Kennesaw State University and the University of West Georgia

Dual Degree Program (3+2) Articulation Agreement
Bachelor of Science in Physics (UWG) + Bachelor of Science degree in Civil, Computer, Construction, Electrical, Environmental, Industrial and Systems, Mechanical or Mechatronics Engineering at Kennesaw State University

Introduction

The faculties of the College of Science and Mathematics of the University of West Georgia (UWG) and the Southern Polytechnic College of Engineering and Engineering Technology of Kennesaw State University (KSU) agree to establish a collaborative Dual Degree program in Engineering. This agreement is being created in an effort to cooperatively provide a general education in liberal arts and sciences, as well as engineering education for each student enrolled, so that through approximately five years of study, a student may complete two separate programs of study that otherwise would require six or more years. This Dual Degree (3+2) program agreement reflects a commitment by both institutions to facilitate the transfer of credits earned from attending UWG for three years, or the equivalent. Upon satisfactory completion of the first three years at UWG, the student will be considered for transfer to KSU and complete the requirements for the Bachelor of Science in Engineering degree programs considered here. Upon successful completion of the academic requirements of the two participating institutions, the student will be awarded a Bachelor of Science in Physics from the University of West Georgia and a Bachelor of Science in Engineering from the Southern Polytechnic College of Engineering and Engineering Technology of Kennesaw State University.

Procedures

Counseling, admission and the transfer of students and credit hours in this 3+2 Dual Degree program will be through the application of the following procedures and policies:

1. Application for admission to the 3+2 program will be made to UWG, where the candidate will be subject to the admission requirements of that institution. A student will indicate a desire to follow the 3+2 program either at the time of the student's admission to UWG, or early enough in the student's program to permit the student to complete the necessary UWG BS in Physics program courses and prerequisite engineering courses, listed in the appendices of this contract.

2. UWG is responsible for informing students in the 3+2 program of the requirements for admission to KSU, as described in this document, and is encouraged to provide each student with a copy of this contract. Students should also be made aware of the courses that are available at UWG that can be used to meet degree requirements for the BS in the Engineering major at KSU. To that end, students should be provided with a copy of the Appendices (A-D) to this contract.

3. Each Fall semester, the 3+2 program coordinator at UWG, the Director of Engineering Studies, shall provide to the Dean's Office of the Southern Polytechnic College of Engineering and Engineering

Technology of Kennesaw State University a list of students at UWG who have indicated their desire to participate in the 3+2 program.

4. At the end of the first (Fall) semester of the third year at UWG, a student becomes a candidate for transfer if the student has completed the entrance-to-major course requirements (see Appendix A) and has attained a cumulative grade point average of 2.7 (on a 4.00 scale) or greater and has attained a GPA in Math and Science courses of 2.7. In all cases, the cumulative grade point average that will be used to determine eligibility will be calculated by the method used at KSU. Original grades for courses that were repeated along with grades for the same courses that were repeated will be used in the calculation.

5. The student should submit an online application and requisite fees (see KSU admissions website) to the Admissions Office of KSU no later than March 1st of the applicant's third year at UWG. The application should clearly indicate that the student is applying as a 3+2 student. The applicant should request official college transcripts from all previously attended institutions be sent to KSU before the admission deadline and also request a second transcript from UWG to be sent to KSU at the end of the term showing successful completion of courses attempted that term.

6. The application and any required supporting documents will be evaluated by the appropriate officer in the Admissions Office. If the applicant meets the entrance requirements, the applicant will be granted transfer admission to KSU in the 3+2 program, commencing the following semester. The student will automatically be granted Engineering Standing upon admission as a transfer student.

7. A minimum of 90 transferable and applicable credits must be completed at UWG prior to transferring to KSU. Under normal circumstances, failure to meet the conditions of admission to KSU will result in the voiding of the offer of admission for the student and in his/her ineligibility to participate in the 3+2 program.

