

TENDER NO: **NAFA/IT/00084**



UEN Registration No.: 201006523 M
Edutrust Cert No.: EDU-2-2020 (Validity: 16/10/2023 – 15/10/2027)

**Supply, delivery, installation, testing,
commissioning, and handing over in
approved working conditions of
computers for Nanyang Academy of
Fine Arts (NAFA) computer labs**

INVITATION TO TENDER

1. Nanyang Academy of Fine Arts (NAFA) invites tender for the Supply, delivery, installation, testing, commissioning, and handing over in approved working conditions of computers for Nanyang Academy of Fine Arts (NAFA) computer labs.
 2. The following documents that form part of this Tender Document have been prepared to enable prospective vendors to tender for the above-mentioned works that would meet the NAFA's requirements and specifications. These forms may be obtained from <https://www.nafa.edu.sg/contact-us/tenders>.
 - Tender Guidelines
 - Conditions of Contract
 - Draft Banker's Guarantee
 - Technical Specification
 - Tenderer's Offer (FORM A)
 - Tenderer's Profile (FORM B)
 - Price Schedule of Tenderer's Offer (FORM C)
 - Tenderer's Proposal – Compliance to Equipment Specifications (FORM D)
 - Tenderer's Proposal – Compliance to Other Requirements (FORM E)
 - Major Projects completed by Tenderer's Company within the 3 years (FORM F)
 - Current Projects undertaken by Tenderer's Company (FORM G)
 - Profile of Tenderer's Project Team (FORM H)
- a. The Tenderer is required to complete and submit the following documents with password protection to nafatender@nafa.edu.sg before the closing date of tender:
 - Tenderer's Offer (FORM A)
 - Tenderer's Profile (FORM B)
 - Price Schedule of Tenderer's Offer (FORM C)
 - Tenderer's Proposal – Equipment Specifications (FORM D)
 - Tenderer's Proposal – Compliance to Other Requirements (FORM E)
 - Major Projects completed by Tenderer's Company within the 3 years (FORM F)
 - Current Projects undertaken by Tenderer's Company (FORM G)
 - Profile of Tenderer's Project Team (FORM H)
 - b. The closing date for submission of tender is **8 April 2025 (Tue), 2.00pm sharp**.
 - c. Tender submitted will be posted in <https://www.nafa.edu.sg/contact-us/tenders>
 - d. Schedule of payments is thirty (30) days after the successful completion of the Acceptance Test.
 - e. Liquidated damages will be charged at **1%** of tender award per week for each week's delay (and a proportionate part of this amount for delay for any period of less than a week).

TENDER GUIDELINES

1. DEFINITIONS

- 1.1 All terms used in the Tender Guidelines, which are defined under clause 1 of the Conditions of Contract, shall have the meanings so described to them.

2. SUBMISSION OF TENDER

- 2.1 The tenderer shall complete and sign the Tender's Offer and complete all parts of this Tender Document required to be completed by a tenderer.

- 2.2 The following for your strict compliance:

- a) Tender submissions will be accepted for evaluation via email. Hardcopies of the tenders will not be accepted.
- b) Please submit your tender with password protected to nafatender@nafa.edu.sg before the closing date/time.
- c) Please do not submit the password to NAFA before the closing date/time.
- d) Password will only be submitted upon request by NAFA after the closing date/time.
- e) Please send in at least half an hour earlier to cater for transmission time.
- f) Max file size for attachment is **100MB** only. If the file is too big, please zip the files or use file sharing like OneDrive, Dropbox,

The above measures taken are to ensure the confidentiality of your tender before the closing date/time. NAFA will not be responsible if the above are not complied.

- 2.3 All expenses incurred in the preparation of this tender shall be borne by the Tenderer.

3. GOODS AND SERVICES TAX (GST)

- 3.1 The tenderer shall not include any Goods and Services Tax (GST) in the Price Schedule of Tender's Offer.
- 3.2 The tenderer shall declare his GST status in his tender. He shall clearly indicate whether he is, or whether he will be a taxable person under the GST Act. He shall, if available, furnish the GST registration number to NAFA.
- 3.3 If the Tenderer is a taxable person under the Singapore GST Act, NAFA will pay the Tenderer, in addition to the rates and prices proposed, the GST chargeable on the supply of Goods and Services provided pursuant to this tender.
- 3.4 A Tenderer who declares himself to be a non-taxable person under the GST Act but who becomes a taxable person after the award of the tender shall forthwith inform NAFA of his change in GST status. He shall be entitled to claim from NAFA any GST charged on the supply of the Goods or Services made by him after his change in GST status.

4. QUERIES

Any queries in respect of this Tender Document or any matter related thereto may be submitted in writing to **Mr Tong Kum Loon / Ms Wendy Lee** before **8 April 2025 (Tue), 2.00pm**.

