MAJOR EFFORT FORMAT
Fiscal Year 2014-2015

Institution/Consortium Name RFCUNY on behalf of NYC College of Technology, CUNY

1. **Major Effort's Number:** 5 of 6
2. **Major Effort's Title:** School of Technology & Design
3. **Major Effort's Target Population/Proposed Expenditures:**

Population	# of Students	Proposed Expenditure
General Postsecondary	113	$ 17,583
Individuals with Disabilities	18	$ 2,762
Economically Disadvantaged Individuals	695	$107,942
Individuals preparing for nontraditional fields	194	$ 30,106
Single Parents	42	$ 6,481
Displaced Homemakers	34	$ 5,318
Individuals with Limited English Proficiency	186	$ 28,930
MAJOR EFFORT TOTAL (UNDUPLICATED COUNT):	880	$199,122

4. a. **Name and Title of the Director of this Major Effort**:
   Dean Kevin Hom, School of Technology & Design
   b. **Major Effort Director's Telephone Number**: 718-260-5525
   c. **Major Effort Director's E-Mail Address:**khom@citytech.cuny.edu

5. **Postsecondary Grant Information Form Narrative** –
   Geographic Information System Technology (GIS) in Architectural Technology project discontinued on Perkins grant because completed. There are two new projects, one in CMCE (HEGIS code 5309 and 5317) for student certification and the other for Non-traditional students in Engineering Technology. Both are a response to the unsatisfactory performance measures in completion and non-traditional participation and completion for HEGIS code 5300 Mechanical and Engineering Technology.

a) All core indicators of Performance 1P1 – 5P1 are addressed in this effort.

b) Need/Achieve Target Performance Standard related to CIP

1. *Construction Management/Civil Engineering (CMCE)*- Leadership in Energy and Environmental Design (LEED) certification is a technical credential for professionals familiar with sustainable design and construction. LEED accredited professionals are on the rise in the job market. CMCE does not currently provide a path toward LEED accreditation students typically (2P1) cannot afford the additional costs of exam and exam preparation.

2. Computer Information Systems -Retention rates of first year students for City Tech associate degree CIS program was 56% in Fall 2013(3P1). The first courses students should be enrolled simultaneously in the first semester are CST 1100 and CST 1101 which are important fundamental introduction courses. Tutoring students during their first semester should improve retention. Students also have weak computer problem solving skills (1P1), skills important in CST 1101 (3PI) We will address by implementing case studies in CST 1101 which were successfully piloted in a first year learning community course linked with ENG 1101.

3. Writing Intensive Courses For the past few years the Perkins Local Advisory Council has indicated that while students graduate with excellent technical skills their writing skills are weak (1P1). Employers have also stressed this point. Each associate degree course of study has one

required technical course that is writing .English faculty will work with faculty who teach associate degree writing intensive courses (3P1) in the School of Technology and Design to strengthen student technical writing skills.

4. CUNY Service Corps- City Tech has always strived to provide students with work-based learning experiences (4P1). This is difficult since most students must work part-time while attending college. In 2013-2014, 67% of continuing students received need-based aid and it has been difficult to obtain paid internships for students. CUNY has implemented a program, CUNY Service Corps which provides paid student internships for full-time students who have earned at least 24 credits.

5. Non-Trad Students in Engineering Technology- New York State performance measures indicates City Tech is below the state average in enrollment and retention (5P1) of non-traditional students in Mechanical and Engineering Technology. The percentage of women in City Tech associate degree technology programs are 12% in CIS, 10% in CMCE, 7% in Electromechanical, 6% in Mechanical, and 4% in Electrical in Fall 2013.

c) Objectives:

1. *Construction Management/Civil Engineering (CMCE)-* Include LEED certification related modules in CMCE 2320 and CMCE 2320 and have 50 students take LEED AP or LEED Green Associate certification exam

2. Computer Information Systems- Increase retention of CST students in CST 1100 and CST 1101 by providing tutoring. Total projected number of impacted students is 110 students. Increase computer programming concepts and skills of students in CST 1101 with introduction of case studies. Total projected number of students 240.

3. Writing Intensive Courses

Our objective is to improve writing skills of students in their disciplines. Each associate degree major in the School has one writing intensive course; Architectural Technology ARCH 1121 and ARCH 2321, Computer Information Systems CST 1100, Environmental Control Technology ENVC 2321, Electrical Engineering Technology EET 2162, Telecommunication Engineering Technology TCET 2220, and Mechanical Engineering Technology MECH 2322. Total projected number of impacts students is 200, 20 students from 10 classes.

4. CUNY Service Corps- Objective is to ensure that associate degree students in School of Technology and Design apply for and are placed in CUNY Service Corps program. Total projected number of students served is 100.

5. Non-Trad Students in Engineering Technology- Increase retention and enrollment of associate degree women students in engineering technology by offering peer advisement and internship preparation workshops. Projected number of students served 180.

d) Activities:

*1. Construction Management/Civil Engineering (CMCE)-*Professor Sowder will create modules for curriculum during summer and implement in classes in fall and spring semester. Practice exam will be administered to students and they will take certification exam.

