the mobility framework, and no lack of interest on the part of students; the gap lies between the framework and its operational uptake, and the existing funding instruments do not yet appear sufficient to bridge it.

The admission of international students under the same programme name since 2023 concerns the separate international-student track described under C-1, which follows its own training objectives and curriculum and is not within the scope of the present evaluation; it is therefore not considered here as operational evidence of incoming mobility for the programme under review. Matters relating to the English-medium teaching capability of the teaching staff are taken up under C-8.

Periodic review

The panel finds the regulatory framework for periodic curriculum review to be well-developed and coherent. The two-level cycle (a four-year programme-level review and a per-semester course-level loop), the five-group stakeholder engagement model and the labour-market demand analysis mechanism together describe a closed feedback architecture. The operational artefacts of the per-semester loop — the Course Objective Reasonableness Confirmation Form, the Evaluation Report on Achievement of Course Objectives and the Course Analysis Table — are in routine production at the course level.

The panel notes, however, that the operational evidence of the four-year programme-level review cycle and of the stakeholder-participation records — in particular the labour-market survey data and the documentation of the participation of employers and other stakeholders in the most recent revision — was not part of the materials submitted with the SAR. As discussed in C-1, this documentation is necessary to substantiate the grounding of the most recent revision in the regional industrial demand the programme cites; the panel records it here as the operational counterpart to the regulatory observation made under C-1. In the interviews, students and graduates confirmed that they are consulted through course-feedback surveys, the student teaching information officer system and the graduate tracking surveys, and described these channels as working ones. What the panel could not verify from the documentation was the participation of employers and other external stakeholders in the most recent programme-level revision.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University *partially fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 1.3.

The panel takes note that the university has acknowledged the recommendations and outlined a number of planned measures: embedding formal-languages-and-automata content into the Principles of Compilers course and strengthening the theoretical course chain; introducing a modular elective system across four specialisation areas; and taking measures — including credit-recognition agreements with partner universities and a mobility data mechanism — to translate the mobility framework into measurable outgoing-mobility figures. The panel considers these appropriate directions; as they are development plans rather than implemented changes, they do not alter the assessment at this stage.

The corresponding recommendations are set out in G, A1, E2, E3.

D-4. Admission requirements [ASIIN 1.4]

Description of the current status

Admission to the programme operates under two pathways. Chinese domestic students enter through the National Unified Examination for General College Admissions (Gaokao), with the requirement that candidates for this programme select both physics and chemistry as exam subjects. The minimum admission score for the institution has, since 2022, consistently exceeded the corresponding undergraduate control line in the home province

of the applicant, with the institution recruiting from 25 to 26 provinces. International students are admitted on the basis of their educational background and language proficiency (with IELTS or TOEFL scores documented at application), without the Gaokao requirement.

The admission process is governed by the institution's annually published admissions regulations (Appendix 11-2) and follows the standardised national procedure (file submission, file review, pre-admission, admission review and issuance of admission notice), operated under the "schools are responsible, admissions are supervised" mechanism. The institution publishes admissions information through its dedicated enrolment website (https://zs.cdtu.edu.cn/) and online channels and applies the medical-examination requirements set out in the national Guiding Opinions (Appendix 11-1) without discrimination on the basis of disability. Admissions statistics are reported in Appendix 12; the institution reports a 100 per cent admission rate over the past five years for those candidates who meet the published thresholds. Rules for the recognition of externally acquired credits are defined for overseas study in the "Measures for Credit Recognition and Student Status Management of Overseas Study Courses (Revised 2021)" (Appendix 13). The materials submitted do not contain corresponding rules for the recognition of qualifications acquired at other higher education institutions or outside the higher education sector.

Student numbers and graduation data for the programme over 2021–2025 are reported in Appendix 16. The normal duration of study is four years and the maximum duration is six years. The institution operates a graded academic-warning mechanism for students with credit deficits or failed core courses, providing academic counselling and support resources.

Analysis and assessment of the expert panel

The panel finds the admission regulations and the admission process to be transparent and consistent with the requirements of the Chinese higher education system. The published admissions regulations, the dedicated enrolment website and the supporting documentation provide candidates with the information necessary to assess eligibility and to apply. The operational evidence — admissions statistics over multiple years, score documentation, and the graded academic-warning mechanism in subsequent study — indicates that the admission framework is in routine operation. The panel raises no concerns regarding the admission regulations or admission process for this programme. In the interviews, students confirmed that the admission procedure had been transparent to them and reported satisfaction with the information they received and with the process itself. With regard to the recognition of externally acquired qualifications, clearly defined rules exist for credits acquired during overseas study, while rules for qualifications acquired at other higher ed-

ucation institutions or outside the higher education sector are not evidenced in the submitted materials. The panel takes into account that in the Chinese system students are allocated to institutions and programmes by the provincial examination authorities and that transfer between institutions is not a routine pathway, so that the practical relevance of such rules is limited in this context; the panel records the point without deriving a recommendation from it.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University *fully fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 1.4.

The panel takes note that the statement of the university does not provide additional information that would affect the assessment of this criterion.

D-5. Workload and credits [ASIIN 1.5]

Description of the current status

The programme operates a parallel system of Chinese credit points and ECTS credits. Under the institutional regulation (Appendix 15), one Chinese credit corresponds to 16 hours of theoretical course time, or to 22 hours of practical training time (excluding the graduation thesis). ECTS credits, by contrast, cover the total student workload — classroom hours and out-of-class self-study hours combined — at the rate of 30 hours of total workload to one ECTS credit, with an annual reference of 60 ECTS corresponding to 1,800 hours.

The conversion from Chinese credit points to ECTS for individual courses is fine-tuned on the basis of the out-of-class self-study hours specified for each course; the SAR reports that the conversion ratio for most courses falls between 1:1 and 1:2. The cultivation plan currently translates 170 Chinese credits into 232 ECTS. The breakdown of lecture time, self-study time, total workload and ECTS by competence area for the four-year programme is reported in Table 1.1 of the SAR, with the engineering-fundamentals area being the largest single block (37 ECTS). The SAR reports the total corresponding to the 170 Chinese credit points of the cultivation plan as lying between 223 and 234 ECTS; this range results from differences in the way individual elective courses are counted, with 232 ECTS applying to the curriculum as documented.

To complement the regulatory framework, the institution has established an annual academic-burden survey targeting graduates from 2021 to 2025 (Appendix 14-1, 14-2). The

survey collects both subjective indicators (professional interests, classroom efficiency, participation) and objective indicators (extracurricular learning behaviour, weekly classroom study time, pre-class preparation time, sources of academic stress). The teaching team uses performance analysis, and counsellors and academic tutors use study-time surveys, to monitor the actual semester-by-semester workload against the planned workload, with a reported per-semester target of approximately 900 hours of total study load (corresponding to 30 ECTS, with semester-to-semester deviation of no more than 3 ECTS, lighter in semesters 7 and 8 due to engineering internships and the graduation project).

Analysis and assessment of the expert panel

The panel notes that the explicit operation of an ECTS-based credit system is a relatively recent institutional construction at Chengdu Technological University; the institution has introduced it in parallel with the Chinese credit system as part of its preparation for international accreditation. As such, the panel assesses the quality of the regulation's design and the viability of its initial implementation steps, rather than expecting the kind of multi-year operational evidence that would be available for a long-established credit framework.

The panel finds the regulatory framework for the ECTS system to be in place: the institution has formalised the conversion principles, has set the reference rate of 30 hours of total workload to one ECTS credit, and has built ECTS allocation into the cultivation plan. The supporting academic-burden survey provides a first generation of empirical workload data. The panel appreciates this construction as a credible starting point.