- 4.1 NAFA reserves the absolute right not to entertain or respond to any query, which, in the NAFA's opinion, is inappropriate or improper.
- 4.2 On submitting his tender, the Tenderer shall be deemed to have examined this Tender Document and site conditions and satisfied himself with regard to any query on this Tender Document.

5. PRESENTATION

- 5.1 The Tenderer shall, on the request of NAFA, make a presentation on such aspects of his tender as may be required by NAFA.

6 VALIDITY PERIOD

- 6.1 Tenders submitted shall remain valid for acceptance for a period of **120 days** commencing on the closing date. This validity period may be extended by mutual consent in writing of NAFA and the Tenderer.

7. AWARD

- 7.1 NAFA shall be under no obligation to accept the lowest or any tender.
- 7.2 NAFA shall normally not enter into correspondence with any tenderer regarding the reasons for non-acceptance of a tender.
- 7.3 NAFA reserves the right to accept portion of each tender as NAFA may decide.
- 7.4 The Letter of Acceptance issued by NAFA shall create a binding contract on the part of the tenderer to supply to NAFA the goods and/or services offered in the tender.
- 7.5 The Contract shall be governed by the Conditions of Contract.
- 7.6 NAFA shall notify a successful tenderer of its acceptance of his tender, whether in whole or in part, by sending a purchase order or letter of acceptance to the tenderer and the purchase order or the letter of acceptance shall be deemed good service of such notice.
- 7.7 NAFA may at its discretion require the tenderer to sign a written agreement.
- 7.8 NAFA may make awards to more than one tenderer.

f. DEBARMENT

- 8.1 NAFA reserves the right to debar tenderer from participating in future NAFA tenders if they withdraw after the closing date.

9. VARIATIONS

- 9.1 NAFA reserves the right to negotiate with the tenderer, where exceptional circumstances so necessitate, to vary any provision or part of this Tender Document without reference to any other party. Any such variation shall be subject to the mutual consent in writing of NAFA and the Tenderer.

CONDITIONS OF CONTRACT

1. DEFINITIONS

NAFA:	Nanyang Academy of Fine Arts
Tenderer:	The company who submits this Tender Document
Contractor:	The Tenderer whose tender has been accepted in whole or in part
Contract Price:	The sum stated in the Form of Tender by the contractor as the price for carrying out and completion of the works
Works:	The supply, delivery to and installation at the Site of the equipment and /or services in conformance and accordance with the Technical Specifications and drawings
Site:	The premises on NAFA, (80, 38 & 151 Bencoolen Street) or any other site designated by NAFA
System Completion Date:	The date which all equipment and/or services shall be functional / ready as specified in the Technical Specifications
Warranty Period:	The period during which the contractor, at his own expense, shall make good to the satisfaction of NAFA and shall promptly attend to any defects whatsoever in the works as per clause 5 of the Condition of Contract
Acceptance Test:	Any applicable functional and/or compliance testing carried out as per clause 6 of the Condition of Contract
Performance Requirements:	The acceptance standards of the Acceptance Test as per clause 7 of the Condition of Contract
Security Deposit:	A refundable sum that placed with NAFA by the Contractor as security for the due performance and observance of the Contractor's obligation to this Contract as per clause 19 of the Condition of Contract
Banker's Guarantee:	A letter issued from a bank undertaking the guarantee payment of Security Deposit upon demand by NAFA for the purpose stated in clause 19 of the Condition of Contract

2. SCOPE OF CONTRACT

- 2.1 The contractor shall carry out and complete the supply of all items of goods and /or services in accordance with the contract in every respect and to the directions and satisfaction of NAFA. Unless otherwise stated in the contract, all goods shall be newly manufactured goods.

- 2.2 The contractor shall do or supply all things, free of charge, which are not expressly specified in this Tender Document but which may be necessary for the proper completion of the Works, or obviously required to be done or supplied in the context of this Tender Document and/or in view of the conditions on the Site.

3. DOCUMENTATION

- 3.1 The contractor shall undertake to supply NAFA with one (1) complete set of comprehensive documentation on all aspects of the equipment/services including documentation to be used for planning, design, installation, operation, maintenance, administration and training purposes. All sets of such documentation shall be of the latest version.
- 3.2 In the event of any conflict between the provisions of any documentation or information or data supplied by the contractor including the supporting data, and the provisions of this tender document exclusive of the supporting data, the provisions of this Tender Document shall prevail unless NAFA agrees otherwise in writing.

