### PROGRAM ARTICULATION AGREEMENT

#### **BETWEEN**

# KASKASKIA COLLEGE CENTRALIA, IL

#### AND

# SOUTHERN ILLINOIS UNIVERSITY CARBONDALE CARBONDALE, IL

In an effort to provide a continued, articulated higher education baccalaureate degree program that will build on community college and university learning experiences, and also eliminate duplication of instruction, this agreement is entered into this day of August, 2019 (Effective Date) by and between Kaskaskia College and the Board of Trustees of Southern Illinois University on behalf of Southern Illinois University Carbondale.

## I. TERM AND TERMINATION

- A. Term. This Agreement shall commence as of the Effective Date (or if no Effective Date is indicated upon the date the Agreement is fully executed by the Parties) and shall remain in effect for a period of five (5) years thereafter. The Parties may renew or extend this Agreement only by written instrument signed by the authorized representatives of each Party.
- B. Termination. This Agreement may be terminated by either Party, with or without cause, upon 60 days advance written notice. The Parties agree that no additional students shall be accepted into the program after a Party's receipt of any written notice of termination. No qualified student then-enrolled in the program shall be deprived the opportunity to complete the program requirements solely due to termination.

# II. TRANSFER REQUIREMENTS

A. All graduates of Kaskaskia College with an Associate in Science (A.S.) degree in Mathematics and meeting SIU Carbondale admission requirements will be considered for admission into SIU Carbondale's Bachelor of Science (B.S.) degree in Physics (PHYS) in the College of Science based upon the Department's enrollment criteria and space availability.

- B. A Kaskaskia College graduate receiving an A.S. degree in Mathematics will be considered for admission to SIU Carbondale's Physics (PHYS) program if the following are met:
  - 1. The student has earned a minimum of 65 semester hours transferable to SIU Carbondale
  - 2. The student has earned an overall grade point average (GPA) of 2.0 or above (4.0 scale) for his or her collegiate work as calculated by SIU Carbondale's grading regulations.
  - 3. Confirmation by the SIU Carbondale College of Science that the student has satisfactorily completed the following courses as part of the A.S. degree in Mathematics at Kaskaskia College:
    - CITA 110-1, Intro to Word Processing
    - ENGL 101-3, English Composition
    - ENGL 102-3, English Composition
    - GUID 109-1, First Year College Experience
    - HLTH 102-3, Human Health and Wellness
    - MATH 136-4, General Statistics
    - MATH 166-5, Calculus & Analytical Geometry I
    - MATH 210-3, Computer Programming for Engineering
    - MATH 236-3, Linear Algebra
    - MATH 267-4, Calculus & Analytical Geometry II
    - MATH 268-4, Calculus & Analytical Geometry III
    - MATH 269-5, Differential Equations
    - PHYS 201-5, University Physics I
    - PHYS 202-5, University Physics II
    - PHLE 120-3, Ethics
    - PSYH 101-3, Psychology
    - SPCH 103-3, Fundamentals of Speech
    - BIOLOGY Elective 3 hours
    - FINE ARTS 3 hours
    - SOCIAL/BEHAVIORAL SCIENCE 3 hours
- C. Kaskaskia College students transferring to the Physics (PHYS) baccalaureate degree program at SIU Carbondale who have not completed all of his or her Associate in Science degree requirements at Kaskaskia College will have their related coursework evaluated on a course-by-course basis by the appropriate SIU Carbondale department.

D. Students will be required to complete a minimum of 42 senior institution hours at the 300-400 course level, with the last 30 such senior institution hours being at SIU Carbondale for residency purposes. Those students enrolled in an approved program delivered by SIU Carbondale Extended Campus will have completed the residency requirement for the University upon completion of all courses required by the program. All students will be required to complete at least 120 hours with an overall GPA of 2.0 on a 4.0 scale to receive a Bachelor of Science degree in Physics (PHYS). Coursework may include University Core Curriculum as well as Physics major courses.

