

TERMS OF REFERENCE

SUPPLY, DELIVERY, AND COMMISSIONING OF MATRIX LABORATORY FOR ACADEMIC PURPOSES FOR THE BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING STUDENTS OF THE QUEZON CITY UNIVERSITY

I. RATIONALE AND BRIEF BACKGROUND

Major subjects of the Bachelor of Science in Electronics Engineering of the Quezon City University includes Advanced Engineering Mathematics, Signal Spectra and Signal Processing and Feedback and Control System includes complex numbers and complex variables, Laplace and Inverse Transform, Power and Fourier Series and Transform, convolutions and filters, random signal analysis, frequency responds and feedback controls. These topics will be performed using programming languages such as MATLAB, Mathematica, MathCAD, or any equivalent.

MATLAB is a high-level programming language and interactive environment for technical computing, and includes functions for algorithm development, data analysis, numeric computation, and visualization. MATLAB is also a high-performance language for technical computing. It integrates computation, visualization, and programming in an easy-to-use environment where problems and solutions are expressed in familiar mathematical notation.

Typical uses include:

- Math and computation
- Algorithm development
- Modeling, simulation, and prototyping
- Data analysis, exploration, and visualization
- Scientific and engineering graphics
- Application development, including Graphical User Interface building

It is in this light that this project is requested to ensure that students will have available software to use this 1st Semester of SY 2022-2023. In view of the preparation for the upcoming limited face to face where the laboratories are deeply needed it is required that MATLAB will be purchased so that the students will have a programming language software developed for electronics and communications engineering courses.

II. PROJECT DESCRIPTION

This project aims to provide the electronics engineering students of QCU with Matrix Laboratory Software package of 50 Academic Perpetual Concurrent License.

The package includes:

1-Set - 50 Academic Perpetual Concurrent License

Technical Feature:

- Provide hands-on learning experiences and industry-standard tools to analyze data, create models, and simulate systems.
- Enables you to design your system with multidomain models, simulate before and deploy without writing code.
- Provides an interactive environment that allows iterative exploration design, and problem solving.

- Create graphics for visualizing data and tools for creating custom plots.
- Capable of high-level simulation.
- Can combine code, output, and formatted text in a single executable document.
- Create live scripts that show output together with the code that produced it. add formatted text, equation, images, and hyperlinks to enhance your narrative, and share the live script with others as interactive document.
- Enables to have additional toolboxes applicable across Engineering, Science and Business discipline and assists in adopting to the industry 4.0 Standards with the capability for Internet of Things (IoT), Big Data Analytics, Artificial Intelligence, Robotics and Autonomous Systems.
- Enables to have additional toolboxes for interdisciplinary applications like Data Science, Aerospace, Computational Finance, Communications, Computational Biology Automated Systems and Systems Engineering.
- Can add toolboxes for Math and Optimization, Simulation, Control Systems, Signal Processing, RF and Mixed Signals, Image and computer Vision, Wireless Communication, Test and Measurement, Application Deployment, Code Generation and Parallel Computing to enhance the quality of education and research application that is commonly used by top Engineering universities worldwide.
- System Requirements: Operating Systems at least windows 7, Processor 3.4 GB of HDD, at least 8GB RAM.
- Inclusions: Simulink Extensible block diagram environment for system simulation and Model-Based Design.

III. PROJECT SCOPE OF WORK AND DELIVERABLES

The Project shall cover the following scope of services:

A. SCOPE OF WORK

1. Delivery and Installation of the software at the identified project location.
2. The Service Provider shall provide training for assigned lead trainers/faculty members through online courses available.

B. TECHNICAL SUPPORT

1. The Service Provider shall provide an Account Manager to assist QCU.
2. Deliver the technical installation and orientation to QCU team

C. DELIVERABLES

1. On site and remote/offsite support for technical concerns and course consultation.
2. Dedicated Technical support team shall be assigned 24/7 to answer all queries and service concerns from the students, faculty and administrators/management.

IV. PROJECT STANDARDS AND REQUIREMENTS

A. SUPPLIER WILL PROVIDE THE FOLLOWING:

1. Online Training course consultation – provide support, insight and techniques for the effective delivery of the concepts and processes to the students.
2. Materials – complimentary softcopy of presentation slides, manuals, quick guides, for the use of lead trainers/faculty members.
3. Provide 1 Year After-Sales Service (Technical Support). The Service Level Agreement on response time will be 1 hour. On-site and/or online response depending on the urgency/severity of the technical issue.
4. Inclusive of 1 year warranty for the maintenance and services.
5. As part of the requirements in RA 9184, the bidder must have completed a government or private contract that is similar in nature to this project within the last three (3) years equivalent to at least fifty (50%) of the approved budget of the contract.

B. END-USER IS EXPECTED TO:

1. Provide a Laboratory Assistant in charge and will work closely for the Matrix Laboratory Room.
2. Provide 50 Workstations/Computers in a Matrix Laboratory Room.

V. APPROVED BUDGET FOR THE CONTRACT

The budget for this contract is One Million Three Hundred Twenty-Five^{Thousand} Pesos^{only} only (Php 1,325,000.00).

VI. BASIS FOR PAYMENT

- A. Billing and Payment shall be one time only based on the number of student licenses issued/installed but for a guaranteed number of 500 students.
- B. This is subject to full compliance to the Procurement Law (RA 9184) and auditing rules and regulations.

VII. PENALTIES FOR BREACH OF CONTRACT

Failure to deliver the services according to the standards and requirements set by the City Government shall constitute an offense and shall subject the Contractor/Service provider to penalties and/or liquidated damages pursuant to RA 9184 and its revised implementing rules and regulations.

VIII. CANCELLATION OR TERMINATION OF CONTRACT

The guidelines contained in RA 9184 and its revised implementing rules and regulations shall be followed in the termination of any service contract. In the event the City Government terminated the contract due to default, insolvency, or for any cause, it may enter into negotiated procurement pursuant to Section 53(d) of RA 9184 and its IRR.

IX. DELIVERY PERIOD

The delivery period is 45 calendar days upon issuance of Notice to Proceed (NTP).

DR. THERESA V. ATIENZA
University President