2. Computer Information Systems Faculty coordinator will oversee tutors and coordinate with faculty to recommend students for assistance. Tutors will be available for students in open lab. Faculty will develop case studies with five students to incorporate in CST 1101, workshops will be held for full time and adjunct faculty to incorporate case studies into curriculum in Spring 2014 semester.

3. Writing Intensive Courses- A doctoral student will work with two English faculty coordinators to develop assignments, rubrics and writing instructional materials for faculty members to integrate into their classroom. Ten faculty members will attend workshops and work with students and English faculty during the fall semester to implement in their spring semester classes.

4. CUNY Service Corps- Two part-time assistants will be hired to help track associate degree students in the program and prepare students to apply in the spring. Since this is a new program an assistant will help Program Manager advise, recruit, and assist students in applying to program.

5. Non-Trad Students in Engineering Technology- A part time coordinator will work with faculty across departments to provide peer advisors. Workshops will be held on topics such as internship opportunities and preparation, discipline specific workforce opportunities and women in STEM.

e) Coordination with external agencies: n/a

f) Timeline:

1. *Construction Management/Civil Engineering (CMCE)-*July August- curriculum modules created Fall and spring semester- modules embedded in curriculum, student practice exams and students take exams

2. Computer Information Systems August- prepare case studies and conduct faculty workshop on case studies September- May- train tutors, schedule and conduct tutoring track activities and data for retention outcomes., refine case studies with students, second faculty workshop and implement in CST 1201 in February

*3. Writing Intensive Courses-*Summer- planning workshops, selecting faculty, and developing discipline specific assignments. Fall semester- conduct faculty workshops, and develop assessments. Spring semester- Faculty implement activities in the classroom, doctoral student assists faculty with implementation and assessment.

*4. CUNY Service Corps-*Summer- Assist with training and develop system of tracking CUNY Service Corp students Fall semester- Obtain and maintain data on participating students Spring semester- Begin recruitment, information sessions, assist with students with application components and process.

5. Non-Trad Students in Engineering Technology

August- Faculty plans workshop schedule, hires coordinator and peer advisors September- December- Advisement and workshops are conducted Feb- May- students hired, workshops scheduled and conducted, advisement continues

g) Evaluation:

Evaluation Measure	**Anticipated Outcome**
1.CMCE LEED Certification exam	At least 35 students will pass LEED certification exam
2. CIS Retention rate first year CIS students Fall 2013 56%	At least 80% of students who participate in mentoring program will be retained in program
2.CIS Student test performance comparison fall 2014 to spring 2015	10% improvement of use of sequencing, selection and repetition structures in computer programming skill improvement in tests
3. Writing Intensive Courses Discipline specific writing rubrics will be created and overall average pass rates of writing intensive course will increase	Average pass rate of students in spring writing intensive courses in which participating faculty teach will be 5% higher than previous semester grades.
4. CUNY Service Corps- Student application and acceptance into program	At least 100 associate degree students in School of Tech& Design will apply to program at least 15 will be placed in internships
5. Non-trad Engineering Technology Student retention	At least 80% of women advised will be retained within their program of study

6. Major Effort Staff:

	Name	Title	Time	Salary
1.	Prof. Anne Marie Sowder (#1)	Faculty Coordinator	2 wks summer	$ 3,000
2.	2 TBD (#2)	Faculty Coordinator	.14 FTE	$ 6,600
3.	TBD (#2)	Faculty coordinator	2 wks summer salary	$ 3,000
4.	TBD (#2)	Student developers	150 hrs@ $20	$ 3,000
5.	To be hired (#2)	Student tutors	1585 hrs @ $18	$28,530
6.	TBH Doctoral student (#3)	Writing Coordinator	720 hrs@ $30	$21,600
7.	Prof. Rebecca Devers (#3)	Faculty Coordinator	2 wks summer salary	$ 3,500
8.	Prof Marianne Bonanome (#3)	Faculty Coordinator	2 wks summer salary	$ 3,500
9.	TBH (#3)	Research Asst. Assessment	1045 hrs @ $26.01	$27,181
10.	2 TBH (#4)	CUNY Service Corp Asst.	1045 hrs@ $18	$18,810
11.	TBH (#5)	Peer Advisors	1809 hrs @ $12	$21,708
12.	TBH (#5)	Coordinator	402 hrs @ $18	$7,236
13.	TBH (#5)	Workshop leaders	124 hrs @ $25	$3,100

Fringe benefits are calculated at 28.9% for faculty summer salary, 42% for faculty release time and 11% for all other staff

7. Major Effort Budget

Purchased Services

Adjunct workshop participation $4,100 (#3)

LEED exams $14,100 (#1)

Supplies

LEED study guide, e-copies $586(#1)

Category	Code	Major Effort Costs
Professional Salaries	15	$ 19,600
Non-Professional Salaries	16	$ 131,165
Purchased Services	40	$ 18,200
Supplies and Materials	45	$ 586
Travel Expenses	46	$
Employee Benefits	80	$ 20,956
Indirect Costs	90	$ 8,615
Minor Remodeling	30	$
Equipment	20	$
Major Effort Total		$199,122