

Terms of Reference

Trainer of Educational Medical Devices Modules ***“Medical Equipment”***

Education to Work Transition Project **Quality Improvement Fund (QIF)**

1. INTRODUCTION

A Medical Devices Trainer will be hired to conduct training course in **Educational Medical Devices Modules (Medical Equipment)** for students, and graduates of medical devices engineering program at Al-Azhar University – Gaza, under the project entitled **“Development of Medical Devices Engineering Curriculum and Laboratories at the Faculty of EIT – (Med-Cal)”**, which has been funded by the World Bank through Palestinian Ministry of Education and Higher Education (MOEHE) under the project named “Education to Work Transition Project-additional financing Quality Improvement Fund (QIF)” which is administrated by Projects Coordination Unit “PCU”, branched out of the MOEHE.

2. BACKGROUND

“Education to Work Transition Project-Additional Financing- Quality Improvement Fund (QIF)” mainly aims at enhancing Palestinian youth’s transition from education to work through reducing the gap and strengthening the linkage between Tertiary Education Institutions “TEIs” and private sector employers.

The Faculty of Engineering and Information Technology at Al-Azhar University-Gaza won a QIF fund for a project entitled **“Development of Medical Devices Engineering Curriculum and Laboratories at the Faculty of EIT – (Med-Cal)”**, and is implemented within 36 months starting from 1st of October, 2018. The Faculty of EIT and its partners (Al-Quds Hospital-Palestine Red Crescent Society (PRCS), Al-Amal Hospital – KhanYounis-PRCS, El-Wafa Medical Rehabilitation and Specialized Surgery Hospital, InterMed-Pal Company, and Medical Supplies and Services (MSS) Company) collaborate to achieve the objectives of the project. The funded project is a technical oriented program that aims to develop the Medical Devices Engineering (MDE) academic curriculum at the faculty of Engineering and Information Technology EIT and provide a suitable educational environment consisting of advanced

laboratory resources and high-skilled academic staff. The project concerns to build training models, develop some courses, hire experts and consultants; and offer hand-on learning experience for the students enrolled in the MDE. Besides, it aims to improve the skills and the technical knowledge of the professionals at the private sector to be able to provide better service.

3. OBJECTIVE AND SCOPE OF THE WORK

3.1. Assignment Objective

The faculty of EIT at Al-Azhar University - Gaza is considering a selection of professional and high-qualified Trainer of **Medical Devices** to conduct technical training course in **Educational Medical Devices Modules (Medical Equipment)** for senior students, and graduates of medical devices engineering program.

The training is to achieve the following objectives:

- To develop the theoretical and practical skills of trainees in the following medical devices:

Medical Equipment

- Infusion & Syringe Pumps,
- Electrosurgical Unit (ESU),
- Patient Monitor,
- Chemistry Analyzer,
- CBC,
- Baby Incubator.
- ECG, EMG, EEG,
- DC Shock,
- Hemodialysis Machine,
- Heart Lung Machine.
- To let the trainees to be familiar with work principles of the medical devices mentioned above.
- To learn how to **OPERATE, USE, and TEST** the educational medical devices training modules mentioned above at the laboratory of the faculty of EIT at Al-Azhar University – Gaza.

3.2. Work Frame

- A. The conducted training hours program in **Educational Medical Devices Modules (Medical Equipment)** should cover the following topics:

Medical Equipment

- Infusion & Syringe Pumps,
 - Electrosurgical Unit (ESU),
 - Patient Monitor,
 - Chemistry Analyzer,
 - CBC,
 - Baby Incubator.
 - ECG, EMG, EEG,
 - DC Shock,
 - Hemodialysis Machine,
 - Heart Lung Machine.
- B. The training content should include the theoretical, practical, operate, use, and test part with overall 60 hours level of efforts.
- C. Conduct 58 training hours program for two groups as following:
- Group I: To Conduct
 - 29 training hours (covering all previous mentioned topics in medical equipment) for 15-20 senior Students and Graduates of Medical Devices Engineering Program at the faculty EIT at Al-Azhar University – Gaza, and
 - Group II: To Conduct
 - 29 training hours (covering all previous mentioned topics in medical equipment) for 15-20 senior Students and Graduates of Medical Devices Engineering Program at the faculty EIT at Al-Azhar University – Gaza.
- D. Conduct 2 hours for the final report, pretest, and posttest preparation.

