AGREEMENT OF COOPERATION

TO ESTABLISH A COOPERATIVE EDUCATION PROGRAM AGREEMENT

BETWEEN

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY,

UNITED STATES OF AMERICA

AND

NATIONAL SUN YAT-SEN UNIVERSITY,

KAOHSIUNG, TAIWAN, R.O.C.

This Agreement of Cooperation ("Agreement") is between Rutgers, The State University of New Jersey on behalf of its School of Engineering and its School of Graduate Studies ("RUTGERS"), and National Sun Yat-sen University ("NSYSU") on behalf of its College of Engineering. The purpose of this Agreement is to establish a 3+2 cooperative bachelor's/master's degree program ("Program") between the two institutions, and stipulate the terms and conditions for the administration of this Program.

ARTICLE 1: PROGRAM DESCRIPTION

1.1 The institutions agree to institute a cooperative education program whereby qualified students may earn a specified bachelor's degree from NSYSU and a specified master's degree from RUTGERS by completing three years of coursework at NSYSU and two years of coursework at RUTGERS.

1.2 At NSYSU, the participants in the Program will be limited to enrollment in existing Bachelor of Science degree programs in the specified departments at the NSYSU. These departments are listed in Appendix I.

1.3 At RUTGERS, the participants in the Program will be limited to enrollment in master's degree programs at the School of Engineering. These programs are listed in Appendix II.

1.4 Students who have been accepted by and enrolled at NSYSU as undergraduate students will complete six semesters of the usual eight-semester Bachelor of Science programs at NSYSU. If accepted into the Program, students will be permitted by NSYSU to complete their final two semesters of study towards the NSYSU Bachelor of Science degree at RUTGERS, while enrolled in the first year of study towards the RUTGERS Master of Science degree.

1.5 Credits earned for courses successfully completed at RUTGERS will be applied toward students' Master's degree from RUTGERS according to standard policies and practices at RUTGERS. Credits earned for courses successfully completed at RUTGERS may be applied toward students' NSYSU Bachelor of Science degree at the discretion of, and according to the policies and standards established by NSYSU.

1.6 The two institutions have established independently their own degree completion requirements for both the Bachelor of Science degree program at NSYSU and the Master's degree program at RUTGERS. Students participating in the Program must satisfy all degree requirements of both institutions in order to successfully complete the Program and be awarded both credentials.

1.7 The two institutions have established independently their own minimum qualifications, application review criteria, and prerequisite requirements for all applicants to both the Bachelor of Science degree at NSYSU and the Master's degree at RUTGERS. Both institutions will apply these existing requirements and criteria in determining the acceptability of all applicants to the Program.

ARTICLE 2: NUMBERS

2.1 The number of students admitted to the Program may be negotiated by the institutions on an annual basis, and may be contingent upon number of qualified applicants, number of spaces available in the specified undergraduate or graduate programs at either institution, or other considerations.

2.2 For the first semester of the Program, beginning in Fall 2024, the institutions plan on admitting up to thirty (30) qualified NSYSU students.

ARTICLE 3: NOMINATION OF PARTICIPANTS AND ENROLLMENT

3.1 NSYSU will screen students at the end of their second year of undergraduate education for potential participation in the program, and recommend these candidates to RUTGERS.

- 3.2 All potential candidates for participation in the Program must:
 - 3.2.1 Have completed 75% of their degree requirements for a Bachelor of Science degree from NSYSU and have earned a cumulative GPA of at least 3.0/4.0 (or equivalent), or rank among the top 30% of their school, by the time of their enrollment at RUTGERS.
 - 3.2.2 Satisfy the minimum English language proficiency requirements for acceptance into graduate programs at RUTGERS. This minimum proficiency may be demonstrated by providing official score reports from a Test of English as a Foreign Language (TOEFL) or from an International English Language Testing System (IELTS) examination taken within the previous two years from the first day of class at the proposed term of entry in order to be valid. The minimum English language proficiency requirement for full status admission can be found at http://gradstudy.rutgers.edu/information/international-students.
 - 3.2.3 Take a placement test on English language before the start of the first semester at RUTGERS as required for all admitted first-year international graduate students. The students with unsatisfactory scores on the test will be required to take extra English course(s) at appropriate levels.

