SM IT Solution

Software · Web · Digital

TECHNICAL PROPOSAL

Digital Campus and Integrated University Management Platform

A connected set of systems for admission, student records, teaching, examinations, fees and administration, introduced in stages.

Submitted to

The Vice Chancellor

Thakurgaon University (ঠাকুরগাঁও বিশ্ববিদ্যালয়)

Thakurgaon, Bangladesh

Submitted by

SM IT Solution

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Reference and date

SMIT/TU/2026/001

18 November 2026

Status

Technical proposal for discussion.

The financial proposal is submitted separately.

Ref. SMIT/TU/2026/001
18 November 2026

The Vice Chancellor
Thakurgaon University
Thakurgaon, Bangladesh

Subject: Technical proposal for a Digital Campus and Integrated University Management Platform

Dear Sir,

Thank you for the opportunity to demonstrate our work to the university. We are pleased to submit this technical proposal for your consideration.

A university that is preparing to admit its first students has a rare advantage: it can set up its records and its office procedures correctly from the first day, instead of repairing them later. Our proposal is built around that idea. Each student has one official record. Each member of the university has one login. Each office keeps its own tools, and those tools share information instead of retyping it.

We propose to deliver this in stages, beginning with the official website and notice system and moving to student records, teaching, examinations, fees and administration as the university's own decisions on admission, departments and regulations are confirmed. At the end of every stage the university decides whether to accept the work and whether to continue.

We have prepared a working demonstration of nine everyday procedures so that the proposal can be judged on what it does and not only on what it says. It is available at campus.smitsolution.com.bd and uses invented sample data only.

We wish to be clear about the status of this document. It is a proposal. Nothing has been installed for the university, and we understand that any purchase will follow the applicable public procurement rules and the university's own approvals. We have not assumed any department, seat number, fee or date.

We would welcome a requirements meeting with the offices concerned, and your guidance on the appropriate procurement route.

Yours faithfully,

Shariar Rahaman
Founder & CEO
SM IT Solution

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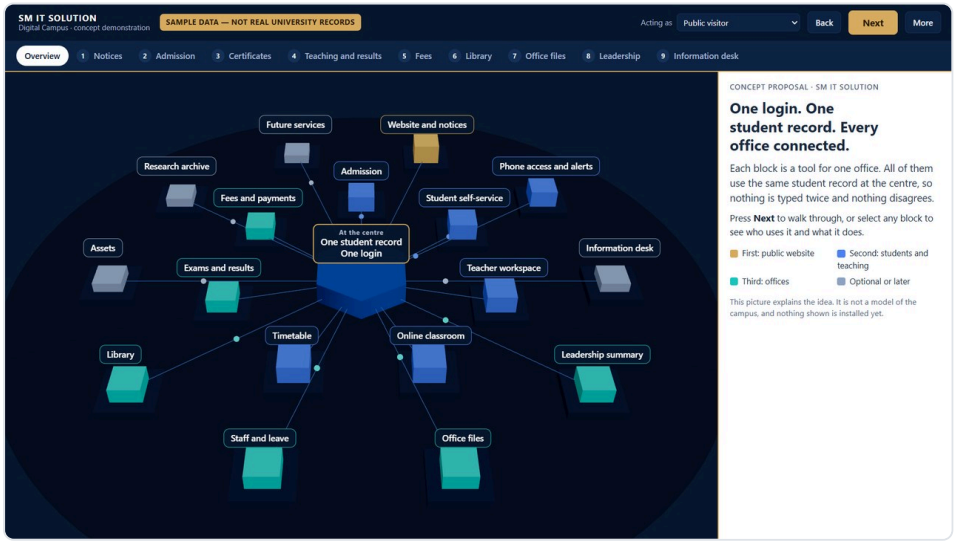
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1 Summary of the proposal

SM IT Solution proposes a Digital Campus and Integrated University Management Platform for Thakurgaon University. The platform connects the university's public website, admission and enrollment, student records, teaching, examinations, fees, library, staff administration and office files, so that information entered once is used everywhere it is needed.

