California University of Pennsylvania

Articulation and Transfer Evaluation Office

CIT

Computer Engineering

March 30, 2007

Community College of Allegheny County
ATTN: Dr. Mary Frances Archey
1750 Clairton Rd
West Mifflin, PA 15122

RE: Articulation Agreement

Dear Dr. Archey:

Enclosed is a fully executed Articulation Agreement between CCAC and California University of Pennsylvania.

Thank you.

Sincerely,

Belinda L. Smith

Belinda L. Smith, Director
Articulation & Transfer Evaluation

Enclosure

BLS/mas

250 University Avenue
California, PA 15419-1394
724-938-5939
724-938-4564 FAX
www.cup.edu

COMMUNITY COLLEGE OF ALLEGHENY COUNTY AND CALIFORNIA UNIVERSITY OF PENNSYLVANIA ARTICULATION AGREEMENT

THIS AGREEMENT, dated this 7th day of March, 2007, is made by and between, Community College of Allegheny County, hereinafter called "CCAC" and California University of Pennsylvania, hereinafter called "CAL U".

CCAC and CAL U acknowledge their shared mission to provide quality higher education programs, which meet the needs of the region and provide a workforce of highly trained residents.

The primary purpose of this agreement is to enhance the transferability between CCAC's Associate of Science Degree in Computer and Information Science and CAL U's Bachelor of Science Degree in Computer Engineering Technology. A secondary purpose is to provide faculty and administration of both institutions with more precise guidelines for advising students interested in pursuing a Bachelor of Science Degree in Computer Engineering Technology.

This agreement does not exclude students from transferring to majors other than Computer Engineering Technology. Exhibit A, consisting of two (2) pages, attached hereto and incorporated herein, outlines the courses that will be accepted from CCAC. Exhibit B, consisting of one (1) page, attached hereto and incorporated herein, outlines the courses necessary for the Bachelor of Science Degree in Computer Engineering Technology from CAL U.

I. MUTUAL TERMS AND CONDITIONS

A. **Term of the Agreement.** This agreement shall be in effect for five (5) years from the date of signature and will be reviewed annually for accuracy.

B. **Termination of the Agreement.** CCAC and CAL U may terminate this Agreement for any reason or no reason with ninety (90) days written notice from either party. Either party may terminate this Agreement in the event of a substantial breach. However, should either party terminate this Agreement prior to the completion of an academic semester, all students enrolled at that time may continue their educational experience until it would have been concluded absent the termination.

C. **Non discrimination.** The parties agree to continue their respective policies of nondiscrimination based on Title VI of the Civil Rights Act of 1964 in regard to sex, age, race, color, creed, national origin, Title IX of the Education Amendments of 1972 and other applicable laws, as well as the provisions of the Americans with disabilities Act.

D. **Interpretation of the Agreement.** The laws of the Commonwealth of Pennsylvania shall govern this Agreement.

E. **Modification of Agreement.** This Agreement shall only be modified in writing with the same formality as the original Agreement.

F. **Relationship of Parties.** The relationship between the parties to this Agreement to each other is that of independent contractors. The relationship of the parties to this contract to each other shall not be construed to constitute a partnership, joint venture or any other relationship, other than that of independent contractors.

G. **Liability**. Neither of the parties shall assume any liabilities to each other. As to liability to each other or death to persons, or damages to property, the parties do not waive any defense as a result of entering into this contract. This provision shall not be construed to limit the Commonwealth's rights, claims or defenses which arise as a matter of law pursuant to any provisions of this contract. This provision shall not be construed to limit the sovereign immunity of the Commonwealth or of the State System of Higher Education or the University.

H. Entire Agreement. This Agreement represents the entire understanding between the parties. No other prior or contemporaneous oral or written understandings or promises exist in regards to this relationship. Any changes, corrections or additions to this contract shall be in writing in the form of a supplemental agreement signed by all necessary parties and setting forth therein the proposed change, correction, or addition.