At the same time, the panel observes that the ECTS allocation is not yet consistently anchored in actual workload data. The current conversion remains primarily a calculation built on regulatory ratios and a designed annual reference, with the workload survey serving as a parallel monitoring instrument rather than as the operational input feeding back into ECTS calibration. The institution itself acknowledges that further development is needed. In the interviews, students did not describe the workload as excessive, and their accounts of weekly study time were broadly consistent with the planned figures; the workload as experienced is therefore not the panel's concern here. The concern is that this experience is not systematically fed back into the calibration of the credit allocation.

The panel further notes that the development required to close this gap operates at three complementary levels. First, the formal institutional regulation needs to evolve from anchoring ECTS to a designed conversion ratio to anchoring ECTS to evidence-based actual workload. Second, the programme team needs to develop a shared recognition of why workload-based credits matter and the operational capability to use workload data in credit-allocation work. Third, the routine collection of operational workload data — already

initiated through the annual academic-burden survey — needs to be embedded as a regular input into the credit-allocation cycle rather than as an external monitoring exercise. The panel considers the current state to be a sound foundation upon which this further development can take place. In view of this — the missing anchoring of the conversion in actual workload data being the decisive gap — and notwithstanding the sound design and the initial implementation steps taken, the panel classifies this sub-criterion as only partly sufficient.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University *partially fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 1.5.

The panel takes note that the university has acknowledged the recommendation and plans to establish a semester-based course-workload monitoring survey and a credit-calibration mechanism grounded in the resulting data, to be institutionalised through formal management measures and reported publicly. The panel considers this an appropriate direction; as the measures are planned rather than yet implemented, they do not alter the assessment at this stage.

The corresponding recommendations are set out in G, A2.

D-6. Didactics and teaching methodology [ASIIN 1.6]

Description of the current status

The teaching methodology of the programme is described in the SAR as implementing the outcome-based education (OBE) concept. Core courses employ a mix of project-based learning (in Fundamentals of Software Engineering, Intelligent Product Design and Comprehensive Practice of Computer Application Systems, with full-lifecycle team projects), case-based learning (in Computer Network and Introduction to Artificial Intelligence Technology), flipped classroom (in more theoretical courses such as Situation and Policy and Literature Retrieval and Scientific Paper Writing), and task-driven guided teaching. The standardised module-description format records the teaching method for each course.

The SAR further describes a formative evaluation system covering the phases before, during and after class, intended to assess how far the various teaching methods support the achievement of students' learning outcomes. Teachers collect empirical data through classroom observation, analysis of assignments and projects, online learning platform data

(video completion rates, forum participation, quiz score analysis) and course feedback surveys; the teaching team then reviews whether specific methods — for example the goal and difficulty alignment of a project-based learning task, or the currency of a case study — have effectively promoted the achievement of the intended learning outcomes. The SAR documents two adjustments arising from this loop: supplementary workshops where flipped-classroom delivery had not produced the expected mastery, and an explicit strengthening of the teamwork dimension in subsequent project task descriptions where a project had not sufficiently developed that competence.

The introduction of students to independent scientific work is anchored in the module Literature Retrieval and Scientific Paper Writing, in extracurricular technological innovation practice, and above all in the graduation thesis (design), which students are required to complete independently under supervision and which is subject to a proposal defence, a mid-term inspection, a defence qualification review and a documented minimum of ten supervision sessions.

The institution operates online learning platforms (Chenggongzhixue, Xuetang Online, Wisdom Tree) to support material distribution, online testing, discussion forums and assignment submission. The data collected through these platforms (video completion rates, forum participation, quiz scores) is described in the SAR as an input into the per-course feedback cycle through which teaching strategies are reviewed and adjusted by the course team.

School–enterprise cooperation underpins practical teaching. The School has established off-campus internship practice bases with Sichuan Huadi Information Technology, Beijing Huaqing Yuanjian Technology Development, the joint Industry-Academic-Research Collaborative Education Base with Loongson Zhongke, Beijing Qunyuan Electric Power Technology, Sichuan Hushan Electric and Huawei Technologies. Enterprise senior experts are invited to participate in teaching activities under an "outbound and imported" collaborative-education strategy.

Analysis and assessment of the expert panel

The panel finds the regulatory framework underpinning didactics and teaching methodology to be appropriate. The standardised module-description format records the teaching method per course; the institution operates digital learning platforms with capacity for online interaction and data collection; and the school–enterprise cooperation portfolio gives the practical-training components a credible operational base.

The panel notes that the diversification of teaching methods described in the SAR (project-based learning, case-based learning, flipped classroom, task-driven guided teaching) is consistent with the outcome-based orientation the programme declares. The integration of AI into teaching, learning and administration, observed during the visit, is a positive operational element: AI is already used in many exercise courses, and the institution stated that its establishment as a subject in its own right is planned. At the same time, the panel observed that the use of AI in teaching and in the setting of examinations is not yet regulated at university level, although the Teacher Development Centre has begun to train teaching staff in the use of AI — a development the panel regards as positive. The panel further noted that information/cyber security is being added to the Computer Network course and discussed with the programme that it would benefit from being addressed across most other courses as well.

The panel further notes that the institution operates a regular review of whether the teaching methods employed support the achievement of the programme objectives: the formative evaluation loop described in the SAR collects evidence on the effectiveness of individual methods and feeds it back into the adjustment of teaching strategies, with documented instances of such adjustments. The panel regards this as a substantive element of the outcome-based orientation at the level of didactics, and one more developed than the headline method labels alone would suggest. The introduction of students to independent scientific work is likewise anchored in the curriculum, through the literature and scientific-writing module, extracurricular innovation practice and the graduation thesis.

The panel also takes a more reserved view on the operational depth of OBE implementation across the course portfolio; this point is developed under C-3 and taken up in the recommendations below and, for the quality management dimension, under C-9.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University *partially fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 1.6.

The panel takes note that the university has acknowledged the recommendation and plans to embed artificial intelligence and information/cyber security more systematically across the course portfolio and to develop institution-level rules for the use of AI in teaching and assessment, supported by dedicated staff training. The panel considers this an appropriate direction; as the measures are planned rather than yet implemented, they do not alter the assessment at this stage.

The corresponding recommendations are set out in G, A3, E5.

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

Description of the current status

Course examinations are governed by the institutional regulations "Chengdu Technological University Curriculum Construction and Management Measures" and the "Course Assessment and Test Paper Management Methods" (Appendix 02). Each course adopts a process-oriented evaluation mechanism: the final grade is determined by a combination of daily assessments (classroom discussions, quizzes, assignments, midterm examinations, laboratory reports) and a final assessment (written examination of typically 120 minutes, papers or course reports), with weights specified in the course syllabus. Teachers are required to explain the grading standards to students at the beginning of each course, and the weighting of each assessment component is specified in the course syllabus.

Examination content is required to cover the learning objectives specified in the course syllabus, and the scope and design of test items must align with the syllabus requirements as recorded in the Course Objective Reasonableness Confirmation Form (Appendix 17-1). Final grades are presented on a hundred-point scale (90–100 Excellent, 80–89 Good, 70–79 Medium, 60–69 Pass, below 60 Fail); the graduation thesis uses a corresponding five-point scale.

Examination organisation is divided between the Academic Affairs Office (for school-wide compulsory general-education courses, scheduled in the seventeenth week of each semester) and the individual colleges (for professional-course assessments). The regulation provides for examination postponement under defined circumstances and for a regular make-up examination organised by the Academic Affairs Office in the first week of the following semester. Students may submit a written application for score review under Article 35 of the Regulations on Student Management (Appendix 01). Examinations for school-wide compulsory courses are concentrated in the seventeenth week in order to give students a defined preparation period, while professional-course assessments are scheduled by the colleges in line with teaching progress.

The graduation thesis (design) is governed by the "Measures for the Management of Graduation Theses (Design) (Revised)" (Appendix 02) and the School's complementary regulations (Appendix 17-2). Topic selection emphasises practical application and engagement with industry, with industry professionals required among the supervisors and external supervisors paired with internal university supervisors. The final grade is composed of supervisor evaluation (40 %), reviewer evaluation (20 %) and thesis defence (40 %), with a text

similarity check (<30 %) required before the defence. The process comprises a thesis proposal defence, a mid-term inspection and a defence qualification review; students maintain documented contact with their supervisors in the graduation design system, with a minimum of ten supervision sessions required over the course of the work.

