and UNIVERSITY OF DELAWARE

PROGRAM ARTICULATION AGREEMENT

Bachelor of Science in Chemistry

Master of Science in Materials Science and Engineering

Fall 2023 through Spring 2027

Baccalaureate-Master's Program Articulation Agreement

between

DELAWARE STATE UNIVERSITY
and
University of Delaware
for
Bachelor of Science in Chemistry
to
Master of Science in Materials Science and Engineering

AGREEMENT

WHEREAS Delaware State University (DSU) and University of Delaware (UD) are committed to expanding educational opportunities for the citizens of the State of Delaware, and

WHEREAS the two institutions are committed to providing a smooth transition for students wishing to earn a bachelor's degree and a master's degree, and

WHEREAS the intent of the two institutions is to avoid duplication of curricula where appropriate within articulated programs of studies, and

WHEREAS the two institutions better serve the educational growth of students and the economic development of the community through cooperative educational planning and optimal utilization of community resources,

BE IT HEREWITH RESOLVED that this agreement commits the partners to full support of an articulation process between similar academic programs offered by the two institutions.

PROVISIONS OF THE AGREEMENT

- 1. This program articulation agreement applies to the Delaware State University Bachelor of Science degree in Chemistry and the University of Delaware Master of Science in Materials Science and Engineering.
- 2. The institutions agree to follow the connected degree curriculum delineated in this document, which will allow qualified students to earn a Bachelor of Science in Chemistry degree from Delaware State University and a Master of Science in Materials Science and Engineering degree from the University of Delaware.
- 3. Both institutions will cooperate toward developing, disseminating, and presenting the articulated program information to students.
- 4. DSU and UD will strive to create academic and co-curricular opportunities with DSU students selected for this program. This will include co-advisement by DSU-UD academic advising staff and other curricular/co-curricular activities such as: summer internships, research opportunities, invitations to select College and Department level events; and access to RISE Program services.
- 5. Delaware State University will develop and maintain a selection process for students who express an interest in this articulated degree that may involve achieving grades in specified courses, participation in a "first summer" experience, etc. Staff from the UD Materials Science and Engineering department will be jointly involved in the selection process.
- 6. Students will be accepted into the Master of Science in Materials Science and Engineering program at the University of Delaware under these conditions: completion of all articulated credits for the Bachelor of Science degree in Chemistry (93 credits) at DSU and earning a minimum cumulative GPA of 3.3. Upon the sole discretion of the Materials Science and Engineering Department at the University of Delaware, those who fail to meet the stated requirements may still be admitted based upon other appropriate strengths. DSU will provide confirmation of the completion of articulated coursework upon student's final semester of coursework at DSU.
- 7. All articulated course credits earned at the University of Delaware with a grade of C or better will be accepted at Delaware State University for transfer and credit toward the Bachelor of Science in Chemistry degree according to the articulation agreement. Delaware State University requires 121 credits for the Bachelor of Science in Chemistry degree; therefore, a minimum of 28 credits will typically need to be transferred from the University of Delaware to meet this requirement. For this program, DSU's Residency Requirement stating the last 30 credit hours must be taken at DSU will be waived, and the transfer of these courses is under