4. SYSTEM COMPLETION DATE

- 4.1 The contractor undertakes that the equipment/services shall be delivered, fully installed and operational within the specified period. The contractor shall be entitled to a reasonable extension of time for delays caused by the following:
- force majeure; or
 - damage or delay not caused by or due to the wilful act or default or negligence of the contractor or his employees, agents or any person for whom the contractor is responsible.

provided that:

- in respect of all the above events, the contractor has not himself been at fault in failing to guard against or prevent or minimise such delays or damage; and
 - the contractor shall make his claim in writing to NAFA for any extension of time within seven (7) days of the date he claims such event took place failing which he shall be deemed to have waived any right he may have had to such extension.
- 4.2 In the event of failure by the contractor to deliver any item of goods or complete the performance of services by the date specified in the contract other than due to the circumstances provided above, NAFA shall have the right
- to cancel all or any items of goods or services from the contract without compensation and obtain them from other sources and all increased costs thereby incurred shall be deducted from any moneys due or to become due to the contractor or shall be recoverable as damages; or,
 - to require the contractor to pay or allow NAFA to deduct from any moneys due or become due to the contractor's sum, calculated at the rate as specified in the Invitation To Tender as liquidated damages until the goods are delivered and the services are performed.

5. WARRANTY PERIOD

- 5.1 There shall be a warranty period during which the contractor, at his own expense, shall make good to the satisfaction of NAFA and shall promptly attend to any defects whatsoever in the works.

- 5.2 The duration of the warranty period shall be the period specified in the “Tenderer’s Proposal – Equipment Support and Maintenance” commencing the day following the date of the successful completion of the Acceptance Test or the last test to be conducted. When NAFA does not require any test to be conducted, the warranty period shall commence the day following the date on which the equipment is fully installed and operational. Provided always that the duration of the warranty period shall not be less than one (1) year.
- 5.3 Where NAFA considers appropriate, it may in its absolute discretion require a separate warranty period in respect of each or any item or part of the equipment delivered. The duration of any such warranty period shall be the specified period, commencing the day following the date of the successful completion of the last test conducted on the said item or part of the Equipment or if NAFA so agrees from the date such item or part of the equipment is installed and operational. Provided always that the duration of any such warranty period shall not be less than one (1) year.

6. ACCEPTANCE TEST

- 6.1 If NAFA so required, the equipment and/or service will be subject to an acceptance test conducted by NAFA in accordance with such procedure(s) and method(s) as NAFA may in its absolute discretion deem fit for the purpose of confirming and verifying that the functions, features and performance of the Equipment meet the requirements and standards stipulated in the Technical Specifications.
- 6.2 The Acceptance Test shall be conducted and completed within a period of thirty (30) days from the date of completion of the installation of the equipment. This period may be extended upon mutual agreement to ninety (90) days.
- 6.3 NAFA may conduct such other tests on each item or part of the equipment in accordance with such procedure(s) and method(s) as NAFA may in its absolute discretion deem fit for the purpose of confirming and verifying that the functions, features and performance of such item or part meet with the requirements and standards stipulated in the Technical Specifications which are applicable to such item or part. Such tests may be conducted, at the discretion of NAFA, in addition to or substitution of the Acceptance test and shall be completed before the expiry of the period stipulated.

7. PERFORMANCE REQUIREMENTS

- 7.1 The equipment when installed must comply with such performance requirements as may be mutually agreed to in writing between NAFA and the Contractor to be acceptable to NAFA.

8. WARRANTIES

- 8.1 The contractor warrants to NAFA that the equipment is suitable for and shall meet the requirements set out in the Technical Specifications.
- 8.2 The contractor warrants that the equipment when operational shall meet the standards of the Acceptance Test and such other test(s) conducted and the Performance Requirements.
- 8.3 The Contractor warrants that all information and data given in the tender submission documents are accurate.

8.4 All equipment and materials and supporting documentation not mentioned or included in this Tender Document but which may be necessary for the proper operation and functioning of equipment to the standards of the Acceptance Test and such other test(s) conducted and the Performance Requirements shall be provided by the Contractor to NAFA free of charge.

8.5 The contractor warrants that the performance of this contract and the use of the equipment by NAFA shall not infringe any patent, copyright, trade secret or other property right of any third party and the contractor shall obtain without charge to NAFA any licences as are necessary for the purposes of this contract from any third parties in respect of such rights.

9. FUTURE PURCHASES

9.1 At any time up to the end of the Warranty Period or, where there are more than one warranty period under this contract, the last warranty period, NAFA shall be entitled to purchase from the contractor any additional quantity of the equipment and materials set out in the Price Schedule of Tenderer's Offer which are marketed by the Contractor at a price not exceeding the price for the same set out therein.