- 3.2.4 Understand that admission to Rutgers University is based on academic qualifications. In addition, an appropriate visa is required to enable international students to study in the U.S. Eligibility for the visa ultimately is decided by a U.S. visa officer pursuant to the requirements of U.S. immigration law.
- 3.2.5 Carry health insurance at a level equivalent to or greater than the coverage offered at RUTGERS for international students. Students visiting RUTGERS must provide evidence of an insurance policy that is compliant with the Affordable Care Act, or purchase the Rutgers Student Health Insurance program available at the time of enrollment. They will be exempted from purchasing health insurance only upon providing acceptable evidence of equivalent insurance. RUTGERS shall bear no responsibility for any health-related expenses incurred by an exchange student. Additionally, participating students must provide evidence of the COVID-19 and other mandatory vaccinations.

3.3 At RUTGERS, students accepted into the Program will be conditionally admitted. Upon being awarded a Bachelor of Science degree from NSYSU, participants will continue as graduate students in the Master's of Science degree programs in the specified Graduate Program at RUTGERS.

3.4 Upon completion of their first semester of study at RUTGERS, students participating in the Program may petition their host graduate program at RUTGERS to convert their Master of Science degree program from a non-thesis program to a Master of Science degree with thesis option. Acceptance into a thesis-option program will be at the discretion of the host program at RUTGERS, and contingent on the student's academic performance at RUTGERS.

3.5 Should a Master's student wish to apply to continue for the Ph.D., the student shall do so by completing the Form for Change of Degree Status and/or reapplying for admission to the PhD Program (at the discretion of the department) and asking for the required approvals indicated on that form. This request can be made at any time during their studies, but not before the end of their first year at RUTGERS.

3.6 A student who enrolls in this program is not guaranteed to graduate and receive a Master of Science degree in the specified departments by the end of second year at RUTGERS if the student is unable to complete the program requirements due to academic reasons, deficiency in English language, or financial hardship.

ARTICLE 4: RESPONSIBILITIES OF RUTGERS

4.1 RUTGERS will provide NSYSU with the information and materials necessary to advertise and promote this Cooperative Education Program among their undergraduate students.

4.2 RUTGERS will accept applicants from NSYSU and enroll them as full-time, degreeseeking graduate students in the regular Master of Science degree program in the specified departments, provided those candidates meet the normal standards and criteria for admission to the programs. 4.3 RUTGERS agrees to accept applications from NSYSU undergraduate students in the specified Master of Science degree programs at RUTGERS, prior to completion of their Bachelor of Science degree program at NSYSU with the understanding that the participating students will enroll at RUTGERS in their first two semesters of graduate study concurrently with the completion of their last two semesters of undergraduate study at a RUTGERS campus. NSYSU undergraduate students participating in the Program will not be eligible to complete the Master of Science degree program at RUTGERS unless and until they have been awarded a Bachelor of Science degree by NSYSU.

4.4 RUTGERS agrees to provide NSYSU with a report of courses completed and grades attained by each participating student during the first two semesters of their study at RUTGERS. NSYSU will assign credit toward each student's NSYSU Bachelor of Science degree program at their own discretion and according to their own policies and procedures.

ARTICLE 5: RESPONSIBILITIES OF NSYSU

5.1 NSYSU agrees to advertise and promote the Program among their students, and to encourage and facilitate applications to the program by outstanding students.

5.2 NSYSU agrees to provide RUTGERS with a roster of applicants to the program by January 15th of the year of intended enrollment.

5.3 NSYSU agrees to award a Bachelor of Science degree to students participating in this program upon successful completion of their first two semesters of coursework at RUTGERS, provided that the students have satisfied all other academic requirements and financial obligations established by NSYSU for completion of the degree program.