During the onsite visit, the panel inspected sample examination papers and the corresponding Evaluation Reports on Achievement of Course Objectives (Appendix 17-3) for representative courses. The panel confirmed that examination items are mapped to course-level learning outcomes, and that item-level scores are aggregated into per-objective achievement values at the course level. Sample graduation theses (Appendix 17-6) were also reviewed onsite.

Analysis and assessment of the expert panel

The panel finds the regulatory framework for examinations and grading to be in place. The two-tier division of responsibility between the Academic Affairs Office and the colleges is clear, the process-oriented assessment principle is anchored in regulation, and the operational artefacts at the course level — the Course Objective Reasonableness Confirmation Form (Appendix 17-1), the Evaluation Report on Achievement of Course Objectives (Appendix 17-3) and the Course Analysis Table (Appendix 17-4) — are produced in routine operation. The graduation-thesis regulation, with its three-component grading composition and the requirement that industry professionals participate among the supervisors, is appropriate for an application-oriented engineering programme.

The panel finds the transparency of the examination and grading arrangements adequate. Grading standards are explained at the start of each course and the weighting of components is documented in the syllabus; students confirmed in the interviews that they know how their marks are composed and that they are able to approach their lecturers about examination results, and a formal route for score review is available under Article 35 of the Regulations on Student Management. The number and distribution of examinations — school-wide examinations concentrated in the seventeenth week, professional-course assessments scheduled by the colleges in line with teaching progress, and make-up examinations held in the first week of the following semester — provides an adequate preparation period and supports a smooth study process; students did not report the examination load or its scheduling as problematic.

With regard to the graduation thesis, students and graduates reported satisfaction with the supervision and support they received, and the requirement of a documented minimum of ten supervision sessions, together with the proposal defence, the mid-term inspection and the defence qualification review, gives this a structural basis. The panel inspected

sample theses during the onsite visit and found their level appropriate to a bachelor's degree in this field, with topics reflecting the practical, application-oriented character the programme declares.

A review of whether the examinations can adequately determine the achievement of the learning objectives is provided for and operates at course level: the Course Objective Reasonableness Confirmation Form is completed before the course begins, and the Evaluation Report on Achievement of Course Objectives and the Course Analysis Table are produced after it, the latter carrying proposals for improving course content and teaching methods. The instrument is therefore in place. What the panel finds not yet established is its reach: the review confirms the alignment of the assessment with the course objectives, but it does not extend downward to the level of the individual examination item, nor upward to the question whether the programme-level learning outcomes are adequately evidenced by the examinations taken across the curriculum as a whole.

The panel especially appreciates one substantive operational element: the mapping of examination items to course-level learning outcomes, combined with the aggregation of item-level scores into per-objective achievement values, gives the institution a direct evidentiary link from individual student performance to the course-level learning-outcome layer. This is a strong operational element of the institution's outcome-based orientation; it connects to the broader evidence chain examined under C-9.

At the same time, the panel observes that examination design and post-examination achievement analysis are not yet routinely anchored in OBE principles in the sense expected for an OBE-driven programme. The level and composition of examination items, as observed from the sample papers reviewed onsite, do not yet provide sufficient evidence that the achievement of programme-level learning outcomes — beyond the achievement of course-level objectives — is reliably reflected in the way examinations are constructed. The achievement-evaluation infrastructure is in place; the question that remains is whether the items themselves are calibrated to deliver evidence at the level the qualifications framework expects.

The panel emphasises that this finding does not prescribe how the institution should organise its examinations; it follows from the programme's own approach. The programme describes itself as outcome-based, sets several objectives for every course, and reports a quantified achievement value for each objective in its Evaluation Reports on Achievement of Course Objectives. For these values to carry the meaning the programme attaches to them, each examination has to be designed and documented against the course objectives it is intended to assess, and the reported achievement values must be traceable back to

the individual examination items. The recommendation below therefore asks no more than that the programme deliver what its own logic already promises.

The panel notes in this connection that the improvement directions arising from the undergraduate education and teaching review and evaluation organised by the Ministry of Education in November 2025, which were discussed during the onsite visit, include the evaluation of outcome attainment at both course and programme level. The direction in which the institution is already developing under its national quality assurance framework and the direction of the panel's finding under this criterion therefore coincide. The panel regards this convergence as favourable: the recommendation below does not ask the programme to depart from its own reform agenda but to carry that agenda through to the level of examination design and documentation.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University *partially fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 2.

The panel takes note that the university has acknowledged the recommendation and plans to establish a three-level mapping from examination items through course-objective attainment to graduation requirements, to broaden the assessment mix beyond the single final written examination, and to introduce a sample-based examination-paper review by external experts. The panel considers this an appropriate direction, consistent with the programme's own outcome-based logic; as the measures are planned rather than yet implemented, they do not alter the assessment at this stage.

The corresponding recommendations are set out in G, A3.

D-8. Resources [ASIIN 3]

Description of the current status

Staff and staff development [ASIIN 3.1]

The programme is served by 37 teachers: 35 full-time teaching staff and two full-time laboratory staff. The student-to-teacher ratio is reported as approximately 18:1 against an enrolment of 657 students. All teaching staff hold a master's degree or higher, with 21 holding a doctoral degree (about 57 per cent); twelve members have prior overseas visiting experience. The distribution of academic ranks is reported in Table 3.1 of the SAR: seven senior, sixteen deputy senior and fourteen intermediate.

Teaching staff development is anchored in institutional regulations covering pre-service training for new teachers, the new-teacher cultivation system (Appendix 19-7), and the regulations on faculty pursuing doctoral degrees and on official temporary overseas travel (Appendix 19-8, 19-9). New teachers receive a personalised cultivation plan including mentor guidance, teaching observation and scientific-research initiation. The institution supports continuing education through doctoral pursuit, short-term training and academic visits, and organises academic lectures, seminars, teaching-and-research activities and teaching observation competitions on campus. Staff résumés and teaching and research achievements are documented in Appendix 19-1, 19-2 and 19-3. The institution operates a stable dual-qualified teacher policy, encouraging teaching staff to undertake periods of enterprise practice or technical training in order to strengthen industry currency and practical teaching capability, and appointing enterprise experts as part-time professors for frontier lectures and short workshops.

Student support and student services [ASIIN 3.2]

Student support and services are provided through a coordinated arrangement of the Academic Affairs Office and the Student Affairs Office, complemented by a "counsellor + class teacher + tutor" three-tier student-work system. The Academic Affairs Office is the central hub for teaching management and student-status matters; the Student Affairs Office covers ideological and political education, daily management, financial aid, and graduate employment guidance. Full-time counsellors handle daily management, mental health and party-building work; class teachers (concurrently held by professional teachers) focus on study-style construction and academic guidance; undergraduate tutors, young-teacher tutors and an alumni-tutor database provide hierarchical academic, research and career guidance.

The institution operates online course platforms (Wisdom Tree, with a school-exclusive entrance at https://cdtu.zhihuishu.com) supporting independent learning, online testing, homework submission and progress tracking. The student psychological counselling system operates on a three-level "school–college–class" linkage, anchored in the Mental Health Education Centre at the institutional level, with secondary psychological counselling stations at college level and class-level psychological committees; the School has formulated the management measures for its psychological safety committee (Appendix 19-10). Online and offline channels are combined, including the "Ling Xiao Nuan" psychological intelligence agent and the Tingxinfang counsellor's studio.