# III. COURSE DELIVERY

- A. Delivery of courses and programs will be based on mutual agreement between the parties (as specified in the SIU Carbondale program) provided there is a minimum class enrollment in each course adequate to meet expenses. Courses with inadequate enrollment may be subject to cancellation. SIU Carbondale shall notify Kaskaskia College of any cancellation due to inadequate enrollment.
- B. SIU Carbondale will perform registration and advisement counseling as needed to support the courses offered. SIU Carbondale will designate an individual(s) as a concurrent enrollment liaison to work in conjunction with Kaskaskia College and students as needed. Advisement about program requirements will be provided by the academic college offering the courses/programs.
- C. SIU Carbondale will obtain all permission and approvals necessary to teach these courses in the State of Illinois.
- D. SIU Carbondale reserves the right to approve and edit all news releases, advertising and other public announcements and information pieces relating to the performance of this Agreement.
- E. This agreement permits students to enroll concurrently at SIU Carbondale and Kaskaskia College to complete the degree.

# IV. KASKASKIA COLLEGE DUTIES: KASKASKIA COLLEGE SHALL BE RESPONSIBLE FOR THE FOLLOWING OBLIGATIONS AND CONDITIONS:

A. Subject to federal and state guidelines, Kaskaskia College will be considered the home institution for the purpose of processing Financial Aid until such time that the student either graduates or severs ties with Kaskaskia College.

- B. Designate in writing a person or persons as point of contact between Kaskaskia College and SIU Carbondale on all matters relating to the courses delivered.
- C. Reserve the right to approve and edit all news releases, advertising and other public announcements and information pieces relating to the performance of this Agreement.
- D. Permit students to enroll concurrently at SIU Carbondale and Kaskaskia College to complete a degree.

# V. PROGRAM ARTICULATION COMMUNICATION

- A. An SIU Carbondale College of Science, Physics representative will communicate periodically with Kaskaskia College personnel in Mathematics for general advisement and degree planning purposes.
- B. Upon successful completion of all degree requirements, and following all policies and regulations stated in the program and SIU Carbondale guidelines, Kaskaskia College students will be eligible to receive the Bachelor of Science degree in Physics (PHYS), College of Science, Southern Illinois University Carbondale.
- C. Should changes occur in course or program content, the institution making the change agrees to notify the other institution in writing so that this agreement can be re-evaluated. Notice of changes shall be given at least 45 days prior to the beginning of the semester when the change is implemented.
- D. The parties acknowledge that many student educational records are protected by the Family Education Rights and Privacy Act (FERPA) and that the written authorization of student(s) must be obtained before student data can be released to anyone. The parties agree that access to and release of student records shall be in accordance with FERPA.

## E. Indemnification:

 To the extent permitted by law and not inconsistent with the doctrine of sovereign immunity, SIU Carbondale shall indemnify and hold harmless Kaskaskia College, its agents and employees, from any claims, demands, or causes of action arising out of the negligent acts or omissions of SIU Carbondale, its agents or employees, in the performance of SIU Carbondale's obligations under this Agreement.

- 2. To the extent permitted by law, Kaskaskia College shall indemnify and hold harmless SIU Carbondale, its agents and employees, from any claims, demands, or causes of action arising out of negligent acts or omissions of the College, its agents or employees, in the performance of the College's obligations under this Agreement.
- F. Reasonable efforts will be made to resolve problems with student(s) through discussions with the student's program instructor, supervisor, and SIU Carbondale's faculty members; however SIU Carbondale reserves the right to remove any student from enrollment at SIU Carbondale upon the determination that the student is unable or unwilling to fulfill the requirements of SIU Carbondale's educational program and mission, including but not limited to the rules and regulations of Southern Illinois University Carbondale, the policies of the Board of Trustees of SIU Carbondale, and the SIU Carbondale Student Conduct Code. SIU Carbondale shall also have the right to withdraw any student from its education degree program in accordance with its academic requirements, including but not limited to unsatisfactory academic performance and/or social misconduct.
- G. Neither party will discriminate against any applicant or student in the nomination, selection, or training because of religion, race, sex, sexual orientation, creed, handicap, national origin, or age.
- H. Notices should be mailed to the following addresses by first class mail in order to fulfill any notice or revision of requirements under this Agreement:

For SIU Carbondale: Dr. Thushari Jayasekera, Undergraduate Director

Department of Physics

SIU Carbondale Mailcode 4401 Carbondale, IL 62901-4401 Phone: 618-453-1055

Email: thushari@siu.edu

For Kaskaskia College: Dr. Ashley Becker, VP of Instructional Services

> Kaskaskia College 27210 College Rd Centralia, IL 62801 Phone: 618-545-3015

Email: abecker@kaskaskia.edu

IN WITNESS WHEREOF, the parties have executed this Agreement by their duly authorized, respective officers, and by doing so, hereby affirm that the Agreement is enforceable on behalf of and against each party as of the date written herein.