ARTICLE 6: FINANCE AND SERVICES

6.1 Students participating in the Program will be required to register as full-time, degreeseeking students each semester, and will be subject to the standard tuition and fees assessed by the institution hosting the students during the semester. At RUTGERS, NSYSU students will be responsible for full, non-resident tuition and fees charged by the School of Graduate Studies, as assessed to all other non-resident enrollees.

6.2 The Host Institutions will not be responsible for the following costs incurred by students:

- 6.2.1 transportation to and from the Host Institution;
- 6.2.2 room and board expenses;
- 6.2.3 textbooks, clothing, and personal expenses;
- 6.2.4 student service fees, including adequate health insurance coverage, which are typically assessed to all full-time students by the institution hosting the student in any given semester;
- 6.2.5 passport and visa costs; and
- 6.2.6 all other debts incurred during the course of the year.

AUTHORIZED SIGNATORIES. Each institution represents that the individuals signing this Agreement have the authority to sign in the capacity indicated.

FOR RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

Alberto Cuitiño, Dean School of Engineering

Date: 4/18/2024

Mark G. Robson, Dean School of Graduate Studies

Date:

Francine Conway, Chancellor Rutgers University–New Brunswick

Date: 4-18-2024

Prabhas V. Moghe Executive Vice President for Academic Affairs

Date:

FOR NATIONAL SUN YAT-SEN UNIVERSITY

Ghao-Wel 640

Shiao-Wei Kuo, Dean College of Engineering

5 xx Date:

Mitch Chou, Vice President Office of International Affairs

18. 2024 Date:

Ying-Yao Cheng, President

4. 4.18 Date:

6.3 Other than as expressly provided herein, no funds shall be exchanged between the Parties without an addendum hereto or a separate agreement enumerating the specific cost and expense related thereto.

ARTICLE 7: DURATION

This Agreement shall remain in force for a period of five (5) years from the date of the last signature, with the understanding that it may be terminated by either institution providing sixty (60) days' advance written notice to the other. Students participating in this exchange at the time of the intended termination will be permitted to complete the agreed upon exchange period at the Host Institution.

ARTICLE 8: GENERAL MATTERS

8.1 USE OF NAMES. Neither institution will use the name of the other in any form of advertising or publicity without the other's express written permission. NSYSU must seek permission from RUTGERS by submitting the proposed use, well in advance of any deadline, to the Office of the Dean, School of Engineering, Rutgers University.

8.2 AMENDMENTS. The institutions may amend this Agreement only by writing, and signed by each institution's authorized signatory.

8.3 COUNTERPARTS. The institutions may sign this Agreement in counterparts, all of which together constitute the complete Agreement.

8.4 DISCRIMINATION. Both institutions subscribe to a policy of equal opportunity and will not discriminate on the basis of race, color, gender identity or expression, age, marital status, ethnicity, religion, national origin, sexual orientation, or disability, or any other category covered by law in its admission, programs, activities, or employment matters.

8.5 NOTICES. Any notice given under this Agreement must be in writing and will be effective upon receipt evidenced by: (a) confirmed facsimile transmission; (b) return receipt of postage prepaid registered or certified mail; or (c) delivery confirmation by commercial overnight carrier. All communications will be sent to the addresses set forth below or to such other address designated by the parties by written notice to the other:

RUTGERS:	Dr. Hae Chang Gea Associate Dean for Graduate and Professional Education School of Engineering Richard Weeks Hall of Engineering Suite 405 500 Bartholomew Road, Piscataway, NJ 08854-8099 USA Tel: (+1) 848-445-5234 email: gea@soe.rutgers.edu
NSYSU:	Dr. Wei-Hsiang Chen Associate Dean College of Engineering70, Lien-hai Road, Kaohsiung 804201, Taiwan Tel: (+886) 7-525 2000 ext. 4421 email: whchen@mail.nsysu.edu.tw

APPENDIX I

List of NSYSU Bachelor's Degree Programs for 3+2 Program

Bachelor of Science in the following majors

- 1) Department of Computer Science and Engineering
- 2) Department of Electrical Engineering
- 3) Department of Materials and Optoelectronic Sciences
- 4) Department of Mechanical and Electro-Mechanical Engineering
- 5) Department of Photonics

