

**Agreement to Establish a Shared-Credit (3+2) Master's Program Between
The University of New Mexico, Albuquerque, NM, USA and
Hohai University, Nanjing, China**

The Regents of the University of New Mexico (UNM) and Hohai University (HHU) agree to establish a Shared-Credit (3+2) Master's Degree called the UNM Global Engineering Scholars Program ("GES Program") as described below:

CLAUSE 1: OBJECTIVE

The purpose of this Agreement is to establish a Shared-Credit Program at the UNM School of Engineering (SOE-UNM) that allows HHU students to count up to 9 hours of undergraduate or graduate credit towards both a Bachelor of Science degree from HHU and a Master of Science degree from UNM. The goal is to provide a framework for exceptional undergraduate students enrolled in the two institutions who seek a global educational and professional experience. The objectives of the GES Program are:

- a. To encourage collaborative research and intellectual interaction between the parties through the activities of the participating students and their advisors; and
- b. To educate students with rich and meaningful experiences across nations so they become competitive in a globalized market.

CLAUSE 2: STUDENT STATUS AND RESPONSIBILITIES

- a. Students must be registered at their home universities on a full-time basis and must complete undergraduate HHU coursework equivalent to 90 UNM credit hours before starting their UNM undergraduate coursework.
- b. Students must apply to UNM as international students and be admitted under the generally applicable academic requirements, financial standards, application deadlines, and language-proficiency requirements (see Appendix A) for international graduate students. UNM waives the GRE requirement for students applying to the GES Program.
- c. Each year, HHU will pre-select 5-12 undergraduate students (before Jan 15 in their 3rd year) to apply to UNM for their 4th year of undergraduate studies. UNM's contact person at the UNM School of Engineering is responsible for evaluating student candidates pre-selected by HHU for admission into the 3+2 GES Program and notifying HHU before Feb 15 in the students' 3rd year. Those students will start their 4th year of undergraduate study at UNM in the fall semester and take 18-30 UNM undergraduate credit hours based on mutual agreement to meet the HHU BS curriculum requirement. By the end of the 4th year, their UNM credits will be transferred back to HHU to complete their BS degree, and up to 9 of these 18-30 credits will be shared for their MS degree program at UNM. The HHU students are responsible for requesting HHU's official transcripts, graduate certificates, degree certificates, and certified English translations of all these documents in one package express-mailed directly to the UNM International Admissions Office so that HHU students may continue their studies for a graduate degree without interruption.
- d. UNM's contact person will be responsible for providing HHU students' unofficial transcripts (from Lobo Web) to HHU's contact person with the students' prior written consent as prescribed by the UNM Registrar's Office (<http://registrar.unm.edu/Transcripts/transcript-request-information.html>).



- e. Students admitted to the GES Program will pay tuition and mandatory student fees at UNM, which are set each spring for the upcoming academic year by the UNM Board of Regents and are posted at <http://bursar.unm.edu/tuition-info/tuition-and-fees.html>. Discounts are available to eligible cohort groups of 10 or more students who are affiliated with an academic or governmental institution. *Discounts do not apply to the summer session, when all students pay in-state base tuition and mandatory student fee rates, nor to differential tuition, course fees, or other student and program fees.*
- f. In addition to tuition and mandatory student fees, students are responsible for:
 - 1) any applicable special course fees, lab fees, recreation fees, and any administrative fees charged to all incoming international students;
 - 2) fees for health and accident insurance that meets UNM requirements and is valid in the U.S.A. for their entire stay, including travel days. It is strongly recommended that this insurance also be valid in any third countries the students may transit or visit;
 - 3) any medical expenses that are not covered by insurance; and
 - 4) living, travel, and personal expenses.
- g. HHU students in the GES Program will have the same opportunity as other UNM international graduate students to apply for graduate assistantships or financial assistance at UNM, subject to applicable laws and policies. Admitted students will not pay tuition and fees to HHU while they are enrolled in the GES Program.
- h. Students must meet all generally applicable UNM graduation requirements.
- i. Students shall comply with U.S. immigration law and other applicable laws
- j. Students shall promptly provide all required documentation and other information needed in connection with their application for an F-1 visa or other student visa.