# KASKASKIA COLLEGE

George I	И.	Evans,	President	and	CEO

Kaskaskia College

8/30/2019

Date

Jøhn W. Hawley, Chair of the Board of Trustees

hn M. Dunn

Kaskaskia College

Date

BOARD OF TRUSTEES OF SOUTHERN ILLINOIS UNIVERSITY

John Dunn, Interim Chancellor

Southern Illinois University Carbondale

Date

8/30/2019

PROGRAM ARTICULATION DEGR	EE PLAN				
Kaskaskia College 2018-2019 AS Mathematics - 65 hours	<u> </u>		Southern Illinois University Carbondale BS Physics (PHYS): General Physics Specialization	- 120 hours	
			University Core Curriculum (UCC) - 39 hrs *		1
		Hrs			Hrs
GUID 109	First Year College Experience	11	UNIV 101	Saluki Success	NA
ENGL 101	English Composition	3	ENGL 101	English Composition I	T
ENGL 102	English Composition	3	ENGL 102	English Composition II	T
SPCH 103	Fundamentals of Speech	3	CMST 101	Intro to Oral Communication	T
MATH 136	General Statistics	4	MATH 282 (Fulfills BS degree requirements)	Intro to Statistics	T
PSYH 101	Psychology	3	PSYC 102	Intro to Psychology	T
SOCIAL/BEHAVIORAL SCIENCE	(See SIUC Transfer Equivalency Guide)	3	SOCIAL SCIENCE		T
PHLE 120	Ethics	3	PHIL 104	Ethics	- <del> </del>
		-	HUMANITIES		NA
PHYS 201	University Physics I	5	PHYS 205/255A (Required for BS degree)	University Physics/Lab	T
BIOLOGY Elective	(See SIUC Transfer Equivalency Guide)	3	LIFE SCIENCE, GRP 2	Offiversity Fifysics/cab	<del>                                     </del>
	(See SIUC Transfer Equivalency Guide)	3	FINE ARTS	A 41-11	<del> -</del>
FINE ARTS					
HLTH 102	Human Health and Wellness	3	PH 101	Foundations of Human Health	<u>T</u>
	<u> </u>	<del> </del>	CULT 1XX	Multicultural Substitute	L
<del>.</del> . <del> </del>		37			ຸ 0
L		l			1
		1	* An A.S. from a regionally accredited Illinois con	nmunity college satisfies UCC requirements	
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Program Requirements			Program Requirements		1
CITA 110	Intro to Word Processing	1			
MATH 166	Calculus & Analytical Geometry I	5	MATH 150 (Required for BS degree)	Calculus I	T
MATH 210	Computer Programming for Engineering	3	CS 202 (Fulfills BS degree requirements)	Intro to Computer Science	Ť
MATH 236	Linear Algebra	3	MATH 221 (Required for BS degree)	Intro to Linear Algebra	† <del>†</del>
MATH 267	Calculus & Analytical Geometry II	4	MATH 250 (Required for BS degree)	Calculus II	<del> </del>
MATH 268	Calculus & Analytical Geometry III	4	MATH 251 (Required for BS degree)	Calculus III	├ <del>┈┆</del> ┈
MATH 269	Differential Equations	3	MATH 305 (Required for BS degree)	Intro to Differential Equations	
					<u>T</u>
PHYS 202	University Physics II	5	PHYS 205/255B (Required for BS degree)	University Physics/Lab	T
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				**************************************	1
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			General Physics Specialization		
			COS Biological Science Requirement	Select 1 additional Life Science course	3
			COS Supportive Skills Requirement	Fulfilled by MATH 282 and CS 202	NA
		1	CHEM 200/201/202	Intro to Chemical Principles/Lab/Workshop	5
	<del></del>	1	PHYS 100	Undergraduate Seminar	1
	<del> </del>	··· ··	PHYS 301	Theoretical Methods in Physics	3
		1	PHYS 305/355	Modem Physics/Lab	4
			PHYS 310		4
	<del> </del>	·	➡ 하실 경험 등 시간	Classical Mechanics	3
			PHYS 320	Electricity and Magnetism I	3
		ļ	_PHYS 420	Electricity and Magnetism II	3
		.l	PHYS 430	Quantum Mechanics I	3
	<u></u>	1	PHYS 440	Quantum Mechanics II	3
		1	PHYS 445	Thermodynamics and Statistical Mechanics	3
		1	PHYS 450	Advanced Laboratory Techniques	3
			Mathematics Elective	Choose from: MATH 405, 406, 407, 409, 450, 455, 475	3
		1	General Physics Electives	Choose a minimum of 14 hrs from: CS 215, 220, 475, 476; PHYS 390, 424,	
		1		425, 428, 431, 432, 458, 470, 476, 490	' 14
		1	General Electives	As necessary to fulfill 120-hr requirement	1
			* Students must complete 42 credit hours of 300/400		55
			Citations must complete 42 credit mouls of 300/400	rievel courses	7
Total assessment by samulated with	L AS degrees	OF.	Total compates has completed with DC do		
Total semester hrs completed wit	un Ao degree:	65	Total semester hrs completed with BS degree:		55
		<del> </del>	<del></del>		
1			Total semester hrs to BS degree:		120

