GENERAL EDUCATION AT NEW YORK CITY COLLEGE OF TECHNOLOGY Proposed by the College General Education Committee, May 11, 2012

New York City College of Technology aspires to be a living laboratory where General Education

- is represented by a mutually accepted core of knowledge, skills, and values that permeate all courses, not only in the liberal arts and sciences, but across the majors.
- makes rich use of the physical, historical, economic, and cultural aspects of our location in a diverse urban community
- stresses active learning and creative problem solving
- encourages engagement in personal, professional, and civic communities
- integrates theory/ knowledge and hands- on/ application
- maintains a global focus/ perspective
- is communications intensive

Important General Education Learning Goals for City Tech Graduates

KNOWLEDGE/ Develop knowledge from a range of disciplinary perspectives, and hone the ability to deepen and continue learning.

Breadth of knowledge

- Value knowledge and learning.
- Understand and appreciate the range of academic disciplines and their relationship to the fields of professional and applied study.
- Use the arts, sciences and humanities as a forum for the study of values, ethical principles, and the physical world.

Depth of knowledge

- Engage in an in-depth, focused, and sustained program of study.
- Pursue disciplined, Inquiry-based learning in the major.

Lifelong learning

- Show curiosity and the desire to learn.
- Acquire tools for lifelong learning—how to learn, how they learn, knowledge of resources.

SKILLS/ Acquire and use the tools needed for communication, inquiry, analysis, and productive work.

Communication

 Communicate in diverse settings and groups, using written (both reading and writing), oral (both speaking and listening), and visual means, and in more than one language.

Inquiry/ Analysis

- Derive meaning from experience, as well as gather information from observation.
- Understand and employ both quantitative and qualitative analysis to describe and solve problems, both independently and cooperatively.
- Employ scientific reasoning and logical thinking.
- Use creativity to solve problems.

INTEGRATION/ Work productively within and across disciplines.

Information literacies

 Gather, Interpret, evaluate, and apply information discerningly from a variety of sources.

Systems

Understand and navigate systems.

Integrate learning

- Resolve difficult issues creatively by employing multiple systems and tools.
- Make meaningful and multiple connections among the liberal arts and between the liberal arts and the areas of study leading to a major or profession.

VALUES, ETHICS, AND RELATIONSHIPS/ Understand and apply values, ethics, and diverse perspectives in personal, professional, civic, and cultural/global domains.

Professional/Personal development

- Demonstrate Intellectual honesty and personal responsibility.
- Discern consequences of decisions and actions.
- Demonstrate intellectual agility and the ability to manage change.
- Work with teams, including those of diverse composition. Build consensus.
 Respect and use creativity.

Ethics/values

- Transform information into knowledge, and knowledge into judgment and action.
- Assume responsibility for social justice.

Community/Civic engagement

- Demonstrate social and civic knowledge.
- Understand organizations and histories underlying government in a global context.
- Apply knowledge and analyze social, political, economic, and historical issues.
- Show ability to contribute actively by applying knowledge to the identification and analysis of societal and professional problems to enact solutions.

Global/ Multicultural Orientation

- Demonstrate expanded cultural and global awareness and sensitivity.
- Discern multiple perspectives.
- Demonstrate proficiencies and capacities in dealing with a diverse society.
- Communicate across cultural and linguistic boundaries.

PROPOSED CITY TECH GENERAL EDUCATION COMMON CORE supports the distinctive character of education at New York City College of Technology and incorporates the CUNY Pathways Common Core.

AA, AS, and all baccalaureate programs--General Education Core (30 credits) consisting of:

I—Required Core (12 credits)

- ENG 1101 (3 credits)
- ENG 1121 (3 credits)
- Mathematics (3 or 4 credits)¹
- Science (3, 4, or 5 credits)

II—Flexible Core--One 3-credit course from each of the following areas (18 credits)

(No more than two courses may be selected from any discipline)

- World Culture and Global Issues
- US Experience in its Diversity
- Individual and Society
- Creative Expression
- Scientific World²
- one additional course from any of the five groups

BS, BTech—All baccalaureate Students starting at City Tech or transferring in with fewer than 30 credits, in addition to I and II above, will also complete the following:

III--College Option requirement (12 credits):

- One course in speech/ oral communication
- One interdisciplinary course/ seminar that links study in the major to one or more liberal arts disciplines
- Two additional liberal arts courses, at least one of which will be an advanced course (i.e., having at least 1 pre-requisite in the discipline)

Particularly in baccalaureate programs, students may take many more credits in arts and science as degree requirements or electives. Degree programs are encouraged to permit as much student choice as possible in selecting General Education Core courses.

