



Training Proposal for:
QPE Technical Institute, Inc.
Agreement Number: ET16-0175

Panel Meeting of: September 25, 2015

ETP Regional Office: San Diego

Analyst: K. Campion

PROJECT PROFILE

Contract Attributes:	Priority Rate Retrainee SB <100	Industry Sector(s):	Manufacturing Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Orange, Riverside, San Bernardino, Los Angeles, San Diego	Repeat Contractor:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Union(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Turnover Rate:	≤20%		
Managers/Supervisors: (% of total trainees)	≤20%		

FUNDING DETAIL:

Program Costs	+	Support Costs	=	Total ETP Funding
\$200,696		\$13,842 8%		\$214,538

In-Kind Contribution:	50% of Total ETP Funding Required	\$152,428
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TRAINING PLAN TABLE

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee Priority Rate	Mftg. Skills, Advanced Tech.	162	8 - 200	0	\$885	\$15.07
				Weighted Avg: 46			
2	Retrainee Priority Rate SB <100	Mftg. Skills, Advanced Tech.	64	8 - 200	0	\$1,112	\$15.07
				Weighted Avg: 40			

Minimum Wage by County: \$15.07 per hour for Riverside and San Bernardino Counties; \$15.93 per hour for San Diego County; \$15.97 per hour for Los Angeles County; and \$16.02 per hour for Orange County.

Health Benefits: Yes No This is employer share of cost for healthcare premiums – medical, dental, vision.

Used to meet the Post-Retention Wage?: Yes No Maybe

Participating employers may use health benefits to meet the Post-Retention Wage.

Wage Range by Occupation

Occupation Titles	Wage Range	Estimated # of Trainees
JOB NUMBERS 1 & 2		
CNC Operator		40
Set-Up Operator		68
Programmer		40
Inspector		34
CAD-CAM Operator		27
Shop Lead		4
Engineer		13

INTRODUCTION

Founded in 1987 and located in Anaheim, QPE Technical Institute, Inc. (QPE) is a private postsecondary training agency that provides customized Manufacturing Skills training for Southern California employers (www.qpetech.com). QPE serves small to medium-sized machine shops with training such as Computer Numerical Control (CNC) machining; Computer-Aided Design/Computer Aided Manufacturing (CAD/CAM) programming; and dimensional metrology.

Participating employers design and manufacture special tools and machines, dies, jigs, fixtures, gauges, and precision-machined parts. They come from a variety of industries including aerospace, aircraft, computer technology, medical-devices, and electronics manufacturing.

QPE projects that approximately 80% of the proposed training will be delivered at its training facility in Anaheim and the remaining 20% of training will be conducted at participating employers' facilities.

PROJECT DETAILS

Employer Demand

Due to advanced technological changes in the metal trades, there is an ongoing shortage of trained workers who have the necessary skills to operate complex CNC equipment. Advanced Coordinate Measuring Machine Programming, Solid Works CAD Modeling and Rapid Prototyping have introduced new materials and computer software applications to the machine-specific CAD programming environments. This leaves small businesses in particular with a critical lack of trained machinists. For example, high-speed manufacturing requires CAD Modeling, leaving "paper" blueprints in the past.

Training will be multi-disciplined with a focus on automated processes. To that end, QPE recently installed \$125,000 in new equipment at its training facility. This includes CAD-CAM Software, computer workstations, a CNC Lathe machine, and a Coordinate Measuring Machine.

Customized Training

QPE conducts formal, shop floor assessments of each participating employer to identify the processes, types of equipment, types of CNC controls, programming methods, trainees' knowledge and abilities, blue-print specifications, quality requirements and productivity levels. The shop floor assessment determines specific courses, training hours and skill levels needed for each participating employer. During and after training, QPE seeks feedback from the participating employers to ensure these needs are being met.

Training Plan

All training will be conducted via class/lab in the following:

Manufacturing Skills (79%) – This training will be provided to all occupations and includes topics such as Shop Math, Geometric Dimensioning & Tolerancing, CNC Set-Up & Operation, SPC, Introduction to CAD/CAM, and Fundamental Programming. This training is designed for workers who need to upgrade their skills as well as recently hired workers new to the industry who need specific job skills to be successful and efficient in their jobs.