PROGRAM ARTICULATION DEGR	EE PLAN				
Kaskaskia College 2018-2019 AS Mathematics - 65 hours		1	Southern Illinois University Carbondale BS Physics (PHYS): Blomedical Physics Specialization	n - 120 hours	
			University Core Curriculum (UCC) - 39 hrs *		
		Hrs			Hrs
GUID 109	First Year College Experience	1	UNIV 101	Saluki Success	NA.
ENGL 101	English Composition	3	ENGL 101	English Composition I	т
ENGL 102	English Composition	3	ENGL 102	English Composition II	ΤĖ
SPCH 103	Fundamentals of Speech	3	CMST 101	Intro to Oral Communication	+-÷
MATH 136	General Statistics	4	MATH 282 (Fulfills BS degree requirements)	Intro to Statistics	<del> </del>
PSYH 101	Psychology	3	PSYC 102	Intro to Psychology	<del>'</del>
SOCIAL/BEHAVIORAL SCIENCE	(See SIUC Transfer Equivalency Guide)	3	SOCIAL SCIENCE	into to Esychology	
PHLE 120	Ethics	3	PHIL 104	Paki	Ţ
11166 120	Luncs			Ethics	
PHYS 201	Maria Divisional I		HUMANITIES		NA
	University Physics I	5	PHYS 205/255A (Required for BS degree)	University Physics/Lab	
BIOLOGY Elective	(See SIUC Transfer Equivalency Guide)	3	LIFE SCIENCE, GRP 2		T
FINE ARTS	(See SIUC Transfer Equivalency Guide)	3	FINE ARTS		T
HLTH 102	Human Health and Wellness	3	PH 101	Foundations of Human Health	T
			CULT 1XX	Multicultural Substitute	T
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		i	* An A.S. from a regionally accredited Illinois comm	nunity college estisfies LICC requirements	
			The state of the s	Tamey concide addishes ooo requirements	
Program Requirements			Program Requirements		-+
CITA 110	Intro to Word Processing	1	riogram Requirements		
MATH 166			1		
	Calculus & Analytical Geometry I	5	MATH 150 (Required for BS degree)	Calculus I	T
MATH 210	Computer Programming for Engineering	3	CS 202 (Fulfills BS degree requirements)	Intro to Computer Science	T
MATH 236	Linear Algebra	3	MATH 221 (Required for BS degree)	Intro to Linear Algebra	Т
MATH 267	Calculus & Analytical Geometry II	4	MATH 250 (Required for BS degree)	Calculus II	T
MATH 268	Calculus & Analytical Geometry III	4	MATH 251 (Required for BS degree)	Calculus III	T
MATH 269	Differential Equations	3	MATH 305 (Required for BS degree)	Intro to Differential Equations	T
PHYS 202	University Physics II	5	PHYS 205/255B (Required for BS degree)	University Physics/Lab	Ť
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		† · · · · <del>- · · ·</del>			
		<del> </del> -	Biomedical Physics Specialization		<u>-</u>
	· · · · · · · · · · · · · · · · · · ·	ł	COS Biological Science Requirement	Fulfilled by BIOL Odd	
	• <del> </del>			Fulfilled by BIOL 211	NA
· · · · · · · · · · · · · · · · · · ·		ļ	COS Supportive Skills Requirement	Fulfilled by MATH 282 and CS 202	NA
		ļ	BIOL 211	Introductory Cell Biology and Genetics	4
			BIOL 213	Introductory Organismal Form and Function	4
	<u> </u>	l	_CHEM 200/201/202	Intro to Chemical Principles/Lab/Workshop	5
			PHYS 100	Undergraduate Seminar	- 1
		I	PHYS 301	Theoretical Methods in Physics	3
			PHYS 305/355	Modem Physics/Lab	A
			PHYS 310	Classical Mechanics	3
		t	PHYS 320		3
		<del></del>	PHYS 420	Electricity and Magnetism I	3
				Electricity and Magnetism II	3
			PHYS 430	Quantum Mechanics I	3
	<u> </u>		PHYS 445	Thermodynamics and Statistical Mechanics	3
		ļ	PHYS 476B	Introduction to Biological Physics	3
	<u> </u>		Mathematics Elective	Choose from: MATH 405, 406, 407, 409, 450, 455, 475	3
			Biomedical Physics Electives	Choose a minimum of 15 hrs from: CHEM 210, 211, 212, 340, 341, 350,	15
			* Students must complete 42 credit hours of 300/400 l	351; MICR 301, 302	57
					1
Total competer has completed					
Total semester hrs completed wi	th AS degree:	65	Total semester hrs completed with BS degree:		57