IN WITNESS WHEREOF, the authorized representatives of the parties have executed this Agreement as of the date previously indicated.

Community College of Allegheny County:

Dr. Mary Frances Archey
Interim Sr. Vice President
of Academic Affairs

Dr. Stewart Sutin, President
CCAC

California University of Pennsylvania:

Dr. Sean C. Madden, Interim Provost and
Vice President for Academic Affairs

Approved for form and legality:

University Legal Counsel

APPENDIX A

CCAC Computer & Information Science A.S. (050)
Cal U Computer Engineering Technology

For purposes of transferring from the Community College of Allegheny County (CCAC) to the Computer Engineering Technology B.S. program at California University of Pennsylvania (CalU), it is recommended that students enroll in the CCAC Computer & Information Science A.S. transfer program 050 and take the following course sequence:

First Semester

1. CIT111 *Introduction to Programming: Java*
   (in place of CalU's CSC120 *Problem Solving & Program Construction*)

2. ENG101 *English Composition 1*
   (in place of CalU's ENG101 *English Composition 1*)

3. EET103 *Introduction to Electronics*

4. MAT142 *Pre-Calculus Mathematics* [1]
   (in place of CalU's MAT199 *Pre-Calculus*)

5. MIT103 *Fundamentals of Microprocessors*
   (in place of CalU's CET270 *Introduction to Microprocessor Design*)

Second Semester

1. CIT130 *Object-Oriented Programming: Java*
   (in place of CalU's CSC265 *Object-Oriented Programming*)

2. MIT110 *Electrical Engineering Circuits 1*
   (in place of CalU's EET110 *DC Circuit Analysis*)

3. ENG103 *Technical Communications* **OR**
   ENG106 Report Writing
   (in place of CalU's ENG217 *Science & Technical Writing*)

4. MAT135 *Discrete Mathematics* [1]
   (in place of CalU's MAT195 *Discrete Mathematical Structures*)

5. SPH101 *Oral Communications*
   (satisfies CalU's Public Speaking General Education course requirement)

APPENDIX A

CCAC Computer & Information Science A.S. (050)
Cal U Computer Engineering Technology

Third Semester

1. CIT145 *Programming in C*
   (in place of CalU's CSC124 *Computer Programming I*)

2. MIT210 *Electrical Engineering Circuits 2*
   (in place of CalU's EET160 *AC Circuit Analysis*)

3. ECO102 *Principles of Macroeconomics* **or**
   ECO103 *Principles of Microeconomics*
   (in place of CalU's ECO100 *Elements of Economics* as one of the two General Education Social Science courses)

4. MAT201 *Calculus 1* [1]
   (in place of CalU's MAT281 *Calculus I*)

5. PHY221 *Physics for Engineering and Science 1* [2]
   (in place of CalU's PHY101 *College Physics I*)

Fourth Semester

1. CIT245 *Data Structures and Programming: C++*
   (in place of CalU's CSC328 *Data Structures*)

2. MIT208 *Digital Electronics*
   (in place of CalU's CET235 *Digital Electronic Design*)

3. MAT202 *Calculus 2* [1]
   (in place of CalU's MAT282 *Calculus II*)

4. PHY222 *Physics for Engineering and Science 2* [2]
   (in place of CalU's PHY202 *College Physics II*)

5. Social Science Elective
   (satisfies CalU's social science general education requirement)

[1] CalU requires the following CCAC mathematics classes to be taken in the first two years:

- MAT142 *Pre-Calculus Mathematics* OR
  MAT111 *College Algebra* AND MAT147 *College Trigonometry*
- MAT135 *Discrete Mathematics*
- MAT201 *Calculus 1*
- MAT202 *Calculus 2*

A student needs to discuss with a counselor the appropriate sequence of mathematics courses and any remedial courses, based on their high school mathematics capabilities and/or placement test scores.