10. COMPLIANCE WITH LAW

10.1 The contractor shall comply with and satisfy all requirements under all laws and regulations relevant or applicable to the performance of his obligations under this Contract and shall indemnify NAFA in respect of all costs and expenses and any liabilities whatsoever which may be incurred under or in connection with such laws and regulations.

11. PROPERTY & RISK

11.1 The property in any items or part of the Equipment shall pass to NAFA on delivery to the site and the risk therein shall pass on the expiry of the warranty period that relate to the item or part of the Equipment so delivered.

12. VARIATIONS

12.1 Any variation of the provisions of this contract shall be subject to the mutual consent on writing of NAFA and the Contractor.

13. ASSIGNMENT

13.1 The contractor shall not transfer or assign the contract or any part, share or interests therein.

14. EQUIPMENT AND MATERIALS

- 14.1 All equipment and materials supplied shall be new and in strict conformance with the Technical Specifications and shall be of good quality and suitable for their required purpose.

15. PROCEDURE ON SITE

- 15.1 The contractor shall keep upon the site a competent supervisor who shall attend to the Works at all time. Any instructions given to the supervisor by NAFA shall be deemed to be given to the contractor.
- 15.2 The contractor shall, if required by NAFA, furnish to him a list of the names, nationalities and other particulars of the employees and workmen engaged for or by him for the purpose of the Works.
- 15.3 The Contractor shall be responsible for the proper behaviour of employees and workmen engaged for or by him and shall remove any such employee or workmen who is not acceptable to NAFA and the contractor shall indemnify NAFA against any claims by such employee or workmen arising from such removal.
- 15.4 Unless prior arrangements are made with and agreed to in writing by NAFA, the Contractor shall carry out all works on the site under his contract during NAFA's official working hours, i.e. Monday to Friday, from 8.00am to 12.00pm and 1.00pm to 6.00pm.
- 15.5 The contractor shall during the execution of the works take all necessary precautions to prevent damage to furniture, fittings and other properties on the site.
- 15.6 Where necessary, the contractor shall supply and place at appropriate places on the Site signs to give warning of work in progress.
- 15.7 The Contractor shall keep the Site clean and shall remove speedily from the site debris and rubbish generated by the works and properly dispose of the same.
- 15.8 NAFA shall not be liable for loss or damage to the Contractor's property placed or left on the Site or elsewhere on NAFA property.

16. PAYMENTS

- 16.1 Payment for the equipment shall be made by NAFA within **thirty (30) days** of the successful completion of the Acceptance Test or the last test to be conducted. Where NAFA does not require any test to be conducted, payment shall be made within **thirty (30) days** of the date on which the equipment is fully installed and operational.

17. LATE COMPLETION

17.1 If the proposed Contractor fails to complete the installation of the equipment/or service or the Equipment is not fully operational by the System Completion Date, the Contractor shall be liable to pay liquidated damages at the rate specified in the Invitation to Tender.

18. TERMINATION

18.1 NAFA may terminate this Contract with immediate effect by giving notice in writing to the Contractor on any one of the following grounds:

- If the Contractor has wholly suspended work without justification or is failing to proceed with due diligence and due expedition and following expiry of two weeks' written notice from NAFA to that effect has failed to take effective steps to recommence work or is continuing to proceed without due diligence or expedition, as the case may be;
- If the Contractor refuses or persistently fails or neglects to comply with the instructions of NAFA issued under the provisions of this Contract and following expiry of two weeks written notice from NAFA to that effect has failed to take effective steps to comply with the said instructions; and
- If the Contractor becomes bankrupt or insolvent or makes a composition with creditors or if, being a company, a winding-up order of any kind is made in respect of the Contractor, or if a receiver or manager is appointed over the Contractor's undertaking or assets or possession of or execution on any part of such undertaking or assets is taken or levied by creditors.

18.2 Upon termination under sub-clause 18.1

- NAFA may engage other contractors to complete those parts of the Works uncompleted by the Contractor and the Contractor shall be liable to NAFA for all additional costs incurred thereby. The Contractor shall also pay liquidated damages for delay calculated in accordance with Clause 18 as if he had himself completed the Works on the date of actual completion by those other contractors engaged by NAFA;
- NAFA may withhold payment of any monies payable to the Contractor until the Works are completed and the damages payable to NAFA arising from such termination are quantified and ascertained by NAFA (such quantification and ascertainment to be made within a reasonable time) and if the aggregate amount of such damages and all monies paid to the Contractor under this Contract exceeds the Contract Price, such excess amount shall constitute a debt payable to NAFA by the Contractor; and NAFA may forfeit portion or all amount from the security deposit.
- the Contractor shall remove from the Site, if required by NAFA, any temporary structures, plants, tools, goods, materials and equipment brought thereon by or for the Contractor and if the Contractor fails to do so within the time stipulated in the said notice for such removal, NAFA shall be entitled to store, remove, sell or otherwise deal with or dispose of the same and the Contractor shall be liable to and shall indemnify NAFA for or against any costs, expenses and liabilities whatsoever incurred by NAFA in so dealing with or disposing the same. In the event that the said temporary structures, plants, tools, goods, materials and equipment are sold, the proceeds after the deduction therefrom of such monies as are due to NAFA from the Contractor shall be held for the Contractor for a period of not less than one month from the date of posting of a notice to the Contractor to collect the said proceeds from NAFA and if the said Contractor fails to collect the same from NAFA within the said period, he shall be deemed to have disclaimed any rights to or interests in the said proceeds. The Contractor shall not be entitled to