Advanced Technology (21%) – This training will be provided to Senior-Level Operators, Programmers, Engineers, Inspectors and Shop Leads. The proposed AT training in topics such as Swiss CNC Lathe, CNC Programming, 3-D wire frame, Advanced Production Milling and Lathe, 4th and 5th Axis Milling, Advanced CAD/CAM Applications, and Rapid Prototyping will provide trainees knowledge and skills to program and run complex machining operations. QPE requests the AT priority reimbursement rate of \$26 per hour for the AT courses identified in the curriculum due to the highly technical and complex nature of the course modules. QPE reports that the costs of AT training average \$64 per trainee hour and the trainer-to-trainee ratio is 1:10 for AT, to allow in-depth coverage and personal attention from the instructor.

Marketing and Support Costs

QPE has a long relationship with the city of Anaheim, the City of Santa Ana and the County of Orange, South Bay Workforce Center. It is through these relationships that the training needs of local manufacturing industries are first identified. Additionally, QPE has developed strong relationships with hundreds of employers in the southern California area and uses these employers to identify specific training needs and develop curriculum accordingly.

QPE requests 8% support costs for program marketing and training-related activities including the recruitment of additional participating employers and assessment of employer-specific job requirements for retrainees. Staff recommends the 8% support costs.

Substantial Contribution

QPE serves large and small companies, some of which may have received training in prior ETP contracts. If a large participating employer has received the benefit of training with payment earned in excess of \$250,000 within the past five years, reimbursement for trainees at the same facility will be reduced by 30% to reflect a substantial contribution to the cost of training. Funding for any participating employer previously assessed a substantial contribution will be reduced by 50%. Small businesses with 100 or fewer full-time employees are not subject to this provision.

Training Agency Certification

Training agency eligibility requires certification by an independent third-party, as required for the type of school and course of study. Most schools must also be licensed by the Bureau of Private Postsecondary Education (BPPE), created in statute effective January 1, 2010. QPE is BPPE approved.

Tuition Reimbursement

QPE represents that students enrolled in the ETP-funded program will not be charged tuition, fees, or any other costs associated with training. The representation will be made a condition of the Agreement.

Commitment to Training

ETP funds will not displace the existing financial commitment to training of participating employers. Safety training is, and will continue to be, provided by the participating employers in accordance with all pertinent requirements under state and federal law. Employers in the machining industry typically provide no formal training to their production employees and have limited training budgets, particularly those job shops with fewer than 100 employees. Most small employers do not have the financial resources to establish an in-house training program. Training is generally limited to informal on-the-job training and new-hire orientation.

The proposed training is in response to acute customer requirements, and therefore, will not duplicate any past or current training efforts. Some returning trainees who received Manufacturing Skills training in the prior agreement will now receive Advanced Technology, based on the employer's specified needs. QPE may also provide training to a repeat employer with employees that did not participate in prior contracts.

The proposed training will provide workers in-depth training in the most proficient use of computerized machine tools, which will allow manufacturers to increase their technical

capabilities to ensure current customer satisfaction is maintained, while increasing the potential for securing new customers with higher complexity requirements.

RECOMMENDATION

Staff recommends approval of this proposal.

PRIOR PROJECTS

The following table summarizes performance by QPE under an ETP Agreement that was completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET13-0376	Anaheim	6/03/13 – 6/02/15	\$214,440	\$180,325 (84%)
ET11-0227	Anaheim	6/07/11 – 6/06/13	\$178,454	\$165,755 (93%)

DEVELOPMENT SERVICES

N/A

ADMINISTRATIVE SERVICES

N/A

TRAINING VENDORS

None

Exhibit B: Menu Curriculum**Class/Lab Hours**

8 – 200

Trainees may receive any of the following:

MANUFACTURING SKILLS

- Shop Mathematics
- Blueprint Reading
- Measuring Instruments
- Manufacturing Materials
- Geometric Dimensioning and Tolerancing
- Statistical Process Control (SPC)
- Surface Plate Setups
- CNC Mill Set up & Operation
- CNC Lathe Set up & Operation
- Fundamental Programming
- Introduction to CAD/CAM

AT Hours

8 – 200

ADVANCED TECHNOLOGY

- Advanced Programming Techniques
- 3D Wire Frame Applications
- Geometry Creation in CAD/CAM
- Posting CNC Programs
- Advanced Production Milling & Lathe
- 4th & 5th Axis Milling
- Swiss CNC Lathe
- Advanced Geometric Dimensioning & Tolerancing
- Advanced Coordinate Measuring Machine Programming
- Composite Modeling and Manufacturing
- Rapid Prototyping
- Advanced CAD/CAM Applications & Modeling
- Solid Works Modeling Software Applications

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of the method of delivery.