8. The required and suggested UWG courses in Physics and their KSU equivalents are shown in the appendices. Course numbers and descriptions may change by the actions of the UWG faculty or KSU faculty. In such cases, only the Appendix would need to be amended. UWG will receive regular updates about changes at KSU and will be expected to regularly inform KSU of changes at UWG, as they relate to the 3+2 program.

9. The Southern Polytechnic College of Engineering and Engineering Technology faculty of KSU are responsible for providing guidance and access to a list of engineering courses, and supporting sciences if necessary, in order to complete the requirements for the engineering BS degree in a two year period. Appendix A shows a possible list of courses that would count toward the KSU engineering degree program for students pursuing the Physics-Engineering Dual Degree program.

10. Upon successful completion of the requirements for the degree, Bachelor of Science in Engineering, the student must submit an online readmission application to UWG along with official transcripts from all institutions attended since the student last attended UWG. Once readmitted to UWG, the

student must then submit an online application for graduation and pay any associated fee(s) by the appropriate deadline (see UWG Registrar website for procedures to be followed). After the BS in Engineering degree is conferred by KSU, the student must send an official KSU transcript containing final semester grades and degree awarded information to UWG for review and award of the BS in Physics from UWG.

11. Any 3+2 student admitted to KSU who does not successfully complete the requirements for the BS in Engineering degree may be readmitted to UWG and given an opportunity to complete the requirements for a baccalaureate degree. If the BS in Engineering degree is not conferred by KSU, the engineering concentration at UWG shall be invalid.

12. KSU engineering faculty will conduct yearly interviews with participating students in order to guide adjustments to the way the program is carried out.

Agreement on Transfer

The University of West Georgia and **Kennesaw State University** agree to cooperate through a transfer articulation agreement for students attaining approximately three-fourths of the number of hours required for the degree at the University of West Georgia and completing the Kennesaw State University program of study that equals approximately the number of hours required in the junior and senior years of the degree program being sought. The total program shall satisfy all requirements for the dual degrees sought at the University of West Georgia and Kennesaw State University. Kennesaw State University agrees to accept all courses (or equivalent) listed in the Appendix A for transfer into Kennesaw State University (required grade of "C" or better).

Agreement of Communication

The University of West Georgia and **Kennesaw State University** agree to cooperate in communicating with each other concerning the articulation relationship between the two institutions. Communications may include common publications and announcements concerning their affiliation. Announcements of this articulation, and of changes in the relationship, will have a coordinated release to the public from both institutions. The institutions will encourage the dissemination of information about programs in this agreement with interested and qualified students, with both institutions providing advising and counseling to prospective students.

The development of this Agreement between Kennesaw State University and the University of West Georgia signifies that both have confirmed that:

- Each institution is currently in good standing with applicable regulatory bodies and regional accreditation:
- Credits awarded by the institutions have been evaluated and determined to be eligible for transfer; and
- Credits earned at the University of West Georgia have been deemed appropriate and applicable to transfer to Kennesaw State University.

Agreement on Maintenance and Review

The Kennesaw State University Associate Registrar and the University of West Georgia Director of Engineering Studies will act as a primary point of contact and agent for this agreement, to speak for the institution, and to communicate details and modifications to respective faculty, advisors, and others with interest at the individual institutions. Both parties agree to review curriculum and any other conditions of this agreement as it might pertain to the institutions' continuous improvement process and assessment.

Any modifications to this agreement must be made in writing and signed by all parties.

This agreement will be in effect for three years from the date of administrative endorsement. Renewal of transfer plans with appropriate content changes will be done on an annual basis. It will be automatically renewed unless one of the parties expresses, in writing, its desire to terminate the agreement giving six months' notification with effective date to be the last day of the following term.

It is understood and agreed that any student participating in the program at the University of West Georgia specifically tracked for admission or admitted to Kennesaw State University under the Dual-Degree program will be allowed to complete the program notwithstanding the termination provisions above, so long as the student remains in good academic standing and is making measured progress towards completion of a degree program.