make any claims whatsoever against NAFA or its employees or agents for any action taken by NAFA in accordance with the provisions of this sub-clause.

18.3 The rights of NAFA specified under clause 19 shall be in addition to such other rights and remedies as NAFA may have or be entitled to against the Contractor for breach of contract or otherwise.

19. NON-DISCLOSURE

19.1 The tenderer agrees not to disclose, reveal or divulge to any person or entity any information concerning the organisation, business, finances, transactions or other affairs of NAFA which may come to the tenderer's knowledge at any time during or after the agreement term, unless NAFA grants written consent of such a disclosure. If need to be, all tenderers are required to enter into a non-disclosure agreement with NAFA.

20. INDEMNITIES

20.1 The Contractor shall indemnify and keep NAFA indemnified against all claims, demands, actions, judgements, damages, costs and expenses for personal injury or death arising directly or indirectly from the Works or the performance of this Contract unless the same are due to the act or neglect of NAFA or its employees or agents.

20.2 The Contractor shall indemnify and keep NAFA indemnified against all claims, demands, actions, judgements, damages, costs and expenses for damage to property which are caused directly or indirectly by any act or omission or negligence of the Contractor, his employees or agents or any person for whom the Contractor is responsible or due to any circumstances within the Contractor's control.

20.3 The Contractor shall indemnify and keep NAFA indemnified against all claims, demands, actions, judgements, damages, costs and expenses in respect of any infringement or alleged infringement of any patent, copyright, trade secret or other property right which infringement or alleged infringement arise directly or indirectly from the performance of this Contract or use of the Equipment or any matter relating thereto unless such infringement or alleged infringement is due solely to the use of any specifications or drawings provided by NAFA.

20.4 None of the indemnities shall be defeated or reduced by reason of the fact that NAFA may have neglected or omitted to exercise any powers of supervision or control whatsoever that may have under this contract.

21. THIRD PARTY INSURANCE

21.1 As a condition precedent to the commencement of the Works, the Contractor shall insure:-

- Against his and NAFA's liabilities and that of NAFA's employees in respect of or in connection with personal injuries or death arising directly or indirectly from the Works or the performance of this Contract.
- Against his and NAFA's liabilities and that of NAFA's employees in respect of or in connection with any damage to property (other than the Works) arising directly or indirectly from the Works or the performance of this contract; and
- Against his and NAFA's liabilities and that of NAFA's employees in respect of any liability to the Contractor's employees or workmen or such persons engaged for the purposes of the Works under the Workmen's Compensation Act with any amendments, modifications thereto or re-enactment thereof or any law.

- Such insurance shall be taken out with an insurer approved by NAFA for such period(s) and on such terms as NAFA may require and in default of production of a satisfactory relevant policy or premium receipt or current certificate of insurance from such insurer NAFA may itself insure against the risks described in sub-clause 23.1 and recover the costs thereof from the Contractor and/or deduct such cost from any sums due to the contractor.

22. WAIVER

- 22.1 The failure by NAFA to enforce at any time or any period any one or more of the terms or conditions of this contract shall not be a waiver of them or of the right at any time subsequently to enforce all terms or conditions of this Contract.

23. NOTICE

- 23.1 Any notice to be served on the Contractor under this contract may be sent by post in an envelope addressed to the Contractor at his place of business or residence last known to NAFA or at the Contractor's registered office, as the case may be, and any notice so posted shall be deemed to have been given at the time when the same would normally be delivered in the ordinary course of post.

24. ARBITRATION

- 24.1 Any dispute or difference between the parties in connection with this Tender Document or this Contract or any matter related thereto shall be referred to arbitration in Singapore in accordance with the Arbitration Act with any amendments, modifications thereto or re-enactments thereof.

25. APPLICABLE LAW

- 25.1 This Tender Document and this Contract shall be construed in accordance with and governed by the Laws of Singapore.