Funds and equipment [ASIIN 3.3]

The School operates a "4+22" laboratory system — four first-level laboratories and twenty-two second-level experimental rooms — distributed across the practical-training areas of

each floor of the School building. The total laboratory area exceeds 3,124 square metres and total equipment assets exceed 29.2 million yuan. The system covers fifteen teaching experimental rooms, five scientific research and innovation experimental rooms, one school-enterprise joint laboratory and one standardised server room. Details are provided in Appendix 19-6. The Practical Teaching Centre operates a 24-hour open-laboratory system, with the regulatory basis set out in Appendix 19-5.

The School's disciplinary research platform system is multi-level: a provincial-level research institute (the Sichuan Industrial Big Data Application Research Institute), school-level research centres (including the Artificial Intelligence Innovation Application Centre), and school-enterprise joint innovation centres (including the Intelligent Network Joint Innovation Centre). The platforms underpin two declared core directions: artificial intelligence and industry applications, and industrial digital intelligence and big data. Additional carriers include the "Mining Intelligence Research Institute" and the "Industrial Digital Intelligence Research Team", through which the School works with related industries and enterprises on research-result transformation.

Investment in teaching is reported in Table 3.2 of the SAR. Over the past three years, the School has invested more than 47 million yuan in teaching and operating funds, including basic undergraduate teaching expenses, laboratory construction, teacher training, teaching research and teaching reform projects. The 2025 figure is 14.812 million yuan in income (government financial allocation including tuition) supplemented by social-service income; expenditure covers teaching operating funds, laboratory construction funds and personnel costs.

External cooperation supporting resources includes the "Kunpeng & Shengteng" industry–education integrated education base jointly built with Huawei, focused on cloud computing, big data and artificial intelligence talent cultivation.

Analysis and assessment of the expert panel

Staff and staff development [ASIIN 3.1]

The panel finds the size, qualification structure and institutional development framework of the teaching staff appropriate for the programme. The student-to-staff ratio of approximately 18:1, the universal master's-or-higher qualification and the doctoral share of about 57 per cent provide a sound foundation. The regulations covering new-teacher cultivation, doctoral pursuit and overseas visits provide a credible framework for continuing development, and the academic-rank distribution is balanced across senior, deputy senior and intermediate levels. The panel also notes the stable dual-qualified teacher policy as an ele-

ment well suited to an application-oriented engineering programme, supported by the substantial volume of applied research and technology-transfer work the teaching staff carries. In the interviews, teaching staff described the institutional development provision — pre-service training, mentoring for new teachers, support for doctoral study and overseas academic visits, and the activities of the Teacher Development Centre — as clear and accessible, and expressed satisfaction with the opportunities and the support available to them.

The panel notes, however, that the English proficiency and English-medium teaching capability of the teaching staff is currently limited. The panel's direct exchanges with the teaching staff during the audit indicated that the ability to communicate in English is limited, and only one module in the Module Handbook (Operating System, listed as bilingual) operates outside Chinese-medium delivery. The same teaching staff serves both the programme under review and the international-student track described under C-1, for which the institution reports the opening of professional modules taught in English; the limited English-medium capability therefore constrains the School on both fronts. Within the programme under review it restricts the further development of bilingual and English-medium courses and limits the exposure of students and graduates to professional English, and it sits in tension with the internationalisation strategy the institution has itself declared and with the ambition to translate the existing mobility framework into actual outgoing mobility. The panel notes this as a limitation the institution would do well to address in support of those objectives.

Student support and student services [ASIIN 3.2]

The panel finds the student support and services arrangement well-developed and broadly fit for purpose. The dual-office model (Academic Affairs Office and Student Affairs Office), the "counsellor + class teacher + tutor" three-tier student-work arrangement, the centralised online learning platform, and the three-level mental-health support architecture form a coherent and operationally active framework. Comprehensive student support — covering financial aid, mental-health counselling, academic warning, and innovation and competition support — is in place; the high level of student satisfaction reported through the institutional feedback system is consistent with the panel's onsite observations. Elements the panel observed specifically include the graded academic-warning mechanism with its associated tutoring and support resources, the three-level mental-health architecture running from the institutional Mental Health Education Centre through college-level counselling stations to class-level student representatives, and the combination of online and offline channels including the counsellor studio and the online psychological support service; support for student participation in innovation and competition activity was likewise in evidence.

Funds and equipment [ASIIN 3.3]

The panel finds the regulatory, operational and capacity dimensions of the funds and equipment area well-developed. The "4+22" laboratory system, with its total area, equipment assets and 24-hour open access, provides adequate operational capacity for the practical-training components of the programme; the panel found laboratory equipment adequate to the curriculum's needs and noted high reported student satisfaction with teaching equipment and facilities. The disciplinary research platform system at three levels (provincial institute, school-level centres, school-enterprise joint centres) gives the programme a research base that connects to its declared application directions, including the mining-informatisation focus through the dedicated research carrier. Investment of more than 47 million yuan over three years, the school–enterprise cooperation portfolio including the joint education base with Huawei, and the operational presence of seven jointly built modern-industry colleges together provide a robust resource foundation. The panel raises no concerns on this sub-criterion. With regard to the school–enterprise cooperation on which the practical components depend, the panel confirms that these arrangements rest on binding agreements: the off-campus practice bases listed in the SAR are established on a contractual basis with documented year of establishment and annual capacity, off-campus internships require a signed agreement and insurance cover, and the collaborative education bases built with Huawei and Loongson Zhongke are formalised undertakings. The panel is satisfied with the scope, the stability and the industry relevance of these cooperations.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University, with regard to Criterion 3, *substantially fulfils* the standard for sub-criterion 3.1 (Staff and staff development), *fully fulfils* the standard for sub-criterion 3.2 (Student support and student services), and *fully fulfils* the standard for sub-criterion 3.3 (Funds and equipment) for the programme Computer Science and Technology.

The panel takes note that, with regard to sub-criterion 3.1, the university has acknowledged the recommendation and plans to raise staff English proficiency through academic-English and English-medium-instruction training and study visits, to increase the share of English-taught and bilingual courses, and to give priority to internationally experienced staff in recruitment. The panel considers this an appropriate direction; as the measures are planned rather than yet implemented, they do not alter the assessment at this stage. With regard to sub-criteria 3.2 and 3.3, the statement does not provide additional information that would affect the assessment.

The corresponding recommendations are set out in G, E4.

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

Description of the current status

The institution operates a systematic, multi-level internal teaching quality assurance system, the structure of which is documented in Figure 5.1 of the SAR and in the suite of regulations collected under Appendix 02. The system integrates four sub-systems: teaching resource and condition, quality objectives and standards, organisational implementation and management, and quality monitoring and evaluation, with a closed-loop quality feedback and improvement architecture.

Internal teacher evaluation integrates four channels: student evaluation (operated through an online teaching evaluation system, contributing 70 per cent of the teacher's classroom-teaching evaluation), school-level teaching supervision, peer evaluation, and lecture attendance by leading cadres. Evaluation criteria cover curriculum education, teaching attitude, content, methods and means, and teaching effects (Appendix 21-5). Evaluation results feed both into teacher performance assessment, promotion and excellence review, and into a structured support and rectification track for teachers in the bottom decile.

Routine monitoring operates through three further instruments: a daily teaching inspection system, a teaching supervision system, and a student teaching information officer system. Beginning-, mid- and end-of-semester teaching inspections are conducted each semester, with school- and college-level supervisors active in classrooms, experiments, internships and graduation theses.

External quality evaluation is anchored in a graduate tracking and feedback mechanism. Graduate tracking surveys are conducted annually, with comprehensive evaluation on a four-year cycle (Appendix 22-1, 22-4); employer surveys are conducted through visits, alumni forums and recruitment matchmaking; third-party evaluation produces the annual Employment Quality Report of Computer Science and Technology Graduates (Appendix 08-3). The institution has also passed the 2025 Ministry of Education undergraduate education and teaching review and evaluation.