CLAUSE 3: PhD DEGREES AT SOE-UNM

Students who complete the GES Program and wish to pursue a PhD degree at SOE-UNM must fulfill UNM's generally applicable requirements, including but not limited to the following:

- a. Have a Master's Degree in a Science, Technology, Engineering or Math (STEM) discipline.
- b. Complete the PhD-degree credit-hour requirements at SOE-UNM.
- c. Pass the PhD qualifying exams taken at SOE-UNM.
- d. Complete an 18-credit-hour PhD dissertation (including dissertation defense).

Each department may elect, upon request by the student, to offer financial aid to an admitted student on a case-by-case basis and according to the department's merit-selection criteria for offering financial aid.

CLAUSE 4: WITHDRAWALS FROM THE PROGRAM

- a. Students working to complete a four-year Bachelor of Science degree at HHU who withdraw from the GES Program may transfer the credits they earn at UNM to HHU and apply them to their HHU BS degree.
- b. Students who do not make satisfactory academic progress may be dismissed from the GES Program in accordance with UNM policies. UNM's contact person will inform HHU of these policies.

CLAUSE 5: PROGRAM ADMINISTRATION

This program will be administered by a permanent, joint management committee, whose members are selected from the participating faculty from SOE-UNM and HHU.

CLAUSE 6: PROGRAM REVIEW

SOE-UNM and HHU agree to review the progress of this GES Program and suggest any needed modifications to the Program and/or this Agreement three years after its effective date, and every three years thereafter.

CLAUSE 7: ADDITIONAL TERMS

- a. This Agreement will become effective upon signing by both parties for an initial term of five (5) years, and shall automatically renew for successive terms of five (5) years each, unless terminated in writing as provided below.
- b. This Agreement may be amended and/or modified in a writing signed by the parties' duly authorized representatives. However, the joint management committee may modify Appendix B as needed from time to time in the normal course of the committee's oversight of academic requirements without the need to modify the clauses of this agreement.
- c. Either party may terminate this Agreement by giving the other party at least six (6) months' written notice, but any HHU students who have already been accepted at UNM will not be affected and will be allowed to complete their studies, subject to any applicable UNM policies governing the time period for degree completion.
- d. This Agreement shall be construed in accordance with the laws of the State of New Mexico.
- e. Nothing in this Agreement, express or implied, is intended to confer any rights, remedies, claims or interests upon a person not a party to this Agreement.
- f. This Agreement is signed in good faith and in accordance with the administrative rules and procedures governing each party. Therefore, any dispute that may arise concerning its interpretation and implementation will be resolved amicably through negotiations.

Both institutions declare the following addresses and contact persons for purposes of this Agreement:

HOHAI UNIVERSITY

Dr. Yiqing Guan
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UNIVERSITY OF NEW MEXICO

Dr. Wei Wennie Shu
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This document memorializes the parties' entire agreement. The parties shall sign two (2) originals of this Agreement, all contents being identical and equally valid. Each party shall retain one original.

HOHAI UNIVERSITY

**REGENTS OF THE UNIVERSITY OF
NEW MEXICO**

Xu Hui 5/26/2015
Dr. Xu Hui, President Date

Chaouki Abdallah May 6/2015
Dr. Chaouki Abdallah, Provost Date
and Executive Vice President for Academic Affairs

Joseph Cecchi 5/16/2015
Dr. Joseph Cecchi Date
Deap, UNM School of Engineering

APPENDIX A

UNM School of Engineering
Language-Proficiency Requirements for International Graduate Students¹

International students must demonstrate English language proficiency. To demonstrate English proficiency, students can take: the International English Language Testing System ([IELTS](#)), the Test of English as a Foreign Language ([TOEFL](#)), or [Cambridge CPE or CAE](#).

Minimum score requirements are listed in the table below. Official test results must be sent directly to the University of New Mexico. The TOEFL code for UNM is 4845.

	Paper Test	Computer Test	IBT
Graduate TOEFL	550	213	79-80
Graduate IELTS	6.5	6.5	6.5

The CPE or CAE test may also be accepted with a satisfactory score of C.