What it is	Eighteen systems arranged around one official student record and one login. Twelve form the core; six are optional or for later.
How it is delivered	In stages. The official website first, then student records and teaching, then examinations, fees and administration. The university accepts each stage before the next begins.
How it is built	The parts specific to the university are built for it. Proven open-source products are used where they fit: Moodle for the online classroom, Koha for the library and Keycloak for login.
Who owns it	The university owns its data, its web address, its administrator accounts and the source code written for it.
What controls it	Results, payments, refunds and public notices each need two people: one prepares and another approves. Every action is recorded.
What can be seen today	A working demonstration of nine procedures at campus.smitsolution.com.bd, using sample data.
What we ask	A requirements meeting with the university's offices, two contact persons, and guidance on the procurement route.



The overview screen of the demonstration. Each block is one office's system; all connect to the single student record at the centre.

2 About SM IT Solution

SM IT Solution is a Dhaka-based software and digital company. We design and build web platforms, e-commerce systems and business software for clients in Bangladesh, the United Arab Emirates and the United Kingdom. The company is a member of the Bangladesh Association of Software and Information Services (BASIS).

Head office	Mohakhali DOHS, Road 01, Plot 195, Flat C-6, Dhaka, Bangladesh
Branch office	Flat B-5, Road 01, House 02, Nasirabad Properties Ltd, South Khulshi, Chittagong, Bangladesh
International	Al Muteena Street, Deira, Dubai, UAE. SM IT Solution Ltd is registered in England and Wales, company number 17476792, at 128 City Road, London EC1V 2NX.
Industry body	Member of BASIS (member profile 25-12-008)
In business	More than four years, with over thirty projects delivered
Leadership	Shariar Rahaman, Founder & CEO
Contact	info@smitsolution.com.bd · +88 01886101109 · smitsolution.com.bd

What we do

- Web and software development
- User interface and experience design
- E-commerce solutions
- Cloud solutions
- Cybersecurity services
- Search engine optimisation
- Digital marketing
- Content creation

Selected work relevant to this proposal

The projects below are not university systems. We include them because each required the same foundations this proposal depends on: separate roles with separate permissions, an administrative back office, online payment, notifications and reliable records.

Project	What we built	Relevance to a university platform
SM Automobiles Vehicle marketplace	Buyer, seller and administrator roles with their own dashboards; document upload and verification before a seller may list; subscription plans; live bidding; online payment and payouts.	Role-based access, document verification before approval, and payments recorded against an account.
BiteBytes Cloud-kitchen platform	Customer ordering and tracking, with an operations dashboard for menus, live order queues, dispatch and sales reports.	A request moving through several hands with its status visible at each step, and management reporting.

Project	What we built	Relevance to a university platform
BY Transport Ltd. Logistics platform	Online booking, shipment tracking, a customer account with history and invoices, automatic email and SMS notices, fleet administration and online payment.	Self-service accounts, automatic notifications and an administrative back office.

> We state our experience plainly. SM IT Solution has not yet delivered a university management system. We are proposing a staged engagement, beginning with the official website, precisely so that the university can judge our work on a contained first stage before committing to more. Section 7 sets out where we would bring in named specialists.

3 Our understanding of the university's position

We have relied only on public sources and have treated everything else as a matter for the university to tell us.

What public sources say	What remains for the university to decide
The university was established by the Thakurgaon University Act, 2023 (Act No. 50 of 2023).	The admission route, including whether and how the university takes part in the GST cluster.
Bangladesh Sangbad Sangstha reported on 3 October 2026 that the University Grants Commission had given preliminary approval to six departments, subject to conditions.	The final departments, programmes, seat numbers, academic calendar and regulations.
The Dhaka Tribune reported on 14 November 2026 that the university's inclusion in GST admission was under consideration and not final.	Fees, the bank and payment channels, and the rules for waivers and refunds.
The Bangladesh Public Procurement Authority states that the Public Procurement Rules 2025 took effect on 28 September 2025, with electronic procurement (e-GP) mandatory.	The procurement method, timetable and eligibility conditions that apply to this purchase.