APPENDIX II

List of Rutgers Master's Degree Programs for 3+2 Program

- 1) Electrical and Computer Engineering (ECE) (2-year program, 30 credits: 3cr/9cr/9cr/9cr)
- 2) Industrial and Systems Engineering (ISE) (2-year program, 30 credits: 3cr/9cr/9cr)
- 3) Materials Science and Engineering (MSE) (2-year program, 30 credits: 6cr/6cr/9cr/9cr)
- 4) Mechanical and Aerospace Engineering (MAE) (2-year program, 30 credits: 6cr/6cr/9cr/9cr)

Rutgers Electrical and Computer Engineering (ECE) Graduate Programs (Year 4 - Year 5)

14:3	332:xxx	Departmental Elective ^{1,2} (prepare students for their Capstone Design Elective course in the Spring)	3cr	14:332:xxx	Capstone Design Elective ^{1,2}	3cr
14:3	332:xxx	Departmental Elective ^{1,2} (prepare students for their Capstone Design Elective	3cr		Graduate Course 2 ³ Graduate Course 3 ³	3cr
		course in the Spring)			Graduate Course 3*	3cr
14:3	332:449	Intro to Capstone Course ⁵	3cr		Graduate Course 4 ³	3cr
		Graduate Course 1 ³			Graduate Course 4	501

4th Year Fall Semester (12cr)⁴

4th Year Spring Semester (12cr)⁴

5th Year Fall Semester³ (9cr)⁴

5th Year Spring Semester³ (9cr)⁴

	Graduate Course 5	3cr		Graduate Course 8	3cr
	Graduate Course 6	3cr		Graduate Course 9	3cr
	Graduate Course 7 (or M.Sc. Thesis Research)	3cr		Graduate Course 10 (or M.Sc. Thesis Research)	3cr
16:332:699	ECE Colloquium	0cr	16:332:699	ECE Colloquium	0cr

Students are required to complete 12 upper-level undergraduate course credits (14:332:xxx, including the Capstone Design Elective) and 30 graduate course credits at ECE.

- 1. Refer to the ECE Undergraduate Handbook for the capstone design tracks and the required courses.
- 2. Courses that can be used to meet the undergraduate degree requirements at NSYSU.
- 3. Graduate Courses completed during the 4th year are not to be used to fulfill the students' undergraduate degree requirements at NSYSU.
- 4. Students must take at least 9 credits each semester in order to maintain the full-time status. Students are allowed to take 12 or more credits per semester.
- 5. Pre-requisite of Linear Systems and Signals (14:332:345) must be met at Rutgers or at home university before enrolling in Intro to Capstone (14:332:449).

Master of Science degree candidates may follow either a thesis or a non-thesis program of study. Students following the thesis program must choose a thesis advisor who will supervise their research project. Refer to the <u>ECE Graduate Handbook</u> for the details on the official requirements.

- A. The thesis program requires 24 credits of coursework, 6 credits of research leading to a master's thesis, and the final defense of the thesis.
- B. In the non-thesis program, the candidate must complete 30 credits of coursework with a minimum grade point average of 3.0, and write an essay/report which must be presented in public as a seminar and approved by at least three members of the ECE Graduate Faculty.
- C. At least 15 credits for the thesis option and 21 credits for the non-thesis option must be fulfilled by the required and elective courses that are *relevant* to the student's area of specialization. The elective courses

must be *approved* by the student's advisor or the graduate director before registration. A list of recommended electives is provided under each area of specialization.

D. ECE has a For-Credit Internship program, which students can pursue after the summer of their fourth year for three credits. If pursuing this option, students will either not take a graduate course in the first semester or only take three graduate courses in the second semester.

All Master of Science students are required to take 2 semesters of 16:332:699 Colloquium in Electrical and Computer Engineering. In order to be graded "Satisfactory," students must attend 80% of the lectures (attendance is taken).