Kennesaw State University

Provost and Vice President for Academic Affairs	Date 10/23/17
President	Date 10/23/17

University of West Georgia

Dean of College of Science and Mathematics	Date 10/17/17
Provost and Vice President for Academic Affairs	Date 10/17/17
President	Date 10/17/17

(update 09-18-2017)

Engineering Standing at Kennesaw State University: The first two years of a program's curriculum are considered to be lower division while the remaining two years are considered the upper division. For the most part, upper division engineering courses are those with course numbers in the 3000's and 4000's. In addition to the stated prerequisites and unless otherwise noted in the catalog, students must apply for and be granted Engineering Standing in order to enroll in any upper division engineering course taught in the College of Engineering. A 2.70 GPA in the courses noted below is required to receive engineering standing.

Courses	Civil Eng	Comp Eng	Constru Eng	Elect Eng	Environ Eng	Ind & Sys Eng	Mech Eng	Mecha Eng
Composition I (ENGL 1101)	X	X	X	X	X	X	X	X
Composition II (ENGL 1102)	X	X	X	X	X	X	X	X
Area B2	X	X	X	X	X		X	X
Chemistry I (CHEM 1211/1211L)	X	X	X	X	X	X	X	X
Chemistry II (CHEM 1212/1212L)	X		X		X			
Physics I (PHYS 2211/2211L)	X	X	X	X	X	X	X	X
Physics II (PHYS 2212/2212L)	X	X	X	X		X*	X	X
Biology I (BIOL 1107/1107L)					X			
Calculus I (MATH 1190)	X	X	X	X	X	X	X	X
Calculus II (MATH 2202)	X	X	X	X	X	X	X	X
Differential Equations (MATH 2306)	X	X	X	X	X		X	X
Probability & Statistics (MATH 2332)		X		X			X	
Applications of Probability (ISYE 2600)						X		
Technical Writing (TCOM 2010)						X	X	
Engineering Programming (CSE 1311)		X		X		X	X	X
Engineering Graphics (EDG 1211)								X

*PHYS2212/L, CHEM1212/L or BIOL1107/L

APPENDIX B

Dual Degree Programs are offered in Physics/Engineering with Kennesaw State University (KSU). Students are provided the opportunity to attend the University of West Georgia (UWG) for approximately three years before embarking on professional academic work at KSU. After completing the academic requirements of both institutions, the student receives a bachelor's degree in physics from UWG and a bachelor's degree in a chosen engineering field from KSU.

Dual Degree Requirements:

1. Complete the course work at UWG as outlined below. Meet Physics Department advisor regularly to ensure you are taking the correct courses.
2. Apply to KSU:
    1. Submit an application online at GAFutures. This requires completing the application and submitting it with the required $40 application fee.
    2. Submit official college transcripts from any college previously attended. If you are enrolled at the time of application, request a transcript showing any work prior to the current term to be sent before the KSU admission deadline, and also request a final transcript at the end of the term.
    3. Follow the status of your application on the application status check.
    4. Obtain a recommendation from the Dual Degree coordinator at UWG and submit with KSU application.
3. Applicable KSU admissions requirements:
    1. The cumulative transfer GPA for admission eligibility is calculated on all academic work attempted from all institutions attended. If a course is repeated both grades are calculated.
    2. Transfers must have a minimum cumulative 2.7 GPA to be considered.
    3. Transfer credit evaluations are not done until after the transfer applicant is accepted. All transcripts must be on file for the acceptance decision and prior to evaluation. The Registrar's Office completes the evaluation and notification is sent to the student and can also be accessed on the Owl Express.
    4. Admission is a selective process. Meeting the application deadline or minimum standards does not guarantee acceptance. It is the responsibility of the applicant to review the admission standards in advance to understand the likelihood of eligibility.
4. Complete the number of hours which equals the number of credit hours required of juniors and seniors enrolled in the standard curriculum for the degree being sought. Meet the engineering department advisor regularly to ensure you are progressing towards graduation.
5. Follow the procedure outlined by the KSU Registrar's Office to apply for graduation (http://registrar.kennesaw.edu/graduation.php) and pay the $50 application fee (2018).
6. Follow the procedure outlined by UWG Registrar's Office for readmission and graduation – look under the 3+2 Dual Degree program tab (https://www.westga.edu/student-services/enrollment-services/readmission.php)
    1. Students in this program that have not been in attendance for three semesters must apply for readmission with the Enrollment Services Center at least ten (10) weeks prior to the end of the term in which they are seeking to graduate from UWG.
    2. Students must submit official transcripts from each institution attended since last attending UWG at least ten (10) weeks prior to the end of the term in which they are seeking to graduate from UWG.
    3. Students currently enrolled at another institution must also submit an official transcript (KSU transcript fee is $5) at the end of the term in which they are readmitted.
    4. The Registrar's Office will be responsible for ensuring that students readmitted for the term in which they are seeking to graduate, remain "Active" in the system. Students enrolled in this program will most likely not be registered for classes at the University of West Georgia during the term in which they are seeking to graduate.
    5. Students must also submit an Application for Graduation to UWG and pay the $40 graduation fee. The Enrollment Services Center will notify any Dual Degree students lacking the