Two consequences follow for the design. First, the platform must not depend on decisions that have not been taken: admission rules, grading rules, fee heads and approval chains are settings that the university's officers control, not fixed parts of the software. Second, the work should begin with what is certain. The university will need an official website and a controlled way of publishing notices whatever else is decided, which is why that is the first stage.

Risks a new university can avoid

These are common risks for any institution that begins on paper and spreadsheets. They are not observations about Thakurgaon University, whose present arrangements we have not reviewed.

- The same student is entered separately by admission, the department, the examination office, accounts and the library, and the copies drift apart.
- Notices circulate in several versions, and it is unclear which is official.
- There is no reliable record of who approved a result, a refund or a correction.
- Payments recorded by the university do not agree with the bank statement, and the differences are found late.

4 The proposed solution

The platform rests on three commitments.

One student record	Each student has a single official record, owned by the Registrar. It is created once, when enrollment is approved. Every other system reads from it instead of keeping a copy of its own.
One login	Each person signs in once and reaches everything their role allows. People in sensitive roles, such as examinations and accounts, pass an additional check when they sign in.
Connected offices	Offices pass work to one another inside the system. Each hand-over is recorded with a name and a time, and nothing is typed twice.

The systems and the offices they serve

System	Used by	How it is provided
Website and notices	The public, applicants, office authors, the authorised publisher	Built for the university, in Bangla and English
Admission and enrollment	Admission committee, Registrar's office, Accounts	Built for the university; follows whichever route the university adopts
Student records	Registrar's office, departments	Built for the university
Student self-service	Students	Built for the university; works on any phone
Teacher workspace	Teachers, heads of department	Built for the university
Online classroom	Teachers and students	Moodle, set up and connected to student records
Timetable and attendance	Departments, teachers, students	Built for the university
Examinations and results	Controller of Examinations, examiners, heads of department	Built for the university
Fees and payments	Accounts, Treasurer's office, students	Built for the university; connected to a bank only with the university's written authority
Staff and leave	Staff office, supervisors, employees	Built for the university
Library	Librarian, students, teachers	Koha, set up and connected to student records

System	Used by	How it is provided
Office files	Registrar's office, departments, approving authorities	Built for the university
Leadership summary	Vice Chancellor, Pro-Vice Chancellor, Registrar, Treasurer	A standard reporting tool reading the offices' own records; view only

Annex A lists all eighteen systems, including the optional ones, with their purpose and stage.

Why this approach

We considered three ways of providing the platform: buying one large packaged product, building everything from nothing, and building the university-specific core while adopting proven products for the classroom, library and login. We recommend the third. A packaged product is quick to install but obliges the university to adapt its procedures to the product. Building everything is slow and repeats work that Moodle and Koha already do well. The combined approach gives the university its own rules where they matter and tested software elsewhere.

The products named are open-source, so there is no licence fee for the core. Their licence terms and current versions will be confirmed with the university before any commitment.

5 How the main procedures would work

The demonstration at campus.smitsolution.com.bd shows nine procedures step by step. Four are summarised here.