DRAFT BANKER'S GUARANTEE

To : Nanyang Academy of Fine Arts
80 Bencoolen Street
S(189655)

RE : << WORKS>>

WHEREAS << Name and Address of Contractor>> ("the contractor") has entered into a contract ("the Contract") with you on the terms of the Form of Tender dated the ____ day of _____ in a Tender Document("the Tender Document") submitted by the Contractor to you for the above Works which are more particularly described in the Tender Document;

AND WHEREAS by the provisions of the Conditions of Contract ("the Conditions of Contract") in the Tender Document the Contractor is required to make a deposit with you in cash in the amount S\$ _____ ("the Security Deposit") as a security deposit for the due performance and observance of the Contractor's obligations under the Contract;

AND WHEREAS we [name and address of banker] have requested you to accept an unconditional guarantee in lieu of the security deposit and you have agreed to accept the same.

NOW IN CONSIDERATION OF THE PREMISES :

1. We guarantee to pay to you forthwith upon demand made to us in writing a sum or sums not exceeding in the aggregate the sum of Singapore Dollars (S\$.....) ("the Guaranteed Sum"). We will pay you the Guaranteed Sum or part thereof as may be requested by you without any proof that you are entitled to reimburse yourself with or utilise such sum or that the Contractor is in default or is in breach of any agreement with you. We will however accept for the account of the guarantee any sum returned by you to us.
2. We expressly agree and declare that this guarantee shall not be prejudiced diminished or affected in any way nor shall we be released or otherwise exonerated by any act omission fact circumstance matter or thing which but for this provision might operate too or otherwise exonerate us including without limitation any arrangement whatsoever made between yourself and the Contractor with or without our consent or knowledge including any alteration in the obligations undertaken by the Contractor or any forbearance by you in respect of those obligations.
3. The Guarantee shall take effect immediately and shall continue until (expiry date of warranty period) and thereafter shall be extended from year to year without request until the Contractor shall have discharged all his obligations under the Contract or the Contract is terminated by NAFA, whichever shall first occur.
4. You may make more than one claim under this Guarantee provided that the claims in aggregate do not exceed the Guaranteed Sum.
5. All claims made by you under this Guarantee must be in writing to us not later than six months from the expiry of this Guarantee or any extension thereof.

Dated the ____ day of ____ 20____

SIGNED BY
[NAME]
AS
[DESIGNATION]
FOR AND ON BEHALF OF
[NAME OF GUARANTOR]

in the presence of
[NAME]
[DESIGNATION]
SIGNATURE
ADDRESS

TECHNICAL SPECIFICATIONS

1. INTRODUCTION

The specifications cover the Supply, delivery, installation, testing, commissioning, and handing over in approved working conditions of computers for Nanyang Academy of Fine Arts (NAFA) computer labs.

2. SCOPE OF WORK

The computers proposed should meet the requirement specified under section 3 “Computer Hardware Technical specifications” and services to be carried out as per section 4 “Services Required”. Tenderer shall project manage the whole operation of delivery, installation, testing and commissioning of the computer hardware to NAFA.

Alternative features may be proposed in place of those specified provided that the requirements of the computer hardware are fulfilled with enhanced capability or reduction in cost or both.

Tenderer must provide expertise to review and improve, if necessary, the expectations herein; and propose changes, if necessary, on matters relating to features, design, installation, and operation of the computer hardware. The tenderer must also advise on matters related to site preparation and all other related matters.

3. COMPUTER HARDWARE TECHNICAL SPECIFICATIONS

The tenderer is required to pay close attention to the specifications provided and ensure that the following technical specifications of computer hardware are complied with.

The proposed quantity is as follows:

Campus	Computer Lab	Type	Qty
1	C1-05-17	Window Desktop with 27” Monitor	28
1	C1-05-32	Window Desktop with 27” Monitor	28
1	C1-05-24	iMac	27
1	C1-05-25	iMac	27
1	C1-05-21	Windows desktop with 27” Monitor	2
1	C1-05-21	Mac Studio with Studio Display	2
1	C1-05-21	16” Macbook Pro	1

3.1. C1-05-17 and C1-05-32 Windows Desktops (Qty: 56)

For use with Autodesk AutoCad, Sketchup Pro, Vray, Enscape, [Lumion](#), Adobe Creative Suite (Adobe Premiere Pro, Photoshop, Illustrator, InDesign and After Effects)

Technical Specifications	
a.	At least Intel Core i7 14th Gen 14700 (33 MB cache, 20 cores, 28 threads, 2.1 GHz to 5.4 GHz, 65W)
b.	At least 32 GB (2 x 16 GB) DDR5, 5600MT/s, SO-DIMM, non-ECC
c.	1TB SSD
d.	A GPU scoring a G3DMark of 14,000 or higher with up-to-date drivers. (Such as the NVIDIA GeForce RTX 3060, NVIDIA Quadro RTX 2000 ADA, AMD Radeon RX 6700 XT or better). Graphics Card Memory: 10 GB or more
e.	Standard built-in I/O Ports with at least: 3x USB 3.2 Type A 2x USB 3.2 Type C Gen2 1x RJ-45 (10/100/1000 Ethernet LAN)