The achievement-evaluation infrastructure operates at two tiers: course-level objective achievement (documented in the Evaluation Report on Achievement of Course Objectives, Appendix 17-3, generated after each course offering) and programme-level (graduation-requirement) achievement (assessed every two years on the basis of aggregated course-

level data complemented by graduate and employer feedback, with results informing revision of training objectives and the curriculum). The rationality of training objectives is reviewed about five years post-graduation via follow-up surveys, the operational architecture of which is set out in Table 5.1 of the SAR.

Analysis and assessment of the expert panel

The panel finds the regulatory framework of the internal quality assurance system well-developed. The four sub-systems, the multi-channel teacher evaluation, the routine monitoring through inspections and supervision, and the external evaluation through graduate tracking together describe a coherent quality architecture. Operational artefacts at the course level — including the Evaluation Reports on Achievement of Course Objectives — are produced routinely; the engagement with the 2025 Ministry of Education review and the publication of the annual Employment Quality Report indicate active operation of the external evaluation track. The convergence between the institution's own reform agenda following the November 2025 Ministry of Education review and the outcome-based perspective of the panel is set out under C-7. In the interviews, students confirmed that the feedback channels are used and that they receive responses: the student teaching information officer system was described as a working route for raising issues, and students were able to point to changes that had followed from their feedback. This is consistent with the weight of 70 per cent that student evaluation carries in the assessment of classroom teaching.

The panel especially appreciates the two-tier achievement assessment in operation at the institution: course-objective achievement, evaluated per course offering and feeding into the Evaluation Report on Achievement of Course Objectives, and graduation-requirement (programme-level) achievement, evaluated periodically through aggregation of course-level achievement evidence complemented by graduate and employer feedback. This two-tier construction generates rich evidence on the competence attainment of graduating cohorts.

The panel observes that this achievement evidence currently flows primarily inward: it is used for syllabus revision, course adjustment and revision of the talent cultivation plan, all of which are appropriate internal management uses. As a consequence, the evidence does not yet flow back to the individual student in a way that gives the student a personal account of his or her own competence attainment, nor outward to external readers — employers, graduate-school admissions officers, accreditation bodies — who might benefit from the evidence the institution already holds. The Diploma Supplement, discussed under C-10, offers a natural channel for this onward flow; the achievement data the institution

already has can be presented as a complement and ultimately an enrichment of the conventional academic transcript.

The panel further notes that the internal quality management system would benefit from being further developed around outcome-based education, in particular by systematically monitoring and documenting the achievement of learning outcomes at both course and programme level, and by closing the overall PDCA loop in a way that traces back from achievement evidence to the design choices in the curriculum and in individual courses.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University *partially fulfils* the standard for the programme Computer Science and Technology with regard to Criterion 5.

The panel takes note that the university has acknowledged the recommendation and plans to develop its internal quality management around outcome-based education through a layered PDCA system operating at course and programme level, supported by an OBE attainment-analysis system and annual public reporting. The panel considers this an appropriate direction; as the measures are planned rather than yet implemented, they do not alter the assessment at this stage.

The corresponding recommendations are set out in G, A5.

D-10. Transparency and documentation [ASIIN 4]

Description of the current status

Module descriptions [ASIIN 4.1]

The institution operates an integrated information portal (https://portal.cdtu.edu.cn/), the academic affairs management integrated system, the Chenggong Zhihui online teaching platform, and the undergraduate graduation thesis (design) management platform. Student profiles, teacher information, workload, awarded credits and course-related details can be accessed via the platforms; students can submit teacher evaluations, with the results retrievable by teachers in the management system. Module descriptions are provided for each course in the standardised format documented in the Module Handbook (Appendix 09-1). The graduation thesis platform supervises the full lifecycle from topic selection to defence, with all process materials uploaded online. The official accreditation information channel for the programme is maintained at https://computer.cdtu.edu.cn/.

Diploma and Diploma Supplement [ASIIN 4.2]

The award of the bachelor's degree is governed by a two-level review: a graduation qualification review carried out under the institution's special leadership group (with each college operating a working group, and the Student Affairs Office reviewing basic information, moral education performance and disciplinary records), and a degree review by the institution-level Degree Evaluation Committee in coordination with the college-level professor committees. Sample graduation and degree certificates are provided in Appendix 21-1; each certificate must bear the institutional seal and the principal's signature. A complaints and review mechanism is in place for publicity of results and acceptance of objections.

A Diploma Supplement is documented in Appendix 06-1 and Appendix 21-2; a sample is appended to the SAR.

Relevant rules [ASIIN 4.3]

Teacher qualification screening operates under the "Measures for the Qualification of Undergraduate Lecturers" (Appendix 21-3). The teaching evaluation system, documented in the "Teachers' Teaching Quality Evaluation Management Measures" and the "Teachers' Classroom Teaching Evaluation Rules (Revised)" (Appendix 21-4), combines student evaluation, peer evaluation and expert evaluation; the underlying suite of teaching-quality regulations (Table 4.1 of the SAR) covers thirteen institutional measures. Evaluation results are fed back to the colleges and to the teachers concerned, with results retrievable in the teaching management system and in the Chenggong Zhihui platform; the student evaluation index system is documented in Appendix 21-5.

Analysis and assessment of the expert panel

Module descriptions [ASIIN 4.1]

The panel finds the documentation and transparency infrastructure of the programme well-developed at the systems layer. The portal, the academic affairs system, the online teaching platform and the graduation-thesis management platform together cover the main lifecycle of teaching and assessment, with online traceability of process artefacts. Module descriptions are provided in the standardised format expected by ASIIN.

The panel notes, however, that the cultivation plan and the module description handbook need to be re-submitted as a complete and updated set, with the OBE elements currently being implemented made explicit, and with the uniform use of course and module names ensured across all programme documents — as discussed under C-3, the same module cur-

rently appears under different English names depending on the document a reader consults. This documentation point is the operational counterpart of the consistency observation made under C-3.

Diploma and Diploma Supplement [ASIIN 4.2]

The panel notes that the Diploma Supplement is a relatively recent institutional product at Chengdu Technological University, introduced in response to international expectations rather than emerging from long-standing Chinese practice. The panel therefore evaluates the construction of the new product and the operational steps already taken, rather than expecting the multi-year roll-out evidence of an established product.

The panel observes that a Diploma Supplement sample is submitted with the appendices and that the institution has begun to consider it as an instrument of programme documentation. At the same time, the Diploma Supplement is not yet operationally understood at programme level in a way that would support its systematic issuance to every graduate of the Computer Science and Technology programme, and it is not yet anchored in an institutional regulation that secures this systematic issuance.

Linking back to C-9: the achievement evidence the institution already generates through its two-tier achievement evaluation can be presented as a complement and ultimately an enrichment of the conventional academic transcript via the Diploma Supplement channel. The institution already has the data; the Diploma Supplement provides the format. This observation does not entail a recommendation under [ASIIN 5].

The remaining elements of the diploma award — the two-level review, the certificate format and the objection procedure — are appropriate.

Relevant rules [ASIIN 4.3]

The panel finds the teaching evaluation framework appropriate. The triangulation of student, peer and expert evaluation, the qualification screening of lecturers, and the institutional suite of teaching-quality regulations together provide a credible basis for evaluating teaching at the level of the individual teacher and the individual course. The flow of evaluation results back to colleges and teachers is operationally in place. The panel raises no concerns specific to this sub-criterion; matters relating to the further outcome-based development of the underlying achievement-evidence chain are addressed under C-9.

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

Based on the preliminary assessment and considering the statement of the university, the panel concludes that Chengdu Technological University, with regard to Criterion 4, *fully*

fulfils the standard for sub-criterion 4.1 (Module descriptions), *partially fulfils* the standard for sub-criterion 4.2 (Diploma and Diploma Supplement), and *fully fulfils* the standard for sub-criterion 4.3 (Relevant rules) for the programme Computer Science and Technology.