AAS programs

Students in will take a minimum of 20 credits from approved Core courses including at least one English Composition course, mathematics, and science, along with other Core courses selected to comply with licensure or accreditation requirements as needed.

Additional cross-cutting factors

- To support the development of strong communication skills, City Tech will maintain its Writing Intensive requirement.
- All college courses will have identified general education learning outcomes.
- All college courses will note expected and intended computational skills.
- Learning Communities, team-teaching, and other cross-departmental collaborations will support integrative and interdisciplinary learning.

¹ Students in STEM programs will take 4-credit mathematics and 4-5 credit science courses. Students in health programs will take 4-credit science courses. Any student may elect to take a 4-credit mathematics or science course. The additional credits will come from degree or elective credits.

² Students whose programs require the second semester of a science sequence or who elect to take it make do so as their required Scientific World course

RATIONALE

The General Education Committee of New York City College of Technology proposes a philosophy for the college's offerings in General Education that makes general education serve as the nucleus of each degree program. This philosophy attempts to balance breadth and depth of knowledge with the acquisition of useful skills. The goal is to produce graduates who are active learners, creative problem solvers, and engaged practitioners in their respective domains.

City Tech's educational approach differs from other senior colleges at CUNY in that it integrates theory with applied hands on experiences. Further, as so many of the degree programs are AAS or BTech degrees, the number of liberal arts credits within these curricula is smaller than for degrees in liberal arts or sciences. It is important, therefore, to ensure that critical learning experiences not explicitly covered in the 30 credit common core are integrated into our proposed twelve-credit option and continued and deepened in courses for the major.

All courses in the CUNY Common Core, both for the 12 credit Required Core and the 18 credit Flexible Core, must satisfy certain learning outcomes. These align with City Tech's proposed Gen Ed as follows:

CUNY Pathways Common Core		City Tech General Education
•	Gather, interpret, and assess information from a variety of sources and points of view.	 Derive meaning from experience, as well as gather information from observation.
•	Evaluate evidence and arguments critically or analytically	 Understand and employ both quantitative and qualitative analysis to describe and solve problems.
	Produce well-reasoned written or oral arguments using evidence to support conclusions	 Communicate in diverse settings and groups, using written, oral, and visual means.

In addition to the base learning outcomes, each category in the CUNY Flexible Core has a set of more specialized outcomes. To fit within a category a course must fulfill at least three of the learning outcomes for that area. This is where the CUNY Pathways design diverges most significantly from City Tech's design. Although both propose breadth of knowledge as critical, City Tech does not specify subject domains in the same way that Pathways does, nor does it consider content on a course-by-course basis.

For example, for the CUNY area World Culture and Global Issues courses must apply the skill sets of assessment, analysis, and communication to the domain of *World Cultures and Global Issues*, with possible outcomes based on identification of concepts, analysis of information, or language fluency. However, they all relate to the domain of global studies.

City Tech's design does not require a course focusing on Global Studies (although many courses that satisfy this requirement). Instead, the college goals within *Breadth of Knowledge* include "Understand and appreciate the range of academic disciplines and their relationship to fields of professional and applied study," and "Use the arts, sciences and humanities as a forum for the study of values, ethical principles, and the physical world."

Because of the different alignment of course categorization between Pathways and City Tech 's design, departments offering liberal arts courses must carefully evaluate how their courses fall into the appropriate Pathways categories. Equally importantly, each category must include sufficient variety of courses both in quantity and in discipline to allow students multiple options for fulfilling degree requirements.

Recommendations regarding the Level III requirements for Baccalaureate Students

- Upon analysis of the Pathways Common Core requirements vis a vis the Important General Education Learning Goals for City Tech Graduates, it is apparent that there is no path that will ensure that students take a course that concentrates on oral communication, an important element in the City Tech General Education Learning Goals. The committee proposes that this requirement be included within the expanded twelve-credit option.
- Also, in line with the City Tech Learning Goals statement that students develop depth as well as breadth of knowledge, the committee proposes that a certain number of courses within the twelve-credit option are classified as "advanced" (requiring at least one prerequisite course from the same discipline).
- To support the goals of integrative/ interdisciplinary learning, the committee proposes to require a course that integrates concepts or skills from the major with that of one or more liberal arts areas. Such course would meet requirements developed by the Interdisciplinary Committee, consisting of faculty from across the three schools.
- As New York City College of Technology values a diverse range of liberal arts courses, and like the CUNY Common Core embraces a breadth over depth strategy, the committee is recommending that the College's Level III twelve credit option continue this flexibility of course choice, subject to the criteria listed above. The committee further recognizes that each department is unique, and so each should be able to make recommendations and/or requirements as appropriate to their discipline and accreditation requirements.