Publishing a notice

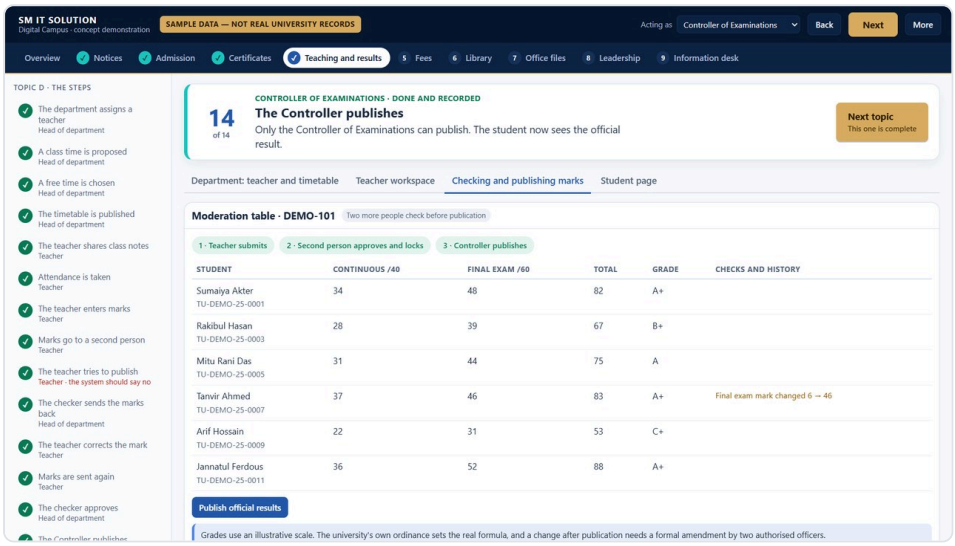
1. An office writes the notice in Bangla and English. It is a draft and the public cannot see it.
2. A reviewer checks it, and may return it with a written reason.
3. The authorised publisher approves it. Only this person can make a notice public.
4. The notice appears on the website, the department's page and each student's own page, with a reference number and date. Earlier versions are kept.

From admitted candidate to enrolled student

1. The university receives the list of admitted candidates through the authorised channel.
2. An officer checks each record and verifies original documents. A duplicate or a mismatch is held for a decision.
3. Accounts confirm that the admission fee has been received.
4. The Registrar approves enrollment. In that one step the student record, student ID, login and class access are created.

From marks to an official result

1. The teacher enters marks as a draft. Students cannot see them.
2. A second examiner checks the marks. The system points out any mark that looks inconsistent, and the sheet can be returned with a reason.
3. Once checked, the marks are locked.
4. The Controller of Examinations authorises publication. A teacher cannot publish a result, and a change after publication requires a recorded reason and two approvals.



From the demonstration: the Controller of Examinations publishes the result. The banner at the top states in one sentence what has just happened.

From fee payment to receipt

1. Accounts create fee bills from the fee schedule approved by the university.
2. The student pays through an approved channel. The bill shows "payment pending".
3. The fee is counted only when the bank itself confirms it, and it is counted once even if the confirmation arrives twice.
4. The bank statement is compared with the university's records. Where they agree, a receipt is issued. A difference goes to a senior accounts officer. The system never pays a refund by itself.

6 Delivery in stages

The durations below are estimates. They begin only after the university's approvals, and they depend on the decisions listed in section 10.

Stage	Estimated time	What is delivered	The university decides
Study of needs	2 to 4 weeks	Meetings with each office; written requirements; agreed scope and plan	Whether to proceed, and on what scope
Stage 0 Foundation	8 to 12 weeks	Official website in Bangla and English; notice publishing with approval; secure set-up, backups and monitoring; training for editors	Acceptance of the website; whether to begin stage 1
Stage 1 Students and teaching	4 to 6 months	One login; student records; enrollment; student and teacher pages; online classroom; timetable and attendance	Acceptance after a trial with one group of students
Stage 2 Offices	4 to 6 months	Examinations and results; fees and bank matching; library; staff and leave; office files; leadership summary	Acceptance by each office concerned
Optional	3 to 4 months	Asset register; research archive; phone app; information desk	Whether any option is wanted

Stages 1 and 2 may overlap where our capacity and the university's readiness allow. If the university needs an earlier start than this plan permits, we recommend narrowing the first stage, not shortening every stage.

