

NEW YORK CITY COLLEGE OF TECHNOLOGY OF THE CITY UNIVERSITY OF NEW YORK 300 JAY STREET x BROOKLYN NEW YORK 11201-2983 *Physics Department* Room Pearl N811, Tel: (718) 260-5257

<u>B.S. Degree in Applied Computational</u> <u>Physics</u> <u>Articulation Agreement with La Guardia Community</u> <u>College</u> <u>A.S in Physical Sciences: Physics</u> <u>Track</u>

A. SENDING AND RECEIVING INSTITUTIONS

La Guardia Community College (LAGCC) Natural Sciences Department
Physical Sciences: Physics Track
Associate in Science (AS)
New York City College of Technology (NYCCT)
Physics Department
Applied Computational Physics
Bachelor of Science (BS)

B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM

To be eligible for this articulation agreement, students must: Have earned the AS in Physical Sciences degree from LaGCC with a minimum 2.50 GPA. Satisfy the College requirements for admission into a baccalaureate program;

Students who wish to transfer but do not meet all of the above requirements or are unable to enroll within two years after graduation will receive admission consideration under our standard transfer credit policies.

Total transfer credit granted toward baccalaureate degree: <u>60</u> Total additional credits required by senior college to complete baccalaureate degree: <u>60</u>

NYCCT and LAGCC agree to offer the courses noted in the BS program in Applied Computational Physics (NYCCT) and AS in Physical Sciences: Physics Track program at La Guardia Community College (LAGCC), as described in this agreement, and as outlined in each college's course catalog. Each college agrees to notify the other if course numbers, content, or catalog descriptions change. Furthermore, the parties involved understand that any change in course number, content, or catalog description may require a modification to this agreement.

C. COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

Students transferring from LAGCC with an AS in Physical Sciences shall enter the BS Program in Applied Computational Physics at NYCCT as third year students. The following courses, totaling 60 credits, will be transferred to NYCCT.

COMMON CORE					
Required Common	Core				
English Composition (two terms)		ENG101 and ENG102 or ENG259		6	
Mathematical and Quantitative Reasoning		Note: Students in this	program at LAGCC have the	3	
		option to choose betw			
			ebra and Trigonometry (3 cr)		
			and Trigonometry (3 cr)		
Life/Physical Scien			4		
		Te	otal Required Common Core	13	
Flexible Core				3	
CreativeExpression					
Scientific World		MAT200 PreCalculus		8	
	SCP231 General Physics I (4 cr)				
Individual and Society			3		
World and Global Issues			3		
US Experience in its Diversity			3		
			Total Flexible Core	20	
Total Common Core				33	
CURRICULUM REQUIREMENTS					
LAGCC course	COURSE NAME		NYCCT Equivalent		
MAT201	Calculus I		MATH 1475	4	
MAT202	CalculusII		MATH 1575	4	
MAT203	CalculusIII		MATH 2675	4	
SCP232	General Physics II	[PHYS 1442	4	
SCP233	Modern Physics		PHYS 2443	4	
SCP211		s in Physical Sciences	Elective	3	
NSF101	First Year Semina		Elective	2	
	Unrestricted electives: 2 credits*		Elective	2	
Total Curriculum Requirements				27	
			Total Program Credits	60	

ASSOCIATE IN PHYSICAL SCIENCES

Note: (*) Students in the AS program at LAGCC might consider taking MAC101 (equivalent to CST1101 at City Tech) as their "Unrestricted electives" course.

TOTAL NUMBER OF CREDITS TRANSFERRED: 60

D. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BS DEGREE

Students transferring to the BS program in Applied Computational Physics at NYCCT from the AS in Physical Sciences: Physics Track at LAGCC will be required to satisfactorily complete the following courses (totaling 60 credits) at NYCCT.

COLLEGE OPTION REQUIREMENTS					
Public Speaking		her. If a public speaking y been completed, then y arts course	3		
Interdisciplinary Co	arse Any course in a p	proved list, elective	3		
	Total Common Core & Coll	lege Option Requirements	6		
CURRICULUM REQUIREMENTS**					
PHYS 2607	Introduction to Quantum Mechanics		3		
PHYS 2609	Introduction to Quantum Computing		4		
PHYS 3100	Classical Mechanics				
PHYS 3200	Electricity and Magnetism				
PHYS 3600	Machine Learning for Physics and Astronomy				
PHYS4100	Computational Methods				
PHYS4150	Computational Methods Lab				
PHYS 4200	Internship/Real research Experience (WI)		4		
MAT 2580	Linear Algebra				
MAT 2572	Probability and Mathematical Statistics I		4		
CST 1101	Problem Solving with Computer Programming		3		
CST 1201	Programming Fundamentals		3		
CST 1204	Database Systems Fundamentals		3		
	Additional program electives		10		
	Total	Curriculum Requirements	54		
		Total Program Credits	60		

Note: (**) To meet New York City College of Technology's bachelor's graduation requirement students must complete two additional writing intensive courses (WI), one in the core curriculum (general education) and one in the major.

TOTAL DEGREE CREDITS TO BE TAKEN AT NYCCT60TOTAL CREDITS FOR THE BS DEGREE120

In order to satisfy the B.S. degree requirements, students must select the appropriate general education common core and flexible core courses to satisfy CUNY Pathways requirements for the degree program.

E. ARTICULATION AGREEMENT FOLLOW-UP PROCEDURES

1. Procedures for reviewing, updating modifying or terminating agreement:

When either of the degree programs involved in this agreement undergoes a change, the agreement will be reviewed and revised accordingly by faculty from each institution's respective departments or programs, selected by their Chairpersons and program directors.

2. Procedures for evaluating the effectiveness of this agreement and tracking the number of students who transfer from LAGCC to NYCCT under terms of this articulation agreement and their success:

Each year New York City College of Technology (NYCCT) will provide La Guardia Community College (LAGCC) the following information: a) the number of LAGCC students who enrolled; b) the aggregate GPA of these enrolled students at NYCCT.

3. Sending and Receiving College procedures for publicizing agreement (e.g., college catalogs, transfer advisors, websites, etc.):

- x This articulation agreement will be publicized on the LaGuardia Community College's website, and New York City College of Technology website.
- x Transfer advisors at LAGCC will promote this agreement with eligible students.

Effective Agreement Date: Spring 2021