# TRANSFER ARTICULATION AGREEMENT

# **Quinsigamond Community College**

## And

Worcester Polytechnic Institute

(Updated 2018)

**Engineering Associate in Science Degree** 

to

Admission to Bachelor of Science Degrees in Engineering

Worcester Polytechnic Institute (WPI) and Quinsigamond Community College (QCC) recognize that for some students, the path to a technical education may begin at a community college. To assist students who wish to pursue such an option, WPI and Quinsigamond Community College formalized this pattern by signing a transfer articulation agreement in 1989. This agreement was last updated in 2010.

The purpose of this document is to reaffirm/update that agreement based on a thorough review of the current courses taught in QCC's **Engineering** associates degree program by the appropriate WPI department head/designee. Further reviews will be conducted tri-annually or when significant changes occur to the curriculum of either institution.

Under this agreement, the terms of which are described on the following pages, WPI agrees to accept students from QCC as sophomores or juniors depending on their programs of study in engineering.

### Terms of Agreement

In this agreement between WPI and QCC, both institutions agree to the following items:

- 1. WPI agrees to refer potentially qualified students to QCC for pre-entrance course preparation as well as first year-level course work leading to eventual transfer to a four-year engineering program.
- 2. WPI agrees to accept as advanced sophomores all graduates of QCC who have completed the attached program of study and, upon proper application and the positive recommendation of the two-year college, have met the admissions qualifications as set forth by WPI's Undergraduate Admissions Office. In general, all students with a 3.3 GPA or higher will be accepted from QCC. Students with grade-point averages below 3.3 will be considered on a case-by-case basis.
- 3. In addition, WPI agrees to accept all college-level courses within the QCC Engineering program curriculum as laid out in this articulation agreement, provided courses are completed with grades of "B" or higher. See Appendix A. Please note: WPI does not have a cap for the number of credits accepted. However, students have to meet a residency requirement of 72 credits (8 units, or two full academic years).
- 4. With careful planning, students completing the above requirements may be able to graduate from WPI in two and one-half years.
- 5. Faculty and administrative staff from both institutions should be encouraged to visit each other's campuses and confer on matters of curriculum content and the program details.
- 6. The program will be promoted through each college's website, academic catalog, and appropriate marketing materials.
- 7. This agreement is effective on the date of signature, and will continue in effect for three years from that date. Substantive changes in the courses or program of either institution will necessitate a review of the agreement. This agreement may be terminated or re-negotiated at the request of either institution given due protection to those students enrolled at either institution who expect to pursue this plan of study.

## Institutional Approvals

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Dr. Luis G. Pedraja	Dr. Laurie Leshin
President /	President
Quinsigamond Community College	Worcester Polytechnic Institute
Dr. Nancy/Schoenfeld Interim Vice President of Academic Affairs Quinsigamond Community College	Dr. Bruce Bursten Provost Worcester Polytechnic Institute
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Kathleen Rentsch	Dr. Art Heinricher
Dean, School of Business, Engineering	Dean of Undergraduate Studies
& Technology	Worcester Polytechnic Institute
Quinsigamond Community College	•
Dadle h Bigonaly, Dadbeh Bigonaly, Professor of Engineering and Sciences Quinsigamond Community College	Dr. Oluwole Soboyejo Dean of Engineering Worcester Polytechnic Institute
Cal de la Don	Oxel Co
Daniel de la Torre	Julie Chapman
Coordinator of Transfer & Articulation	Director of Recruitment Partnerships
Quinsigamond Community College	Worcester Polytechnic Institute
Confirmed date of agreement signed by all parties:	5/1/2018
Initials:	

#### APPENDIX A

## QCC to WPI Engineering Articulation Agreement

#### **QCC COURSES**

## WPI EQUIVALENT

#### **CHEMISTRY**

CHM 123 CH 1010 Chemical Properties, Bonding, & Forces CHM 124 CH 1030 Kinetics, Equilibrium & Thermodynamics