PROGRAM ARTICULATION DEGR	EE PLAN				
Kaskaskia College 2018-2019			Southern Illinois University Carbondale		
AS Mathematics - 65 hours			BS Physics (PHYS): Computational Physics Specialization	1 - 120 hours	
		ļ.,	University Core Curriculum (UCC) - 39 hrs *		
		Hrs			Hrs
GUID 109	First Year College Experience	11	UNIV 101	Saluki Success	NA
ENGL 101	English Composition	3	ENGL 101	English Composition I	T
ENGL 102	English Composition	3	ENGL 102	English Composition II	T
SPCH 103	Fundamentals of Speech	3	CMST 101	Intro to Oral Communication	T
MATH 136	General Statistics	4	MATH 282 (Fulfills BS degree requirements)	Intro to Statistics	T
P\$YH 101	Psychology	3	PSYC 102	Intro to Psychology	T
SOCIAL/BEHAVIORAL SCIENCE	(See SIUC Transfer Equivalency Guide)	3	SOCIAL SCIENCE	The state of the s	T
PHLE 120	Ethics	3	PHIL 104	Ethics	T
1112 120			HUMANITIES		NA
PHYS 201	University Physics I	5	PHYS 205/255A (Required for BS degree)	University Physics/Lab	1 T
	(See SIUC Transfer Equivalency Guide)	3	LIFE SCIENCE, GRP 2	O'INTOISILY ! ITYSICS LED	Ť
BIOLOGY Elective			FINE ARTS		<del> </del>
FINE ARTS	(See SIUC Transfer Equivalency Guide)	3		Paradation of the state of the	
HLTH 102	Human Health and Wellness	3	PH 101	Foundations of Human Health	<b>│</b> <u>Т</u>
			CULT 1XX	Multicultural Substitute	LŢ.
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		1	* An A.S. from a regionally accredited Illinois commun	ity college satisfies UCC requirements	
		1		The state of the s	1
Program Requirements		1	Program Requirements	The second secon	
CITA 110	Intro to Word Processing	1	Tregram rioquitaments		
MATH 166	Calculus & Analytical Geometry I	5	MATH 150 (Required for BS degree)	Calculus I	T
		3		Intro to Computer Science	Ť
MATH 210	Computer Programming for Engineering	3	CS 202 (Required for BS degree)		
MATH 236	Linear Algebra	3	MATH 221 (Required for BS degree)	Intro to Linear Algebra	<u> </u>
MATH 267	Calculus & Analytical Geometry II	4	MATH 250 (Required for BS degree)	Calculus II	<u> </u>
MATH 268	Calculus & Analytical Geometry III	4	MATH 251 (Required for BS degree)	Calculus III	<u>T</u>
MATH 269	Differential Equations	3	MATH 305 (Required for BS degree)	Intro to Differential Equations	T
PHYS 202	University Physics II	5	PHYS 205/255B (Required for BS degree)	University Physics/Lab	T
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		1			1
		1	Computational Physics Specialization		
			COS Biological Science Requirement	Select 1 additional Life Science course	3
			COS Supportive Skills Requirement	Fulfilled by MATH 282 and CS 202	NA
				Intro to Chemical Principles/Lab/Workshop	1474
			CHEM 200/201/202	intro to Chemical Principles/Lab/vvorksnop	5
			CS 215	Discrete Mathematics	4
			CS 220	Programming with Data Structures	4
			PHYS 100	Undergraduate Seminar	1
		1	PHYS 301	Theoretical Methods in Physics	3
			PHYS 305/355	Modern Physics/Lab	4
		1	PHYS 310	Classical Mechanics	3
		1	PHYS 320	Electricity and Magnetism I	3
		1	PHYS 420	Electricity and Magnetism II	3
		+	PHYS 430	Quantum Mechanics I	3
			PHYS 440	Quantum Mechanics II	2
					3
			PHYS 445	Thermodynamics and Statistical Mechanics	3
			PHYS 476C	Intro to Computational Physics	3
			Mathematics Elective	Choose from: MATH 405, 408, 407, 409, 450, 455, 475	3
			Computational Physics Electives	Choose a minimum of 5 hrs from: CS 475, 476; PHYS 390, 424, 425, 428,	5
			그 마이 이 현실 바로 내로면 취임된다. 그리고 그는 것 같다.	431, 432, 458, 470, 490	
			General Electives	As necessary to fulfill 120-hr requirement	2
			* Students must complete 42 credit hours of 300/400 level		55
					7
Total semester hrs completed wi	th AS degree:	65	Total semester hrs completed with BS degree:		55
Total semester ms completed wi	ui no deglee.	- 00	Town semester mis completed with be degree.		- 55
			Total semester hrs to BS degree:		120
		1	: corat semester ars to 65 debree:	1	