4. Main Tasks and Responsibilities:

The **Educational Medical Devices Modules Trainer (Medical Equipment)** will be responsible for, but not limited to the following tasks:

1. Delivering an action plan for conducting the training mission. This includes the main topics to be covered, and the types of evaluation methodologies used.
2. Developing the necessary theoretical and practical training materials, contents and related resources for the training based on the labor market needs.
3. Prepare and conduct pre-test and post-test to measure the trainees' skills improvement by the end of the training program.

4. Delivering 58-training hours sessions for 30-40 trainees divided into 29 training hours for two groups of 15-20 (senior students/graduates from medical devices engineering program).
5. Preparing a detailed report of the implemented tasks and associated deliverables.
6. Performing other duties as may be assigned by the project director concerning the training program.

5. DELIVERABLES

#	Task description
Deliverable 1	<p>Submit action plan report including but not limited to</p> <ul style="list-style-type: none"> - Training Topics and Content (detailed Syllabus/outline). - Objectives. - Methodology of Implementation - Outcomes - Materials - Source of References - Timeframe.
Deliverable 2	<p>A successfully delivered training course in <u>Educational Medical Devices Modules (Medical Equipment)</u> consisting of overall 58 hours/training intensive training course (theoretical and practical) for trainees to develop their skills and knowledge as follow:</p> <p><u>58 Training hrs. in Medical Equipment (29 training hours- for two groups)-covering the topics of:</u></p> <ul style="list-style-type: none"> - Infusion & Syringe Pumps, - Electrosurgical Unit (ESU), - Patient Monitor, - Chemistry Analyzer, - CBC, - Baby Incubator. - ECG, EMG, EEG, - DC Shock, - Hemodialysis Machine, - Heart Lung Machine.
Deliverable 3	<p>Prepare and conduct pre-test and post-test to measure the trainee's skills improvement by the end of the training program.</p>

Deliverable 4	<p>Detailed report including the Introduction, Context of Training, Objective, Implemented Tasks, Training Outcomes, Success Stories, Finding, Recommendation, Testimonies and trainees Achievements across Using Educational Medical Devices, and Results of Training Evaluation.</p> <p>Approval of the submitted report from project director is a MUST</p>
<p>Important Note: All reports and documents must be well-written in English language with proofreading, and the training hour cost includes all the mentioned requirements and deliverables.</p>	

6. REQUIRED QUALIFICATIONS, EXPERIENCE, AND EDUCATIONAL BACKGROUND:

This call for training is **only** open for individuals who have the following qualification and experiences:

1. At least a Bachelor university degree in Medical Devices Engineering, Bio-Medical Science or any related field. A master degree is preferable.
 2. At least 3 years work experience in medical devices field.
 3. Proven experience in conducting similar trainings.
 4. Strong professional communication and inter-personal skills and able to transfer knowledge to trainees.
 5. Ability to share knowledge and building the capacity
 6. Experience in writing technical reports of training programs.
 7. High level of English proficiency: reading, writing and speaking.
 8. Demonstrated proficiency with MS Office and excellent knowledge and command of computer programs.
- 7. TIME FRAME:** The expected level of effort is about (60) working hours within the period from March 01, 2021 till May 5th, 2021.
- 8. THE SUGGESTED DAY OF STARTING:** 01/03/2021
- 9. DUTY STATION:** At the faulty of EIT in Medical Devices Laboratory at Al-Azhar University – Gaza.
- 10. CONTRACT TYPE:** Lump Sum Contract.

11. Number of Trainers: 1 trainer is needed for this position

12. To apply: Interested and qualified candidates to fill the online application on Al-Azhar University – Gaza jobs portal through the link below:

<http://www.alazhar.edu.ps/arabic/EmpAffairs/Instr.asp>

13. All applicants must submit by hand the following document (English Only) to **Employee Affairs Unit at Al-Azhar University - Gaza** no later than **February 24rd, 2021** indicating **“Trainer of Educational Medical Devices Modules (Medical Equipment)”** in the Job Application:

1. Latest CV.
2. A cover letter.
3. University Certificates and any relevant documents.
4. Technical Proposal with clear implementation plan.
5. Financial Proposal in USD currency.

Incomplete or missing information or documentation and evidence of experience as requested above, may exclude you from further consideration.

The selection process follows World Bank recruiting policies and procedures. Only shortlisted candidates will be contacted for an interview.

If you have any questions, please don't hesitate to contact us by email and/or by phone;

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