How each stage is accepted

- Before a stage begins, the university and SM IT Solution agree in writing what will be delivered and how it will be tested.
- University staff test the work themselves against those written tests, using sample data.
- The officer responsible for each system signs its acceptance. Payment for a stage follows acceptance.
- A change requested after the requirements are signed is assessed for its effect on time and cost, and proceeds only with the university's written approval.

7 Project team and governance

Our team

SM IT Solution's permanent team covers software engineering, web development, design, quality assurance and client support. For this project we would assign the following roles.

Role	Source	Responsibility
Project sponsor	Founder & CEO	Accountable to the university for the engagement as a whole
Project manager	Our team	Plan, progress reports, coordination with the university's contact persons
Software engineers and web developers	Our team	Building and maintaining the systems written for the university
Designer	Our team	Screens that are clear in Bangla and English and usable on a phone
Quality assurance engineer	Our team	Testing each release before it reaches university staff
University process adviser	Engaged for the project	Registrar, examination and accounts procedures in public universities
Moodle and Koha specialists	Engaged for the project	Setting up the online classroom and the library system
Security tester	Independent, engaged for the project	Security review before each stage goes live
Trainer and support officer	Our team	Training in Thakurgaon, manuals and day-to-day support

Names and curricula vitae for each role, including the specialists we would engage, will accompany the formal submission.

How the project is governed

Activity	The university	SM IT Solution
Rules and requirements	Decides and signs	Advises and writes them down
Design and building	Reviews every two weeks	Builds and tests
Where the system runs	Decides	Sets up and secures
Content and Bangla text	Writes and approves	Publishes as instructed
Acceptance and go-live	Tests and accepts	Corrects and hands over

We propose a weekly working meeting with the university's contact persons, a demonstration of progress every two weeks, and a monthly meeting of a steering committee chaired by the university.

8 Security, data ownership and where the system runs

Ownership

- The university owns all of its data. It can obtain a complete copy at any time, in standard formats.
- The web address, the administrator accounts and the passwords are held by the university.
- The source code written for the university is handed over to it, with documentation, under terms to be set in the contract.
- If our engagement ends, the university's IT unit or another supplier can continue from what has been handed over.

Control

Matter	Prepared by	Approved by
Examination marks	Teacher	Second examiner, then the Controller of Examinations
Refunds and waivers	Accounts officer	A senior accounts officer
Public notices	Office author	The authorised publisher
Certificates	Registrar's office	The Registrar

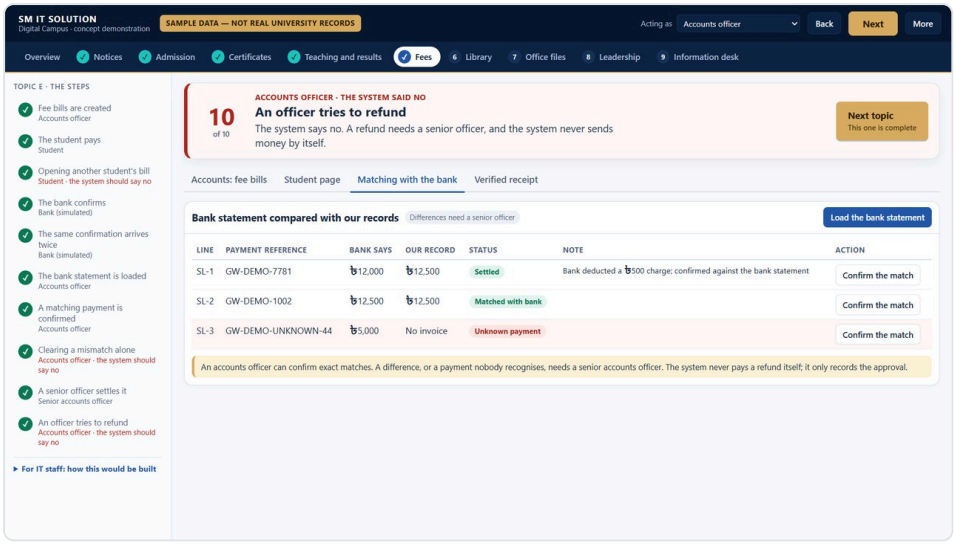
Each person sees only what their work requires. A student sees only their own record. Every action and every refused attempt is recorded with the person's role and the time, and the record cannot be edited.