[2] CalU allows the algebra-based PHY141 *Physics 1* and PHY142 *Physics 2* courses to be taken in place of PHY221 *Physics for Engineering and Science 1 and* PHY222 *Physics for Engineering and Science 2.*

APPENDIX B
Program-to-Program Transfer Articulation
CCAC CIS Associates to Cal U CET Bachelors

Name _____ Student ID Number _____

GENERAL EDUCATION** (55 Credits):**

		Crs	Grade
Building a Sense of Community - 1 credit			
EET 103	Introduction to Electronics	1	CCAC
Critical Thinking Skills - 3 credits			
CIT 111	Introduction to Programming: Java	3	CCAC
Communication Skills - 6 credits			
ENG 101	English Composition I	3	CCAC
ENG 103/106	Tech.Comm./Rprt Wtng	3	CCAC
Public Speaking - 3 credits			
SPH 101	Oral Communication	3	CCAC
Mathematics - 3 credits			
MAT 142	Pre-Calculus* ***	3	CCAC
Natural Sciences - 8 credits			
PHY 221/141	College Physics I*	4	CCAC
PHY 222/142	College Physics II*	4	CCAC
Social Sciences - 6 credits			
EC 102/103	Economics*	3	CCAC
	Social Science Elective	3	CCAC
Humanities - 3 credits			
		3	
Fine Arts - 3 credits			
		3	
Multicultural Awareness - 3 credits			
		3	
Values - 3 credits			
		3	
Technological Literacy - 6 credits			
CIT 145	Programming in C	3	CCAC
CSC 306	Fortran*	3	
Health & Wellness - 3 credits			
		3	
Writing Component Courses (two courses required)			
CET 360	Microprocessor Engineering	x	
CET 492	Senior Project II*	x	

MAJOR (72 Credits)

Required Courses:		Crs	Grade
MIT 208	**Digital Electronics**	**4**	**CCAC**
MIT 103	**Fundamental of Microprocessors**	**4**	**CCAC**
CET 335	Microprocessor Interfacing	4	
CET 350	Technical Computing using Java	3	
CET 360	Microprocessor Engineering	4	
CET 440	Computer Networking	4	
CET 490	Senior Project I	3	
CET 492	Senior Project II	3	
CIT 130	**Object-Oriented Programming:Java**	**3**	**CCAC**
CIT 245	**Data Structures and Prog Design:C++**	**3**	**CCAC**
CSC 378	Computer Architecture	3	
CSC 400	Operating Systems	3	
MIT 110	**Elect. Engr. Circuits I**	**4**	**CCAC**
MIT 210	**Elect. Engr. Circuits II**	**4**	**CCAC**
EET 215	Introduction to Instrumentation	3	
MAT 135	**Discrete Mathematics**	**3**	**CCAC**
MAT 201	**Calculus I**	**3**	**CCAC**
MAT 202	**Calculus II**	**3**	**CCAC**
MAT 341	Linear Algebra	3	

Approved Technical Electives - 9 credits

_____ _____ _____

_____ _____ _____

_____ _____ _____

Approved Technical Electives

CET 495 CET Internship
CSC 302 Visual Programming
CSC 323 Assembly Language Programming
CSC 420 Artificial Intelligence
CSC 455 Structures of Programming Languages
CSC 460 Language Translation
CSC 475 Theory of Languages
EET 370 Instrumentation Design I
EET460 Digital Signal Processing
MAT 381 Calculus III
MAT 382 Calculus IV

NOTE:

*** Required Courses:** If these courses are not completed as part of the student's general education, he or she should complete them within the elective category.

***College Algebra (3 cr.) and College Triginometry (3 cr.) may be substituted for Pre-Calculus, if math placement test score does not permit direct entry into Pre-Calculus, or if students would prefer less intense coverage of this material.

****Students must complete **six** credits of General Education courses at the 300/400/500 level.

CCAC 64 credits
Cal U 60 credits
Total 124 credits
Note: Student MUST complete the CCAC CIS degree