Readmission Application of the Readmission requirement after the Application for Graduation has been submitted.

6. Follow the following application deadlines:

   Spring Graduation Application Deadline: October 1st
   Summer Graduation Application Deadline: March 1st
   Fall Graduation Application Deadline: August 1st

APPENDIX A
Bachelor of Science degree in Civil, Computer, Construction,
Electrical, Environmental, Industrial and Systems,
Mechanical or Mechatronics Engineering at
Kennesaw State University
(Updated 4-1-2018)

Univ Of West Georgia	Courses		Civil Eng	Comp Eng	Const Eng	Elect Eng	Enviro Eng	Ind & Sys Eng	Mech Eng	Mecha Eng
ENGL 1101	Composition I (ENGL 1101)	3	X	X	X	X	X	X	X	X
ENGL 1102	Composition II (ENGL 1102)	3	X	X	X	X	X	X	X	X
MATH 1634	Calculus I (MATH 1190)	4	X	X	X	X	X	X	X	X
Approved B1	Contemporary Economic Issues (B1)	2	X	X	X	X	X	X	X	X
Approved B2	Cultural Perspectives (B2)	3	X	X	X	X	X	X	X	X
Approved C1	Literature (C1)	3	X	X	X	X	X	X	X	X
Approved C2	Art & culture (C2)	3	X	X	X	X	X	X	X	X
CHEM 1211	Chemistry 1 (CHEM 1211+1211L)	4	X	X	X	X	X	X	X	X
CHEM 1212	Chemistry II (CHEM 1212+1212L)	4	X		X		X			
PHYS 2211	Physics I (PHYS 2211+2211L)	4	X	X	X	X	X	X	X	X
PHYS 2212	Physics II (PHYS 2212+2212L)	4	X	X	X	X		X*	X	X
BIOL 1107	Biology (BIOL 1107/1107L)	4					X			
MATH 2644	Calculus II (MATH 2202)	4	X	X	X	X	X	X	X	X
Approved E1	US Government (E1)	3	X	X	X	X	X	X	X	X
Approved E2	US History (E2)	3	X	X	X	X	X	X	X	X
Approved E3	World History(E3)	3	X	X	X	X	X	X	X	X
Approved E4	Social Sciences (E4)	3	X	X	X	X	X	X	X	X
MATH 2654	Calculus III MATH 2203	4		X		X			X	X
MATH 2853 or CS 2610	Linear Algebra MATH 3260	3						X		
MATH 3303	Differential Equations (MATH 2306)	3	X	X	X	X	X			X
CS 1300	Engineering Programming (CSE 1311)	4		X		X		X	X	X
Total Trans			56	60	56	60	56	56	57	60
KSU			74	69	74	70	73	71	73	69
Degree Required			130	129	130	130	129	127	130	129