- the discretion of the DSU's Dean for Agriculture, Science and Technology and the DSU Registrar.
- 8. Students who have attended a college or university other than DSU and transferred credits to DSU in pursuit of the bachelor's degree program will be evaluated on a case-by-case basis for eligibility into this program. In rare cases, students may be required to take additional courses to address any eligibility concerns. It is expected that students will complete all coursework in the UD portion of the agreement at UD.
- 9. The 6 credits of dual-counted UG/Master's coursework taken at UD must be completed with a B- or better grade to count toward the Master's degree.
- 10. Students intending to participate in this articulation program should complete the UD Graduate Admissions application during the Spring of their third year.
- 11. Students are subject to all specific policies pertaining to the Master of Science in Materials Science and Engineering program at UD governed by the rules for the thesis or non-thesis option. Choosing the thesis option may extend time to degree completion. Matriculated students will be assigned an academic advisor upon matriculation at UD.
- 12. Students are subject to all the policies and procedures of both institutions and the specific policies of this articulation agreement. This includes applying for graduation at Delaware State University. Students must have earned the Bachelor's degree at DSU prior to applying for graduation at the University of Delaware.
- 13. Delaware State University will provide a letter when the Bachelor's degree requirements have been met. The letter will be required for the students to file an Application for Advanced Degree for the Master of Science Degree in Materials Science and Engineering at UD. Students will provide, via DSU, an official transcript to the University of Delaware Graduate College once the bachelor's degree has been awarded.
- 14. This articulation agreement is based on the present curricula contained in this document and it is effective as of the date of the final signature and shall remain in place through May 31, 2027. This agreement may be terminated in writing by either party with at least three months' notice. In such an event, students already accepted into the program by the date of termination will be permitted to progress through the program.
- 15. Changes made to the Delaware State University Chemistry curriculum articulated in this document will be evaluated by the Department of Materials Science and Engineering at the University of Delaware to ensure the suitability of any curriculum changes for the connected degree program. Any such changes by

- Delaware State University and acceptance of those changes by the University of Delaware will be documented in an addendum to this agreement
- 16. Both institutions at any time may initiate changes to this articulation agreement. Both institutions reserve the right to modify the programs as deemed necessary and agree to inform the appropriate individuals of said changes. The DSU-UD Dual Degree Steering Committee will review all agreements and proposed curricular changes to be presented by the respective departments by July 1 of each year. Any outcomes requiring academic approval will be managed by the respective Deans. The University of Delaware will honor this articulation agreement for any DSU student who enrolls in the Bachelor of Science in Chemistry degree program during the period specified in this agreement and matriculates at UD for the Master of Science program within eight (8) years of the signing of this agreement by both parties.
- 17. Students who apply to this program are responsible for all tuition, fees, and living expenses that are applicable to their curriculum and enrollment. These charges may be partially or wholly reduced by scholarships, grants, or other financial tools.
- 18. 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, and 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.
- 19. 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.
- 20. This Agreement is not intended to and does not create any contractual rights or obligations with respect to the signatory agencies or any other parties. Any dispute arising hereunder shall be submitted to the Presidents of the respective universities for final resolution.
- 21. This Agreement represents the entire understanding between the parties. This Agreement shall only be modified in writing with the same formality as the original Agreement.

CONNECTED DEGREE CURRICULUM

Suggested Course Sequence

Bachelor's Degree Program: Bachelor of Science in Chemistry, DSU Master's Degree Program: Master of Science in Materials Science and Engineering, UD

FRESHMAN FALL SEMESTER (DSU)			FRESHMAN SPRING SEMESTER (DSU)		
Course	Course Name	CR	Course	Course Name	CR
CHEM 101	General Chemistry I	4	CHEM 102	General Chemistry II	4
ENGL 121	Rhetoric and Composition I	2	ENGL 123	Rhetoric and Speech	3
ENGL 122	Rhetoric and Composition	2	ENGL 124	Rhetoric, Research, and Comp III	2
MTSC 251	Calculus I	4	MTSC 252	Calculus II	4
CHEM 191	University Seminar I	1	CHEM 192	University Seminar II	1
XXXX XXX	History Elective	3	KINE 101	Fitness and Wellness	2
			XXXX XXX	Arts/Humanities Elective	3
	Total Credits	16		Total Credits	19
SOPHOMORE	FALL SEMESTER (DSU)		SOPHOMORE	SPRING SEMESTER (DSU)	
Course	Course Name	CR	Course	Course Name	CR
CHEM 210	Organic Chemistry I	4	CHEM 211	Organic Chemistry II	4
CHEM 305	Analytical Chemistry	4	ENGL 200	Speech	3
PHYS 201 or 211	General Physics I or Fundamentals of Physics	4	PSYC 201	Introduction to General Psychology	3
XXXX XXX	Arts/Humanities Elective	3	PHYS 202 or 212	General Physics II or Fundamentals of Physics	4
	Total Credits	15		Total Credits	14
JUNIOR FALL	SEMESTER (DSU)		JUNIOR SPRIN	G SEMESTER (DSU)	
Course	Course Name	CR	Course	Course Name	CR
CHEM 303	Physical Chemistry I	4	CHEM 304	Physical Chemistry II	4
GLOB 395	Global Societies	3	CHEM 306	Instrumental Analysis	4
CHEM 403	Biochemistry	4	CHEM 308	Inorganic Chemistry	4
ENGL 2XX	Literature Elective	3	XXXX XXX	Elective	3
CHEM 310	Environmental Chemistry	3			
				Total Credits	