Exceptions to the English Proficiency Test Requirements (only one exception required):

- Completion of four years of US high school with a 2.5 GPA or better
- Bachelor's or graduate degree from an accredited institution in the United States, English-speaking Canada, the United Kingdom, South Africa, Australia, or New Zealand.
- SAT Verbal score of 480 or better (test not REQUIRED for admission)
- 1 year of full-time study (minimum 24 credit hours) at a regionally-accredited US college or university with a 3.0 GPA or higher completed within the last two years
- Completion of two semesters of freshman English composition (English 101 and 102 equivalent) with a GPA of 2.0 or higher at a regionally- accredited U.S. college or university.
- Bachelor's degree from a regionally-accredited US college or university
- Attendance in the Center for [English Language and American Culture \(CELAC\)](#) program at UNM with a passing Institutional TOEFL score and a recommendation from the CELAC program director

¹ http://geo.unm.edu/admission_grad_requirements.html

APPENDIX B

UNM School of Engineering Junior and Senior Level Courses for Undergraduate Students

C.1: Electrical and Computer Engineering (with HHU's 能源与电气学院 & 计算机与信息学院)

Course #	Title	Prerequisites	Course # for Graduate Credit
ECE412	Intro to Computer Graphics	ECE331	
ECE413	Intro to Ray & Vector Graphics	ECE331	
ECE421	Analog Electronics	ECE322L	ECE523
ECE424	Digital VLSI Design	ECE321L, ECE338	*
ECE432	Introduction to Parallel Processing.	ECE331	*
ECE435	Software Engineering.	ECE331, ECE335	
ECE437	Computer Operating Systems	ECE330	*
ECE438	Design of Computers	ECE344L, ECE338	*
ECE439	Intro to Digital Signal Processing	ECE314	*
ECE440	Intro to Computer Networks	ECE330, ECE340	*
ECE442	Intro to Wireless Communications	ECE314, ECE360	*
ECE443	Hardware Design with VHDL	ECE338	*
ECE446	Design of Feedback Control Systems	ECE345	*
ECE460	Introduction to Microwave Engineering	ECE360	ECE560
ECE463	Advanced Optics	PHYC302	*
ECE464	Laser Physics	ECE360	*
ECE469	Antennas for Wireless Communication Systems	ECE360	ECE569
ECE471	Materials & Devices II.	ECE360, ECE371	
ECE474	Microelectronics Processing		
ECE475	Introduction to Electro-Optics & Opto-Electronics	ECE371	ECE574
ECE482	Electric Drives & Transformers	ECE203, ECE213	ECE582
ECE483	Power Electronics	ECE321L, ECE371, ECE381	ECE583
ECE484	Photovoltaics	ECE381, MATH121	ECE584
ECE488	Smart Grid Technologies [Future Energy Systems]	ECE381, ECE482, ECE483, ECE484	ECE588
ECE314	Signals & Systems.		
ECE321L	Electronics I.		
ECE322L	Electronics II.		
ECE330	Software Design		
ECE331	Data Structures & Algorithms		
ECE335	Integrated Software Systems		
ECE338	Intermediate Logic Design		
ECE340	Probabilistic Methods in Engineering		
ECE341	Intro to Communication Systems		
ECE344L	Microprocessors		
ECE345	Intro to Control Systems		
ECE360	Electromagnetic Fields & Waves		
ECE371	Materials & Devices		
ECE381	Intro to Electric Power Systems		

*Indicates a 400-level course that counts for graduate credit.

C.2: Computer Science (with HHU's 计算机与信息学院)

Course #	Title	Prerequisites	Course # for Graduate Credit
CS412	Intro to Computer Graphics	CS361L	
CS413	Intro to Ray & Vector Graphics	CS361L	
CS422	Digital Image Processing	MATH314 or MATH321	CS522
CS423	Intro to Complex Adaptive Systems	CS251L, MATH163	
CS427	Principles of Artificially Intelligent Machines	CS351L	CS527
CS429	Intro to Machine Learning	CS362, STAT345, MATH314	CS529
CS442	Intro to Parallel Processing	CS481	*
CS444	Intro to Cybersecurity		CS544
CS454	Compiler Construction.		CS554
CS456	Advanced Declarative Programming	CS357L	CS556
CS460	Software Engineering		
CS464	Intro to Database Management		CS564
CS471	Intro to Scientific Computing		*
CS473	Physics & Computation.		CS573
CS481	Computer Operating Systems.	CS341L	
CS485	Introduction to Computer Networks		
CS494	Advanced Topics in Computer Generated Imaging		
CS341L	Intro to Computer Architecture & Organization		
CS351L	Design of Large Programs		
CS357L	Declarative Programming		
CS361L	Data Structures & Algorithms		
CS362	Data Structures & Algorithms II.		
CS365	Introduction to Scientific Modeling		
CS375	Introduction to Numerical Computing		
CS394	Computer Generated Imagery & Animation		
CS357L	Declarative Programming		
CS361L	Data Structures & Algorithms		
CS362	Data Structures & Algorithms II		
CS365	Introduction to Scientific Modeling		
CS375	Introduction to Numerical Computing		
CS394	Computer Generated Imagery & Animation		