The panel takes note that, with regard to sub-criterion 4.1, the university has provided the complete and updated cultivation plan and module descriptions requested by the panel (as additionally requested under D-3). With regard to sub-criterion 4.2, the university has acknowledged the recommendation and plans to introduce an English-language Diploma Supplement template, to issue it systematically from the class of 2027, and to anchor its issuance in formal management measures with accompanying staff training. The panel considers these appropriate; as the 4.2 measures are planned rather than yet implemented, they do not alter the assessment at this stage. With regard to sub-criterion 4.3, the statement does not provide additional information that would affect the assessment.

The corresponding recommendations are set out in G, A4.

E. Additionally requested documents

D 1. [ASIIN 1.1 / 1.3 / 4.1] Please re-submit a complete and updated cultivation plan (Programme Handbook) and module description, ensuring the completeness and consistency of the OBE elements currently being implemented, and ensuring uniform use of course and module names across all programme documents.

D 2. [ASIIN 1.1 / 5] Please provide the labour-market survey data or reports underpinning the most recent revision of the cultivation plan, together with documentation of the participation of other stakeholders in the revision process.

D 3. [ASIIN 1.1 / 1.3] Please clarify how the "Mining Intelligence Research Institute" and the mining-informatisation specialism support the talent-training and curriculum systems of the programme — in particular whether mining informatisation is reflected in the curriculum, and whether the Institute's resources can benefit a broader cohort of students beyond the small number currently involved in its research and development work.

F. Statement of the Higher Education Institution (16.08.2026)

We sincerely appreciate the ASIIN accreditation experts for the valuable comments and constructive suggestions provided to improve the quality of education and teaching at our university. These recommendations have clearly charted the course for us to further deepen programme development and refine the quality assurance system. We express our sincere respect and gratitude for this. Upon receiving the feedback, the university attached great importance to it, promptly convened a special working meeting with relevant departments, systematically reviewed and thoroughly discussed each expert comment, and formulated targeted improvement plans based on the university's positioning and the actual situation of the computer science and technology programme. In response to the issues identified during the programme's self-evaluation phase and the recommendations raised during the expert panel's on-site visit, our responses are provided item by item as follows.

Progress of Work Since the On-site Certification Inspection:

Since the on-site certification audit, our university has consistently adhered to the core principles of the ASIIN programme accreditation concept, using the accreditation standards as a guide for action to continuously deepen educational and teaching reforms and systematically optimize teaching practice outcomes. As of August 2026, our university has successfully applied for one provincial-level higher education high-quality development special teaching reform research project for 2026.

In terms of ensuring the quality of education and teaching, our university, based on the existing institutional framework, has effectively integrated the quality assurance philosophy throughout the entire process of talent cultivation. While strictly implementing the existing quality management systems, we have focused on strengthening process management and continuous improvement:

1. In-depth Quality Monitoring: Relying on the university's existing implementation measures for the undergraduate education and teaching quality monitoring and evaluation system, we have further strengthened the collection, analysis, and application of quality monitoring data. By improving data recording and organization for core aspects such as course objective attainment evaluation and graduation requirement attainment evaluation, we have effectively enhanced the systematic nature and precision of quality monitoring, providing more detailed data support for teaching improvement.

2. Orderly Progress in Quality Evaluation: In accordance with the university's current requirements for college/department evaluation work, this year we have continued to advance the quality evaluation of secondary teaching units. By conducting routine quality activities such as programme self-inspections, teaching archives inspections, and lecture evaluations, we have gained a comprehensive understanding of the teaching operation status of each programme, clarifying the direction for continuous improvement. The relevant evaluation plan is being further optimized based on the ASIIN certification feedback and will proceed as planned after soliciting opinions from various colleges and faculty representatives.

3. Continuous Improvement of the Quality Assurance Closed-Loop Mechanism: By strictly implementing the existing quality management systems, our university has further strengthened the full-process monitoring and management of education and teaching quality. Based on the PDCA quality assurance closed-loop concept, this semester, a pilot programme has been launched in the computer science and technology programme to track the effectiveness of improvement measures at the course level, ensuring that all improvement measures are implemented effectively and produce tangible results, providing a strong guarantee for the continuous improvement of programme development and talent cultivation quality.

(In addition to the above, the university's statement contains extensive descriptions of its improvement intentions and proposed methods in response to the recommendations. For reasons of length, these are not reproduced in full here. These intentions and actions proceed from the university's acceptance of the experts' evaluation findings, and the statement does not identify any factual inaccuracies in the expert report. Since improving an educational programme requires a full cycle of planning, implementation, observation of results and review, the improvements the university can make within this short period are reflected in the panel's final assessment as set out in the evaluative chapters.)

Furthermore, the university has provided supplementary materials of good quality, which will be archived. The document list is as follows:

- D1-08-1 Study Plan of Computer Science and Technology Major.pdf
- D1-08-2 Curriculum list of Computer Science and Technology Major.pdf
- D1-09-1 Module Descriptions of Computer Science and Technology Programme.pdf
- D2-Undergraduate Talent Development Programme Survey Report.pdf
- D3-Statement on the Support of the Mine Intelligence Research_Institute_Formatted_English.pdf

G. Summary: Expert recommendations (19.08.2026)

Taking into account the additional information and the statement given by institution, 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	31.12.2032	–	–

Requirements

A1. **[ASIIN 1.3]** It is required that the curriculum be further developed in content and in course sequence so that students have more opportunities to acquire the disciplinary foundations of computer science — in particular formal languages and automata, and computing complexity — so as to better support the achievement of the programme-level learning outcomes (graduation requirements) and to strengthen students' disciplinary theoretical foundation.

A2. **[ASIIN 1.5]** It is required that ECTS credits, used in parallel with the Chinese credit system, be calculated on the basis of the actual student workload, and that a systematic process be implemented to regularly monitor and evaluate the student workload — involving students in the review and adjusting credits where necessary.

A3. **[ASIIN 2 / 1.6]** It is required that examinations be designed and documented in a competence-oriented manner, so that the achievement of both course-level and programme-level intended learning outcomes can be adequately assessed and reliably traced from the examination items to the reported achievement values.

A4. **[ASIIN 4.2]** It is required that all graduates of the programme be provided a Diploma Supplement in English in line with the ASIIN criteria, and that its systematic issuance be anchored in a formal institutional regulation and in a shared understanding among the responsible staff.

A5. **[ASIIN 5]** It is required that the internal quality management system be further developed around outcome-based education, so that the achievement of the intended learning outcomes is systematically monitored and documented at both

course and programme level, and that the outcomes of these evaluations are systematically used — closing the overall PDCA loop — to improve the quality of the programme.

Recommendations

E1. **[ASIIN 1.1]** It is recommended that the intended programme learning outcomes more clearly express the distinctive applied-engineering profile (e.g. embedded systems, cloud computing, industrial digital transformation including mining informatisation) and the programme's graduate destinations.

E2. **[ASIIN 1.3]** It is recommended that a broader range of elective courses be offered, so that students have more opportunities for individual specialisation.

E3. **[ASIIN 1.3]** It is recommended that effective measures be taken to translate the existing international-mobility framework into measurable improvement of outgoing-student mobility data.

E4. **[ASIIN 3.1]** It is recommended that systematic measures be established to enhance the English proficiency and English-medium teaching capability of the teaching staff, so as to support the offering of more bilingual and English-medium courses, the internationalisation strategy declared by the institution, and the integration of international students.

E5. **[ASIIN 1.3 / 1.6]** It is recommended that the programme take a more systematic approach to the two fast-evolving areas of artificial intelligence and information/cyber security — both by embedding them more consistently across the course portfolio and by developing institution-level rules for the use of AI in teaching and assessment.

H. Comment of the Technical Committee 04 (10.09.2026)

Technical Committee 04 – Informatics/Computer Science (10.09.2026)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure and 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	30.09.2032	–	–

I. Decision of the Accreditation Commission (25.09.2026)

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

The Accreditation Commission agrees with the assessment of the experts and the Technical Committee, but makes the following changes. In requirement A 1, the required theoretical foundations are limited to formal languages and automata theory, as the AC considers these the core deficits to be remedied within the requirements procedure and aims at a consistent wording with comparable computer science programmes. In addition, all requirements are reformulated in an action-oriented manner for better understanding, without changing their substance. The recommendations remain unchanged.