*PHYS2212/L, CHEM1212/L or BIOL1107/L

Appendix C
University of West Georgia

COURSE REQUIREMENTS FOR THE B.S. DEGREE WITH A MAJOR IN PHYSICS
(PLAN B - Engineering Dual Degree)
Effective: Fall 2017

AREA	COURSE	HRS	GRADE
A	ENGL 1101	3	
A	ENGL 1102	3	
B	CORE B (See Catalog)	3	
B	XIDS 2001 (The Physical Universe)	1	
C	Core Elective (See Catalog)	3	
C	Core Elective (See Catalog)	3	
D	CHEM 1211K	4	
D	CHEM 1212K	4	
E	POLS 1101	3	
E	HIST 1111 or 1112	3	
E	HIST 2111 or 2112	3	
E	Core Elective (See Catalog)	3	
A&F	MATH 1113	3(A) 1(F)	
D&F	MATH 1634	3(D) 1(F)	
F	MATH 2644	4	
F	MATH 2654	4	
F	PHYS 2211	4	
F	PHYS 2212	4	
MAJOR	PHYS 3113	3	
MAJOR	PHYS 3213	3	
MAJOR	PHYS 3313	3	
MAJOR	PHYS 4313	3	
MAJOR	MATH 3303	3	
MAJOR	FL (6 hours) or six hours selected from: PHYS 4513, 4523, MATH 2853, 3063, 3003, 3353, 4203, 4313, 4363, or 4513	6	
MAJOR	Nine hours selected from: PHYS 3013, 3023, 3413, 3511, 3521, 4103, 4323, 4333, 4413, 4513, 4523, 4683, 4984	9	
	Bold Credits must be completed at UWG for the 3+2 *Italicized Credits reverse transfer from KSU*		
MAJOR	*X* number of hours at the engineering school (Must include enough upper-level hours to make a total of at least 39)	*21-30*	
MAJOR	Electives (Any hours less than 30 in X above should be accounted for here)	*0-9*	
	Total	120	

Appendix D
University of West Georgia

Typical Program Map – BS Physics

YEAR 1

TERM 1		TERM 2	
Course	**Credits**	**Course**	**Credits**
ENGL 1101	3	ENGL 1102	3
MATH 1113	4	MATH 1634	4
CHEM 1211/1211L	4	CHEM 1212/1212L	4
Area B2-XIDS 2001 (The Physical Universe)	1	Core (B, C, or E)	3
UWG 1101	2	Core (B, C, or E)	3
SEMESTER TOTAL	14	SEMESTER TOTAL	17
Milestones		**Milestones**	
• Complete ENGL 1101 C or better • Complete MATH 1113		• Complete ENGL 1102 C or better • Complete Calculus I	

YEAR 2

TERM 1		TERM 2	
Course	**Credits**	**Course**	**Credits**
PHYS 2211/2211L	4	PHYS 2212/2212L	4
MATH 2644	4	MATH 3303	3
MATH 2853	3	MATH 2654	4
Core (B, C, or E)	3	Core (B, C, or E)	3
Core (B, C, or E)	3	Core (B, C, or E)	3
SEMESTER TOTAL	17	SEMESTER TOTAL	17
Milestones		**Milestones**	
		• Complete Introductory Physics sequence • Complete Math up to Calculus III	

YEAR 3

TERM 1		TERM 2	
Course	**Credits**	**Course**	**Credits**
PHYS 3503	3	PHYS 3213	3
PHYS 3113	3	PHYS 3313	3
FL or Math/Phys elective	3	PHYS elective	3
PHYS elective	3	MATH/FL elective	3
Core (B, C, or E)	3	PHYS elective	3
SEMESTER TOTAL	15	SEMESTER TOTAL	15
Milestones		**Milestones**	
		• Fill out application to transfer to Engineering Program	

Complete degree requirements at Engineering School