	1x DP or DVI or HDMI out Headphone and microphone jacks
g.	The monitor and CPU should have a Kensington slot for the reuse of the existing dual cable locks
h.	Wired optical mouse
i.	Wired keyboard
j.	Pre-installed with Windows 11 Pro (64bit) English
k.	27-inch LED monitor 27" widescreen (16:9) LED-backlit Monitor WQHD – 2560 x 1440 Input connector: HDMI Height and tilt adjustable stand HDMI cable to be included
l.	Warranty Period: The warranty must be at least 3 years Next Business Day Onsite Service (inclusive of parts, transportation and labour)
m.	Built-in HDMI out port for projector or interactive TV panel (for each lecturer's station in both labs) (Qty: 2)

3.2. C1-05-24 and C1-05-25 iMac (Qty: 54)

For use with Adobe Creative Suite (Adobe Premiere Pro, Photoshop, Illustrator, InDesign and After Effects)

Technical Specifications	
a.	Apple M4 chip with 10-core CPU, 10-core GPU, 16-core Neural Engine
b.	24-inch 4.5K Retina display
c.	Standard Glass
d.	Silver
e.	24GB unified memory
f.	512GB SSD Storage (Option A) 1TB SSD Storage (Option B) *To provide optional costing for 512GB SSD and 1TB SSD
g.	Four Thunderbolt 4 ports Gigabit Ethernet
h.	USB-C Keyboard for Mac – Silver / white preferred
i.	USB-C wired mouse – Silver / white preferred
j.	AppleCare+ for iMac
k.	USB-C to HDMI adaptor for projector or interactive TV panel (for each lecturer's station in both labs) (Qty: 2)
l.	Kensington SafeDome™ Cable Lock for iMac® 24" (with customed master key)

3.3. C1-05-21 Windows Desktop / Workstation (Qty: 2)

For use with rendering software, including motion capture and interactive motion sensor cameras. The proposed specifications should be able to support virtual production software such as Blender, Autodesk Maya, 3dsMax, 3D models and spatial rendering and facilitate walkthroughs and interactive objects in augmented reality (AR) and virtual reality (VR).

Technical Specifications	
a.	At least Intel Core Ultra 9 285K Processor or equivalent
b.	At least 64 GB (2 x 32GB) DDR5
c.	4TB SSD
d.	Gigabyte RTX 5090 Aorus Master – 32GB or equivalent
	Standard built-in I/O Ports with at least:

	2x USB 3.2 Type A Gen2 1x USB 3.2 Type C Gen2 1x RJ-45 (10/100/1000 Ethernet LAN) 1x DP or DVI or HDMI out Headphone and microphone jacks
e.	Wired optical mouse
f.	Wired keyboard
g.	Pre-installed with Windows 11 Pro (64bit) English
h.	27-inch LED monitor 27" widescreen (16:9) LED-backlit Monitor WQHD – 2560 x 1440 Input connector: HDMI & DP Height and tilt adjustable stand HDMI cable to be included
i.	Warranty Period: The warranty must be at least 3 years Next Business Day Onsite Service (inclusive of parts, transportation and labour)

3.4. C1-05-21 Mac Studio (Qty: 2)

For use with rendering software, including motion capture and interactive motion sensor cameras. The proposed specifications should be able to support virtual production software such as Blender, Autodesk Maya, 3dsMax, 3D models and spatial rendering and facilitate walkthroughs and interactive objects in augmented reality (AR) and virtual reality (VR).

Technical Specifications	
a.	Mac Studio
b.	Apple M3 Ultra with 28-core CPU, 60-core GPU, 32-core Neural Engine
c.	96GB unified memory
d.	4TB SSD storage
e.	Front: Two Thunderbolt 5 ports, SDXC card slot
f.	Back: Four Thunderbolt 5 ports, two USB-A ports, HDMI port, 10Gb Ethernet port, headphone jack
g.	AppleCare+ for Mac Studio (M4 Max / M3 Ultra)
h.	USB-C Keyboard for Mac – Silver / white preferred
i.	USB-C wired mouse – Silver / white preferred
j.	Studio Display - Standard glass Tilt-adjustable stand
k.	AppleCare+ for Studio Display