IVIASTER 3 D	EGREE FIRST SEMESTER (UD)		IVIASTER'S DE	GREE SECOND SEMESTER (UD)	
Course	Course Name	CR	Course	Course Name	CR
MSEG 608	Structure and Properties of Materials I (Dual counts toward DSU UG degree and UD graduate degree.)	3	XXXX XXX	Elective (Counts toward DSU UG degree.)	3
MSEG 303	Introduction to Polymers (Counts toward DSU UG degree.)	3	MSEG 835	Principles to Polymer Physics (Count as open elective at UD.) (Dual counts toward DSU UG degree and UD graduate degree.)	3
XXXX XXX	UG Elective (Counts toward DSU UG degree.)	3	XXXX XXX	Elective (Counts toward DSU UG degree.)	3
MSEG 466 or MSEG 401 or XXXX XXX	Independent Study (counts for DSU CHEM 405) or Design of Materials and Their Application (only with permission of instructor) or Transfer course (Counts toward DSU UG degree.)	6	XXXX XXX	Elective (Counts toward DSU UG degree.)	3
			xxxx xxx	Elective (Counts toward DSU UG degree.)	3
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	Total Credits	15		Total Credits	15
MASTERS DE	EGREE THIRD SEMESTER (UD)		MASTERS DE	GREE FOURTH SEMESTER (UD)	
Course	Course Name	CR	Course	Course Name	CR
MSEG 803	Equilibria in Materials Systems	3	MSEG 804	Kinetics in Materials Systems	3
MSEG 832	Principles of Polymerization	3	XXXX 6XX Or XXXX 8XX	Technical Elective (chosen in consultation with advisor)	3
XXXX 6XX Or XXXX 8XX	Tech Elective (chosen in consultation with advisor)	3	XXXX 6XX Or XXXX 8XX	Technical Elective (chosen in consultation with advisor) or Thesis	3
XXXX 6XX Or XXXX 8XX	Tech Elective (chosen in consultation with advisor) or Thesis	3	XXXX 6XX Or XXXX 8XX	Technical Elective (chosen in consultation with advisor)	3
	Total Credits	12		Total Credits	12
	TOTAL DSU UG CREDITS	96		TOTAL UD CREDITS	54
				TOTAL DUAL DEGREE CREDITS	150

APPROVAL

This program articulation agreement is between DSU's Bachelor of Science in Chemistry and UD's Master of Science in Materials Science and Engineering.

Approval is granted for a period of five years effective on the date both parties have signed this agreement

DELAWARE STATE UNIVERSI	TY	UNIVERSITY OF DELAWARE	
<u>Dr. Saundra Delauder</u> Dr. Saundra F. DeLauder, Provost	3/27/2023 Date	7:42 AM PDFLAURA Carlson Dr. Laura Carlson, Provost	3/31/2023 10:56 A Date
Dr. Cherese Winstead, Dean, College of Agriculture, Science, and Technology	3/27/2023 Date	Dr. Levi T. Thompson, Dean, College of Engineering, and Elizabeth Inez Kelley Professor, Chemical & Biomolecular Engineering	3/31/2023 10:56 A Date
Dr. Sabrina McGary, Interim Chair Department of Chemistry Antonio Boyle	3/27/2023 Date 3/27/2023	7:42 AM PDJoshua M. Q. Edu Dr. Joshua Zide, Chair Materials Science and Engineering 7:42 AM PDT	3/31/2023 10:56 / Date
Mr. Antonio Boyle, Vice President Enrollment Management	Date		