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	30.09.2032	–	

Requirements

A1. **[ASIIN 1.3]** Further develop the curriculum in content and in course sequence so that students have more opportunities to acquire the disciplinary foundations of computer science — in particular formal languages and automata theory — so as to better support the achievement of the programme-level learning outcomes (graduation requirements) and to strengthen students' disciplinary theoretical foundation.

A2. **[ASIIN 1.5]** Calculate ECTS credits, used in parallel with the Chinese credit system, on the basis of the actual student workload, and implement a systematic process to regularly monitor and evaluate the student workload — involving students in the review and adjusting credits where necessary.

A3. **[ASIIN 2 / 1.6]** Design and document examinations in a competence-oriented manner, so that the achievement of both course-level and programme-level intended

learning outcomes can be adequately assessed and reliably traced from the examination items to the reported achievement goals.

A4. **[ASIIN 4.2]** Provide all graduates of the programme with a Diploma Supplement in English in line with the ASIIN criteria, and anchor its systematic issuance in a formal institutional regulation and in a shared understanding among the responsible staff.

A5. **[ASIIN 5]** Further develop the internal quality management system around outcome-based education, so that the achievement of the intended learning outcomes is systematically monitored and documented at both course and programme level, and use the outcomes of these evaluations systematically — closing the overall PDCA loop — to improve the quality of the programme.

Recommendations

E1. **[ASIIN 1.1]** It is recommended that the intended programme learning outcomes more clearly express the distinctive applied-engineering profile (e.g. embedded systems, cloud computing, industrial digital transformation including mining informatisation) and the programme's graduate destinations.

E2. **[ASIIN 1.3]** It is recommended that a broader range of elective courses be offered, so that students have more opportunities for individual specialisation.

E3. **[ASIIN 1.3]** It is recommended that effective measures be taken to translate the existing international-mobility framework into measurable improvement of outgoing-student mobility data.

E4. **[ASIIN 3.1]** It is recommended that systematic measures be established to enhance the English proficiency and English-medium teaching capability of the teaching staff, so as to support the offering of more bilingual and English-medium courses, the internationalisation strategy declared by the institution, and the integration of international students.

E5. **[ASIIN 1.3 / 1.6]** It is recommended that the programme take a more systematic approach to the two fast-evolving areas of artificial intelligence and information/cyber security — both by embedding them more consistently across the course portfolio and by developing institution-level rules for the use of AI in teaching and assessment.

Appendix: Learning objectives and curricula

1. Objectives and Learning outcomes

Objectives of The Program - CDTU

The computer science and technology major is committed to cultivating socialist builders and successors who can adapt to the needs of socialist modernization, who can study rigorously, be brave in innovation, pay attention to hard work, and be responsible, and who can inherit the spirit of Chen Yi and the spirit of success, and become socialist builders and successors with comprehensive development of morality, intelligence, physical education, art, and labor. For the development of related industries in the field of science and technology, senior application-oriented engineering and technical talents who have good humanities literacy, professional quality, computer science and technology-related knowledge and application capabilities, and can engage in computer product design, system research and development, application research, operation management, etc. in the field of computer science and technology.

The goals that students trained in this major can achieve after graduating about 5 years after their own study and industry training can be summarized into the following six items:

1. Master the basic knowledge of mathematics and natural science and basic engineering knowledge necessary for professional work, systematic and solid theoretical knowledge of computer science and technology, and be able to correctly apply it to complex engineering problems in the professional field of computer science and technology involved in engineering practice.

2. Be able to use the basic principles of mathematics and natural sciences, engineering foundations and computer science and technology expertise, combined with relevant materials and literature, to abstract complex engineering problems in computer science and technology, understand, identify and express the key elements and links in the problem, and obtain effective conclusions.

3. Master the basic design, development methods and technologies of the whole cycle and process of computer application products and systems, be able to propose solutions to complex engineering problems in the field of computer science and technology design and manufacturing, and design computer science and technology systems and their parts and components that meet the solutions. During the design process, you can consider social, environmental, health, safety, legal, cultural and other factors, and be able to reflect a certain sense of innovation.

4. Able to study complex engineering problems in computer science and technology based on scientific principles and using scientific methods, design reasonable experimental plans based on the characteristics of the objects in the problem, analyze and explain experimental results, and obtain reasonable and effective conclusions through information synthesis. Master the tools and methods required for computer science and technical product design, and be able to debug and use typical equipment and systems.

5. Be able to proactively communicate with project members and related personnel, have good teamwork, coordination and project management capabilities, and be able to effectively play a role as a key member in project operations.

6. Have an international perspective, be able to proactively update and expand your knowledge and abilities according to the needs of work and environment, and adapt to the evolving needs of computer science and technology.

The objectives of the program are easily accessible to the students and lecturers on the school website: https://computer.cdtu.edu.cn/

Learning outcomes of the program / Ability requirements

1. Knowledge and understanding

(1) Master the basic knowledge of mathematics, natural science, and engineering science required to solve complex computer science and technical problems and their application to the description of engineering problems.

(2) Master the basic professional knowledge required to engage in computer science and technology work, and be able to establish and solve mathematical models for specific objects. Can be used for modelling, deduction and analysis of computer science and technical problems.

(3) Master the professional knowledge of analysis, design, manufacturing and control required to engage in computer science and technology work, and be able to use relevant knowledge and mathematical model methods to compare and synthesize solutions to professional engineering problems.

2. Engineering analysis

(1) Be able to apply the basic principles of engineering science to correctly identify, express and solve complex computer science and technology problems.

(2) Be able to analyze and evaluate products, processes and methods used in this subject area based on scientific facts.

(3) Be able to select appropriate analysis, modelling, simulation and optimization methods, and have the ability to apply these methods at a high level.

3. Engineering design

(1) Have the ability to design and formulate plans for computer application system functions.

(2) Be able to analyze and demonstrate the rationality of the design plan, and demonstrate a certain sense of innovation in the process.

(3) Be able to design solutions to complex computer science and technical problems and demonstrate certain innovation capabilities during the implementation process.

(4) Consider social, health, safety, legal, cultural and environmental issues and other factors in the design process.

4. Investigation and evaluation

(1) Ability to conduct literature searches based on one's own knowledge and understanding level, and use databases and other information resources to serve research work.

(2) Able to plan and implement appropriate experiments based on one's own knowledge and understanding, interpret experimental data, and draw reasonable conclusions.

5. Engineering practice

(1) Be able to transform new discoveries in the fields of engineering and natural sciences into industrial and commercial production under the premise of comprehensive consideration of economic, ecological, safety, sustainability and environmental compatibility requirements.

(2) Have the ability to plan, control and monitor processes, and develop and operate systems and equipment.

(3) Able to independently integrate and consolidate the knowledge learned.

(4) Recognize the non-technical impacts of engineering activities.

6. General skills

(1) Ability to effectively perform individual responsibilities and work efficiently as a team member (including coordinating team work when necessary).

(2) Ability to use a variety of methods to communicate effectively with the engineering community and the general public.

(3) Demonstrate awareness of health, safety and legal issues and responsibilities in engineering practice, understand the social and environmental impacts of engineering solutions, and abide by professional ethics, responsibilities and norms in engineering practice.

(4) Have awareness of project management and business practices (such as risk management and change management) and understand their limitations.

(5) Recognize the necessity of lifelong independent learning and be able to actively practice it.

(6) Ability to work and communicate in national and international environments.