3.5. C1-05-21 16" MacBook Pro (Qty: 1)

Technical Specifications	
a.	16-inch MacBook Pro - Space Black
b.	16-inch Liquid Retina XDR display
c.	Standard display
d.	Apple M4 Max chip with 16-core CPU, 40-core GPU and 16-core Neural Engine
e.	48GB unified memory
f.	1TB SSD storage
g.	140W USB-C Power Adapter
h.	Three Thunderbolt 5 ports, HDMI port, SDXC card slot, headphone jack, MagSafe 3 port Backlit Magic Keyboard with Touch ID - US English
i.	AppleCare+ for Mac

4. SERVICES REQUIRED

4.1 Software Installation and Cloning Services

- a. Successful tenderer is to provide 1 unit of desktop / iMac per lab (C1-05-17, C1-05-32, C1-05-24 C1-05-25 and C1-05-21) for NAFA to prepare the master image prior to the delivery and setup. Alternatively, the successful tenderer can propose an alternative method for the image cloning services to be completed by the deployment dateline.
- b. Successful tenderer to ensure that the operating system and all installed software applications are running properly after image cloning.

4.2 Physical setup and cable management

- a. To setup all desktops/monitors/keyboard/mouse/adaptors at the respective computer labs
- b. To replace all power cables including those that are connected under the raised floor, if any.
- c. Ensure all cables are tidy
- d. Ensure all desktop/monitor/keyboard/mouse/adaptor, etc are properly secured with the purchased locks or NAFA's existing cable lock and cable trap (master keylock)
- e. Labelling of all workstations
- f. Ensure all debris (including empty carton boxes, packaging, unused/old cables, etc) is removed and disposed outside NAFA premises

5. WARRANTY AND POST-SALES SUPPORT

- 5.1 The warranty period shall be for a period of 3 years with next business day onsite service.
- 5.2 During the warranty period for all equipment, the Contractor shall respond to service calls within one (1) working day whenever such calls are made during office hours (Monday to Friday, 9am to 6pm, excluding public holidays).
- 5.3 The warranty shall commence on the date of acceptance by NAFA.
- 5.4 The Contractor shall provide a local Helpdesk and support team that is capable of giving prompt and efficient on-site services in support of the equipment, including the hardware and all parts of the total systems, labour and transport services.
- 5.5 The Contractor shall provide at least two (2) telephone contacts and one (1) E-Mail account. The purpose is for sales and post-sales support.
- 5.6 The Contractor shall ensure that at least 70% of the calls are answered by the Contractor's personnel within 10 rings. The remaining calls would be routed to the voicemail system. The Contractor shall respond to calls directed to the voicemail system within one (1) hour.
- 5.7 E-Mail facility will be used as a tool to measure the Contractor's turnaround and/or response time to meet the stated device delivery lead time, installation lead time and post-sales support response time.

6. PROJECT MANAGEMENT & DELIVERABLES

- 6.1 The contractor must undertake to deliver, install, test and commission the delivered computer hardware.
- 6.2 The contractor must be fully responsible for the project management and coordination work.
- 6.3 The contractor must provide the latest and/or most relevant software/firmware for the new computer hardware.
- 6.4 The contractor is required to do the entire necessary software configuration and labels for all the machines as required by the IT staff.
- 6.5 Proper documentation of the entire computer hardware is to be submitted by the contractor upon completion of the installation at no cost to the Academy. The documents needed upon completion of the installations are:
 - Warranty Certificate (registration included)
 - Inventory list of the delivered computer hardware (serial no, item description, location)

7. PROJECT SCHEDULE

Month	Project Phases
25 Mar to 8 Apr 2025	Open Tender Exercise
9 Apr to 30 Apr 2025	Evaluation and award to the successful vendor
May to 15 Jul 2025	Delivery of master image creation (Vendor) Master image creation (by NAFA) Image cloning (Vendor) Delivery and installation <u>must be completed by 15 July 2025 or earlier.</u>

8. Price and Payment Schedules

- 8.1 Tender contract price to be submitted using Price Schedule of Tenderer's Offer – Form C
- 8.2 Individual unit prices for each computer type should be stated clearly. The final quantity to purchase may vary.
- 8.3 The tender contract price is to remain valid for a period of 120 days starting from the tender closing date.
- 8.4 The contractor shall claim payment (with 30-day credit terms) after the equipment handover.

9. Evaluation Criteria

This tender will be evaluated based on the following criteria:

- Compliance with required technical specifications
- Tender price
- Experience and performance in current and past projects

10. Contact persons / Queries

All queries to these tender requirements are to be directed to:

Mr Tong Kum Loon
Assistant Manager
Information Technology
Tel: 6512 4054
Email: kltong@nafa.edu.sg

Ms Wendy Lee
Manager
Information Technology
Tel: 6512 4049
Email : ytlee@nafa.edu.sg