C.3: Civil Engineering (with HHU's 水利水电学院 and 土木与交通学院)

Course #	Title	Prerequisites	Course # for Graduate Credit
CE411	Reinforced Concrete Design	CE308	CE511
CE413	Timber & Masonry Design	CE310	CE513
CE424	Structural Design in Metals	CE308	CE524
CE431	Physical-Chemical Water & Wastewater Treatment	ME301 or CHNE302	CE531
CE433	Environmental Microbiology	CHEM 122	CE533
CE435	Water Reuse		CE535
CE436	Biological Wastewater Treatment	CE335	CE536
CE438	Sustainable Engineering		CE538
CE440	Design of Hydraulic Systems	CE331	CE540
CE441	Hydrogeology	ME320L & ME380 & ME459	CE541
CE442	Hydraulic Engineering & Hydrology	CE331 & MATH162	*
CE455	Engineering Project Management		*
CE462	Foundation Engineering I	CE360	CE562
CE463	Earth Structures.		CE563
CE473	Construction Law	CE376 & CE377 & ENGL219	CE573
CE474	Principles of Written Construction Documents	CE376 & CE377 & ENGL219	CE574
CE475	Construction Safety	CE376 & CE377 & ENGL219	CE575
CE477	Project Controls	CE376 & CE377	CE577
CE478	Design of Temporary Support Structures	CE308 or CE371	CE578
CE481	Urban Transportation Planning		CE581
CE482	Highway & Traffic Engineering	CE382	CE582
CE302	Mechanics of Materials		
CE305	Infrastructure Materials Science	CE302 or CE371	
CE308	Structural Analysis	CE302 & CE305	
CE310	Structural Design I.	CE308	
CE331	Fluid Mechanics		
CE335	Environmental & Water Resources Engineering	CE331	
CE350	Engineering Economy		
CE352	Computer Applications in Civil Engineering.		
CE354	Probability & Statistics for Civil Engineers		CE554
CE360	Soil Mechanics	CE302	
CE370	Construction Methods & Equipment		
CE371	Structures for Construction		
CE372	Principles of Construction		
CE376	Cost Estimating		
CE377	Construction Scheduling		
CE382	Transportation Engineering		

C.4: Mechanical Engineering (with HHU's 机电工程学院)

Course #	Title	Prerequisites	Course # for Graduate Credit
ME400	Numerical Methods in Mechanical Engineering	ME317L & ME320L & CE302 & MATH 316	ME500
ME401	Advanced Mechanics of Materials	CE302	ME501
ME404	Computational Mechanics	MATH312 & CS151L	ME404
ME405	High Performance Engines	ME301 or CHNE302	ME505
ME416	Applied Dynamics	ME306 & ME357 & MATH 316	ME516
ME419	Theory, Fabrication, & Characterization of Nano & Microelectromechanical Systems		ME519
ME429	Gas Dynamics	ME301 & ME317L	ME529
ME455	Engineering Project Management		
ME459	Mechanical Engineering Design IV	ME360L & ME370L	
ME460	Mechanical Engineering Design V	ME320L & ME380 & ME459	
ME471	Advanced Materials Science		ME571
ME480	Dynamic System Analysis	ME380 & (MATH 314 or MATH321)	ME580
ME481	Digital Control of Mechanical Systems	ME380	ME581
ME482	Robot Engineering		ME582
ME485	Modern Manufacturing Methods		ME585
ME486	Design for Manufacturability		ME586
ME301	Thermodynamics	ME301	
ME302	Applied Thermodynamics		
ME306	Dynamics.		
ME314	Design of Machinery	ME306	
ME317L	Fluid Mechanics		ME301
ME318L	Mechanical Engineering Laboratory		
ME320	Heat Transfer		
ME350	Engineering Economy		
ME357	Introduction to Mechanical Vibrations.	ME306	
ME306L	Mechanical Engineering Design III		
ME365	Heating, Ventilating & Air Conditioning Systems	ME302L	
ME370	Heating, Ventilating & Air Conditioning Systems		
ME380	Analysis & Design of Mechanical Control Systems		