Protection

- Information is encrypted in transit and in backups.
- Backups are taken daily and restoring from them is practised on a schedule.
- An independent security test is carried out before each stage goes live, with the university's written permission.
- Proposed targets, to be confirmed with the university: service available 99.5% of each month; at most 24 hours of data at risk in a failure; service restored within 8 hours. These are planning targets and not guarantees at this stage.

Where the system runs

This is the university's decision. The options are equipment on campus, a data centre in Bangladesh, or a combination. For planning we have assumed a combination, with the university's information held in Bangladesh, until the university's policy is confirmed.



From the demonstration: an accounts officer attempts a refund and is refused, because a refund requires a senior officer.

9 Testing, training, support and handover

Testing

Each system is tested by our quality assurance engineer before university staff see it, and then by university staff against written tests agreed in advance. We have drafted ninety-five such tests for discussion. Examples: a draft notice never appears in public; a teacher cannot publish a result; a repeated bank confirmation is counted once; a student cannot open another student's record.

Training

- Training for each group of users in Thakurgaon: website editors, admission and Registrar's staff, teachers, examination staff, accounts staff, the librarian and the IT unit.
- Short written guides in Bangla and English, and recorded walkthroughs.
- One or two named members of staff in each office trained to help their colleagues.

Support

We propose a warranty period after each stage is accepted, during which faults are corrected without charge, followed by an annual support agreement. Support hours, response times and visits to campus will be agreed with the university and set out in the financial proposal and contract.

Handover

At the end of each stage the university receives the source code, the documentation, the administrator accounts, the operating procedures and the results of the tests. The IT unit is trained to operate the system and to restore it from backup.

10 What we would need from the university

The plan in section 6 depends on the following. None has been assumed.

No.	Decision or item	Needed for
1	Two contact persons: one for office procedures and one for technology	The study of needs
2	The approved logo, the official web address and the content for the website	Stage 0
3	Who is authorised to publish notices	Stage 0
4	Where the system is to run	Stage 0
5	The admission route, and the form in which the admitted list will be received	Stage 1
6	Departments, programmes, the academic calendar and the rule for student ID numbers	Stage 1
7	Examination and grading regulations, and who may publish or amend a result	Stage 2
8	The fee schedule, the bank and payment channels, and the rules for refunds and waivers	Stage 2
9	Staff, leave and approval rules; the periods for which files must be kept	Stage 2
10	The university's position on digital signatures and on documents verified by code	Certificates and office files

11 Conditions of this proposal and next steps

Conditions

- This is a technical proposal for discussion. It is not a bid, a contract or a quotation.
- The financial proposal is submitted separately. It will be revised after the study of needs and offered through the formal process.
- We understand that any purchase will follow the applicable public procurement rules, including electronic procurement where it applies, and the university's own approvals. We ask the university's procurement officials to tell us beforehand if any preliminary work with the university would affect a firm's eligibility in a later tender.
- The demonstration uses invented sample data. It is not connected to any bank, to the GST admission system or to any system of the university, and no such connection has been made or approved.
- No logo of the university is used in our materials. One will be used only when supplied and authorised by the university.
- This proposal remains open for discussion for ninety days from its date.

Next steps we propose

1. A requirements meeting of sixty to ninety minutes with the Registrar's office, the Controller of Examinations, Accounts and the IT unit.
2. Nomination of the two contact persons.
3. Guidance from the university on the procurement route and timetable.
4. Our revised scope and financial proposal, submitted through that route.