CHM 123 & 124 CH 1010 Chemical Properties, Bonding, & Forces; CH 1020

Chemical Reactions, & 1030 Kinetics, Equilibrium &

Thermodynamics

## **COMPUTER SCIENCE**

CSC 221 CS 1000 General Elective

#### **ENGINEERING**

ERG 101 ES 1310 Engineering Graphics
ERG 211 ES 2001 Introduction to Materials Science
ERG 221 ES 2501 Introduction to Static Systems
ERG 223 ES 3001 Introduction to Thermodynamics

ERG 225 ES 2502 Stress Analysis or CE 2001 Analytical Mechanics

## **MATHEMATICS**

**MAT 233** MA 1021 Calculus I **MAT 234** MA 1022 Calculus II **MAT 235** MA 1024 Calculus IV MAT 233, 234 MA 1021-1023 Calculus I-III MAT 233, 234, 235 MA 1021-1024 Calculus I-IV **MAT 237** MA 2611 Applied Statistics I **MAT 238** MA 2051 Ordinary Differential Equations **MAT 243** MA 2071 Matrices and Linear Algebra

#### Special Note:

All Math courses, with the exception of MAT 243, require a grade of "B" or better to transfer. A "C" or better is required for MAT 243.

#### **PHYSICS**

PHY 105
PH 1110 General Physics - Mechanics
PHY 106
PH 1000 General Physics elective credit
PHY 205
PH 1120 General Physics - Electricity & Magnetism

### **HUMANITIES AND ARTS**

ENG 101 WR 1010 Elements of Writing ENG 102 EN 1251 Introduction to Literature

In addition to the above, courses taken in the subjects below\* will transfer towards the Humanities and Arts requirement at WPI. Please note that only courses taken at the 100 level or higher are approved for transfer. In addition, students can only transfer elementary level language courses if they plan to fulfill the WPI Humanities and Arts requirement in that foreign language. Please note: All courses require a grade of "B" or better to transfer.

\*Art, Arabic, Mandarin, English, German, History, Humanities, Music, Philosophy, Religion, Spanish, and Theatre

#### **SOCIAL SCIENCES**

The social science courses are not included in the articulation agreement and will be evaluated on an individual basis.

## QCC to WPI Engineering Articulation Agreement

QCC Course #	QCC Course Title	WPI Course #	WPI Course Title
	5	Semester 1	
CHM 123	Principles Of Chemistry for Engineers I	CH 1010	Molecularity*
CSC 221	C++ for Scientists & Engineers	CS 1000	General Elective
ENG 101	Composition I	WR 1010	Elements of Writing
ERG 101	Engineering Graphics	ES 1310	Introduction to Computer Aided Design
MAT 233	Calculus I	MA 1021	Calculus I **
		Semester 2	
CHM 124	Principles of Chemistry for Engineers II	CH 1030	Equilibrium*
ENG 102	Composition II	EN 1251	Introduction to Literature
MAT 234	Calculus II	MA 1022	Calculus II **
PHY 105	General Physics I	PH 1110	General Physics—Mechanics
***	Social Science Elective	***	***
	S	Semester 3	
ERG 211	Introduction to Materials Science	ES 2001	Introduction to Materials Science
ERG 221	Statics	ES 2501	Introduction to Static Systems
MAT 235	Calculus III	MA 1024	Calculus IV **
MAT 237	Probability and Statistics for Engineers & Scientists	MA 2611	Applied Statistics I
PHY 106	General Physics II	PH 1000	General Elective
	S	Semester 4	
ERG 223	Thermodynamics	ES 3001	Introduction to Thermodynamics
ERG 225	Strength of Materials	ES 2502	Stress Analysis
MAT 243	Linear Algebra	MA 2071	Matrices and Linear Algebra I
PHY 205	General Physics III	PH 1120	General Physics—Electricity and Magnetism

<sup>\*</sup>Earning a B or better in both CHM 123 and CHM 124 at QCC will result in the receiving transfer credit for CH 1010, CH 1020, and CH 1030 at WPI.

<sup>\*\*</sup>Earning a B or better in all courses of the calculus series at QCC (MAT 233, MAT 234, and MAT 235) will result in receiving transfer credit for MA 1021, MA 1022, MA 1023, and MA 1024 at WPI.

<sup>\*\*\*</sup>The Social Science elective is not included in the articulation agreement and will be evaluated on an individual basis.