2. Curriculum

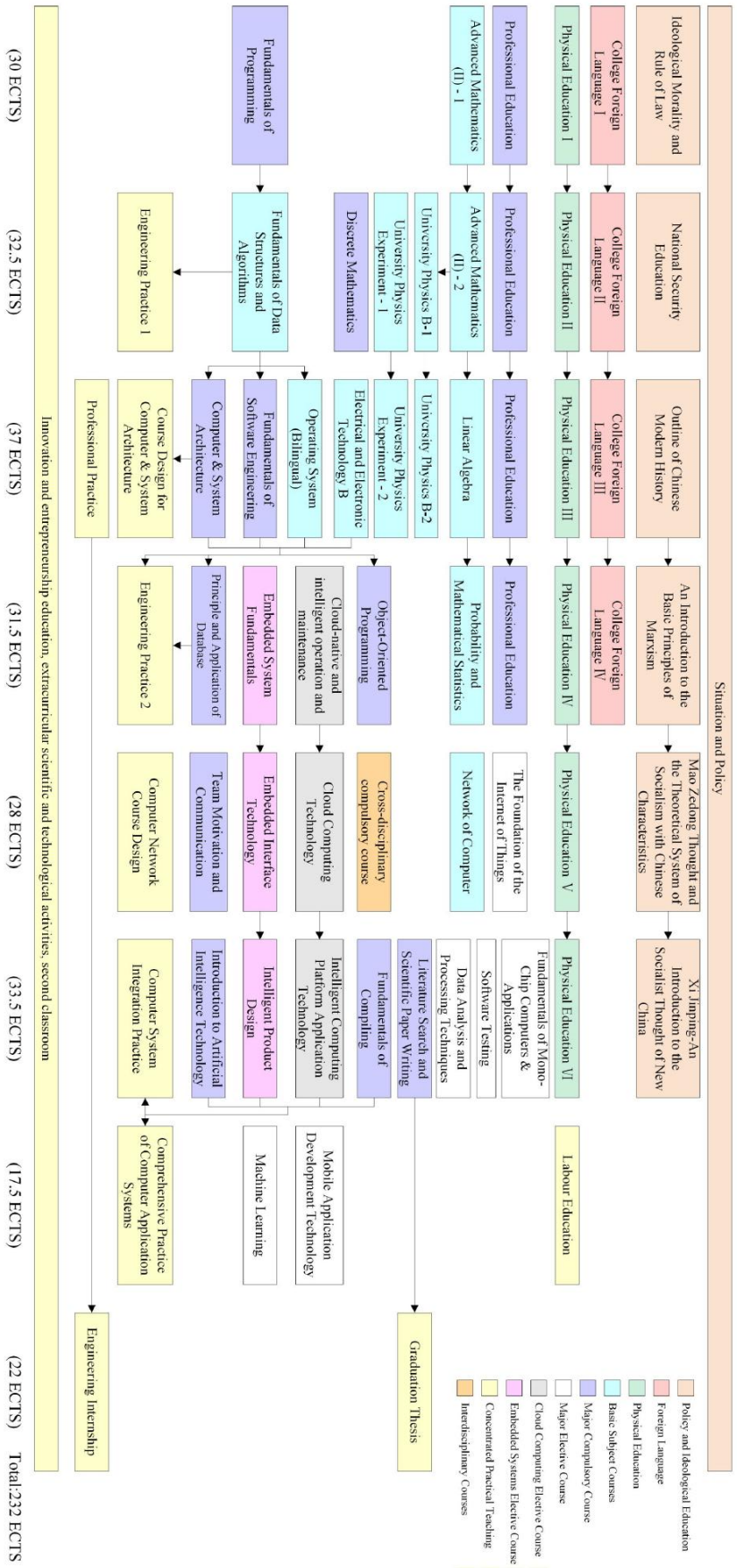


Figure 1.1 Learning Plan for Computer Science and Technology Major

Sort by semester

semester	courses	contact time	Self-study time	total time	ECTS
1	Ideology, Morality and Rule of Law	40	50	90	3
	Situation and Policies (1)	16	14	30	1
	SportsI	30	0	30	1
	College English I	64	86	150	5
	University Military Theory	36	24	60	2
	mental health education	32	28	60	2
	Advanced Mathematics (I)-1	96	84	180	6
	Programming basics	64	86	150	5
	University military skills training	75	0	75	2.5
	Engineering Training II	32	43	75	2.5
		first semester		900	30
2	national security education	32	28	60	2
	Situation and Policies (2)	16	14	30	1
	Physical Education II	30	0	30	1
	College English II	64	56	120	4
	Advanced Mathematics (I)-2	64	56	120	4
	College Physics B-1	48	42	90	3
	College Physics Experiment-1	16	44	60	2
	College Physics B-2	32	28	60	2
	discrete mathematics	64	86	150	5
	Data Structures and Algorithms	64	86	150	5
	professional education	16	14	30	1
	Engineering Practice 1 (Comprehensive Training in Programming Design)	32	43	75	2.5
		second semester		975	32.5
3	Outline of Modern Chinese History	64	26	90	3
	Situation and Policies (3)	16	14	30	1

	Physical Education III	30	0	30	1
	College English III	32	58	90	3
	linear algebra	48	57	105	3.5
	College Physics Experiment-2	16	44	60	2
	Operating system (bilingual)	48	72	120	4
	Software Engineering Fundamentals※	48	72	120	4
	Electrical and Electronic Technology B	80	100	180	6
	Computer composition and system structure※	48	72	120	4
	professional practice	16	104	120	4
	Computer composition and system structure course design	16	29	45	1.5
		third semester		1140	37
4	labor education	32	28	60	2
	Innovation and Entrepreneurship Education	32	58	90	3
	Basic principles of Marxism	64	26	90	3
	Situation and Policies (4)	16	14	30	1
	Sports IV	30	0	30	1
	College English IV	32	58	90	3
	Probability Theory and Mathematical Statistics	48	72	120	4
	Database principles and applications	48	72	120	4
	Object-oriented programming※	48	72	120	4
	Embedded system basics	48	72	120	4
	Engineering Practice 2 (Information System Design and Development)	32	43	75	2.5
		fourth semester		945	31.5
5	An introduction to Mao Zedong Thought and the theoretical system of socialism with Chinese characteristics	64	26	90	3

	Situation and Policies (5)	16	14	30	1
	Sports V	30	0	30	1
	Interprofessional required courses	32	58	90	3
	Computer network※	48	72	120	4
	Team motivation and communication	32	28	60	2
	Embedded interface technology	48	72	120	4
	cloud computing technology	48	72	120	4
	Art Appreciation and Aesthetic Cultivation	32	28	60	2
	Practical Teaching of Ideological and Political Theory Courses	32	43	75	2.5
	Computer Network Course Design	16	29	45	1.5
		fifth semester		900	28
6	An Introduction to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era	80	40	120	4
	Situation and Policies (6)	16	14	30	1
	Sports VI	30	0	30	1
	Compilation principle※	32	58	90	3
	Literature search and scientific paper writing	8	22	30	1
	Introduction to Artificial Intelligence Technology※	32	58	90	3
	Smart product design	48	72	120	4
	Intelligent computing platform application technology	48	72	120	4
	Microcontroller Principles and Applications	32	58	90	3
	Data analysis and processing technology	32	58	90	3
	software testing	32	58	90	3
	Chinese Classics	16	14	30	1

	Computer system integration practice	32	43	75	2.5
		Sixth semester		1005	33.5
7	Career planning and employ-ment guidance	32	28	60	2
	Situation and Policies (7)	16	14	30	1
	machine learning	32	58	90	3
	expression and communication	16	14	30	1
	Approaching industrial culture	16	14	30	1
	Extracurricular scientific and technological innovation prac-tice	32	118	150	5
	Comprehensive Practice of Computer Application Systems	64	71	135	4.5
		seventh semester		525	17.5
8	Situation and Policies (8)	16	14	30	1
	Engineering Internship	32	118	150	5
	Graduation project (thesis)	0	480	480	16
		eighth semester		660	22