For SM IT Solution

Shariar Rahaman
Founder & CEO
info@smitsolution.com.bd · +88 01886101109

A Annex A: The eighteen systems

A separate master plan gives, for each system, the software, users, steps, exceptions, connections, approvals required, acceptance tests and our method of delivery and support. It is available to the university on request.

No.	System	Purpose	Stage
1	**Website and notices**	The official bilingual website; a notice appears only after an authorised officer approves it	0
2	**Admission and enrollment**	Turns an admitted candidate into a student after documents and fee are checked	1
3	**Student records**	The one official record for each student, read by every other system	1
4	**Student self-service**	A student's own page: routine, notices, fees, results and requests	1
5	**Teacher workspace**	Assigned classes, attendance and marks entry	1
6	**Online classroom**	Class notes, assignments and quizzes (Moodle)	1
7	**Timetable and attendance**	Class times and rooms, checked for clashes before publication	1
8	**Examinations and results**	Marks entered, checked by a second person, locked and published by the Controller	2
9	**Fees and payments**	Fee bills, payments confirmed by the bank, receipts and matching with the bank statement	2
10	**Staff and leave**	Staff records and leave approvals, with information prepared for payroll	2
11	**Library**	Catalogue, lending and returns (Koha)	2
12	**Office files**	Files numbered, sent to the right authority, with each decision and reason kept	2
13	**Asset register**	What the university owns and who holds it. It does not replace national e-GP.	Optional
14	**Research archive and complaints**	Research profiles and publications; a protected channel for complaints	Optional
15	**Leadership summary**	Totals from every office and the matters awaiting a decision; view only	2
16	**Phone access and alerts**	Every page works on an ordinary phone; email and SMS for approved events	1
17	**Information desk**	Answers common questions from approved notices and passes the rest to staff	Optional
18	**Future services**	Hostel, transport, health or ID card services, when the university has them	Later

B Annex B: Company information

Name	SM IT Solution
Head office	Mohakhali DOHS, Road 01, Plot 195, Flat C-6, Dhaka, Bangladesh. Sunday to Thursday, 11:00 to 19:00.
Branch office	Flat B-5, Road 01, House 02, Nasirabad Properties Ltd, South Khulshi, Chittagong, Bangladesh
Dubai office	Al Muteena Street, Deira, Dubai, UAE
UK company	SM IT Solution Ltd, registered in England and Wales, company number 17476792. Registered office: 128 City Road, London EC1V 2NX.
Industry membership	Bangladesh Association of Software and Information Services (BASIS), member profile 25-12-008
Authorised signatory	Shariar Rahaman, Founder & CEO
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Telephone	+88 01886101109 (Bangladesh) · +44 7476 675484 (United Kingdom)
Website	smitsolution.com.bd

Documents to accompany the formal submission

Document	Status
Trade licence	To be enclosed
Tax identification (TIN) and VAT registration (BIN) certificates	To be enclosed
BASIS membership certificate	To be enclosed
Certificate of incorporation, SM IT Solution Ltd (United Kingdom)	To be enclosed
Client references, with the clients' permission	To be enclosed
Curricula vitae of the proposed team and engaged specialists	To be enclosed
Financial statements, as the tender documents require	To be enclosed

C Annex C: Sources

Source	What it is relied on for
Thakurgaon University Act, 2023 (Act No. 50 of 2023), Laws of Bangladesh, bdlaws.minlaw.gov.bd	The university's establishment and legal name
Bangladesh Sangbad Sangstha, 3 October 2026	Reported preliminary, conditional approval of six departments
Dhaka Tribune, 14 November 2026	Reported status of GST admission: under consideration, not final
Bangladesh Public Procurement Authority, bppa.gov.bd	Public Procurement Rules 2025 and electronic procurement

All sources were read on 18 November 2026. News reports are not decisions of the university, and nothing in this proposal treats them as such.