Rutgers Industrial and Systems Engineering (ISE) Graduate Programs (Year 4 - Year 5)

	14:540:xxx	Senior Design I ^{1,2}	3cr		14:540:xxx	Senior Design II ^{1,2}	3cr
	14:540:xxx	Departmental Elective ^{1,2}	3cr			Graduate Course 2 ³	3cr
						Graduate Course 3 ³	3cr
		Graduate Course 1 ³	3cr			Graduate Course 4 ³	3cr

4th Year Fall Semester (9cr)⁴

4th Year Spring Semester (12cr)⁴

5th Year Spring Semester³ (9cr)⁴

5th Year Fall Semester³ (9cr)⁴

	Graduate Course 5	3cr	1.00		Graduate Course 8	3cr
	Graduate Course 6	3cr			Graduate Course 9	3cr
	Graduate Course 7 (or M.Sc. Thesis Research)	3cr			Graduate Course 10 (or M.Sc. Thesis Research)	3cr
16:540:691	Seminar	0cr	1993	16:540.:692	Seminar	0cr

Students are required to complete 9 upper-level undergraduate course credits (14:540:xxx, including the Senior Design Elective) and 30 graduate course credits at ISE.

- 1. Refer to the ISE Undergraduate Handbook for the capstone design tracks and the required courses.
- 2. Courses that can be used to meet the undergraduate degree requirements at NSYSU.
- 3. Graduate Courses completed during the 4th year are not to be used to fulfill the students' undergraduate degree requirements at NSYSU.
- 4. Students must take at least 9 credits each semester in order to maintain the full-time status. Students are allowed to take 12 or more credits per semester.

Master of Science degree candidates may follow either a thesis or a non-thesis program of study. Students following the thesis program must choose a thesis advisor who will supervise their research project. Refer to the <u>ISE Graduate Handbook</u> for the details on the official requirement.

- A. The thesis program requires 24 credits of course work, 6 credits of research leading to a master's thesis, and the final defense of the thesis.
- B. In the non-thesis program, the candidate must complete 30 credits of course work with a minimum grade point average of 3.0, and write an essay/report which must be presented in public as a seminar and approved by at least three members of the ISE Graduate Faculty.
- C. At least 15 credits for the thesis option and 21 credits for the non-thesis option must be fulfilled by the required and elective courses that are *relevant* to the student's area of specialization. The elective courses must be *approved* by the student's advisor or the graduate director before registration. A list of recommended electives is provided under each area of specialization.

All Master of Science students are required to take 2 semesters of 16:540:691/692 Seminar in ISE. In order to be graded "Satisfactory," students must attend 80% of the lectures (attendance is taken).

Rutgers Materials Science and Engineering (MSE) Graduate Programs (Year 4 - Year 5)

14.625.412	Series Design II2		14.625.411
14:635:412 or	Senior Design I ^{1,2} or	3cr	14:635:411 or
14:635:402	Senior Lab ^{1,2}		14:635:401
14:xxx:xxx	Departmental Elective ^{1,2}	3cr	
	Graduate Course 1 ³	3cr	

4th Year Fall Semester (9cr)⁴

4th Year Spring Semester (12cr)⁴

3cr

Senior Design II^{1,2}

Senior Lab^{1,2}

or

Graduate Course 233crGraduate Course 333crGraduate Course 433cr

5th Year Spring Semester³ (10cr)⁴

5th Year Fall Semester³ (10cr)⁴

	Graduate Course 5	3cr		Graduate Course 8	3cr
	Graduate Course 6	3cr		Graduate Course 9	3cr
	Graduate Course 7 (or M.Sc. Thesis Research)	3cr		Graduate Course 10 (or M.Sc. Thesis Research)	3cr
16:635:601	Materials Seminar	1cr	16:635:602	Materials Seminar	1cr

Students are required to complete 9 upper-level undergraduate course credits (14:635:xxx, including the Capstone Design/Lab Elective) and 30 graduate course credits at MSE.

- 1. Refer to the MSE Department Website for the capstone design/lab tracks and the required courses.
- 2. Courses that can be used to meet the undergraduate degree requirements at NSYSU.
- 3. Graduate Courses completed during the 4th year are not to be used to fulfill the students' undergraduate degree requirements at NSYSU.
- 4. Students must take at least 9 credits each semester in order to maintain the full-time status. Students are allowed to take 12 or more credits per semester.

Master of Science degree candidates may follow either a thesis or a non-thesis program of study. Students following the thesis program must choose a thesis advisor who will supervise their research project. Refer to the <u>MSE Department Website</u> for the details on the official requirement.

- A. The thesis program requires 24 credits of course work, 6 credits of research leading to a master's thesis, and the final defense of the thesis.
- B. In the non-thesis program, the candidate must complete 30 credits of course work with a minimum grade point average of 3.0, and write an essay/report which must be presented in public as a seminar and approved by at least three members of the Department Graduate Faculty.
- C. At least 15 credits for the thesis option and 21 credits for the non-thesis option must be fulfilled by the required and elective courses that are *relevant* to the student's area of specialization. The elective courses must be *approved* by the student's advisor or the graduate director before registration. A list of recommended electives is provided under each area of specialization.

All Master of Science students are required to take 2 semesters of 16:635:601/602 Materials Seminar. In order to be graded "Satisfactory," students must attend 80% of the lectures (attendance is taken).

Rutgers Mechanical & Aerospace Engineering (MAE) Graduate Programs (Year 4 - Year 5)

4th Year Fall Semester (11cr)⁴

4th Year Spring Semester (11cr)⁴

14:650:467	Design & Manufacturing I	2cr
14:650:xxx	MAE Elective	3cr
	Graduate Course 1 ³	3cr
	Graduate Course 2 ³	3cr

14:650:468Design & Manufacturing II1.22cr14:650:xxxMAE Elective3crGraduate Course 333crGraduate Course 433cr

5th Year Fall Semester³ (9cr)⁴

5th Year Spring Semester³ (9cr)⁴

	Graduate Course 5	3cr		Graduate Course 8	3cr
	Graduate Course 6	3cr		Graduate Course 9	3cr
	Graduate Course 7 (or M.Sc. Thesis Research)	3cr		Graduate Course 10 (or M.Sc. Thesis Research)	3cr
16:650:608	MAE Seminar	1cr	16:650:608	MAE Seminar	1cr

Students are required to complete 10 upper-level undergraduate course credits (14:650:xxx, including the Senior Design Project) and 30 graduate course credits at MAE.

- 1. Refer to the MAE Undergraduate Handbook for the senior design projects and the required courses.
- 2. Courses that can be used to meet the undergraduate degree requirements at NSYSU.
- 3. Graduate Courses completed during the 4th year are not to be used to fulfill the students' undergraduate degree requirements at NSYSU.
- 4. Students must take at least 9 credits each semester in order to maintain the full-time status. Students are allowed to take 12 or more credits per semester.

Master of Science degree candidates may follow either a thesis or a non-thesis program of study. Students following the thesis program must choose a thesis advisor who will supervise their research project. Refer to the <u>MAE Graduate Checklist</u> for the details on the official requirement.

- A. The thesis program requires 24 credits of course work, 6 credits of research leading to a master's thesis, and the final defense of the thesis.
- B. In the non-thesis program, the candidate must complete 30 credits of course work with a minimum grade point average of 3.0, and write an essay/report which must be presented in public as a seminar and approved by at least three members of the MAE Graduate Faculty.
- C. At least 15 credits for the thesis option and 21 credits for the non-thesis option must be fulfilled by the required and elective courses that are *relevant* to the student's area of specialization. The elective courses must be *approved* by the student's advisor or the graduate director before registration. A list of recommended electives is provided under each area of specialization.

All Master of Science students are required to take a minimum of 2 credits (and maximum of 3 credits) of 16:650:608 Seminar. In order to be graded "Satisfactory," students must attend 80% of the lectures (attendance is taken).