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(askaskia College 2018-201	19	1	Southern Illinois University Carbondale	L PARALLEY CO. CO. C.	<u> </u>
S Mathematics - 65 hours	Approximate the second of the	sivinos,	BS Physics (PHYS): Materials & Nanophysics Specialization	n - 120 nours (2000 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200 - 1200	Habitus.
		<u> </u>	University Core Curriculum (UCC) - 39 hrs *		<del></del>
		Hrs			Hrs
UID 109	First Year College Experience	11	UNIV 101	Saluki Success	, NA
NGL 101	English Composition	3	ENGL 101	English Composition I	T
NGL 102	English Composition	3	ENGL 102	English Composition II	T
PCH 103	Fundamentals of Speech	3	CMST 101	Intro to Oral Communication	T
MATH 136	General Statistics	4	MATH 282 (Fulfills BS degree requirements)	Intro to Statistics	T
PSYH 101	Psychology	3	PSYC 102	Intro to Psychology	T
OCIAL/BEHAVIORAL SCIEN	NCE (See SIUC Transfer Equivalency Guide)	3	SOCIAL SCIENCE	TO THE RESIDENCE OF THE PARTY O	T
PHLE 120	Ethics	3	PHIL 104	Ethics	T
. 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1			HUMANITIES		. NA
PHYS 201	University Physics I	5	PHYS 205/255A (Required for BS degree)	University Physics/Lab	7 T
BIOLOGY Elective	(See SIUC Transfer Equivalency Guide)	3	LIFE SCIENCE, GRP 2	Conversity i mysics cab	+ <del>-</del>
INE ARTS	(See SIUC Transfer Equivalency Guide)	3	FINE ARTS		<del>-</del>
			· · · · · · · · · · · · · · · · · · ·	Foundation of the control to the	+;
ILTH 102	Human Health and Wellness	3	PH 101	Foundations of Human Health	
			CULT 1XX	Multicultural Substitute	LT
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			* An A.S. from a regionally accredited Illinois communi	ty college satisfies UCC requirements	
		1			1
Program Requirements			Program Requirements		
CITA 110	Intro to Word Processing	1			
MATH 166	Calculus & Analytical Geometry I	5	MATH 150 (Required for BS degree)	Calculus I	Т
AATH 210	Computer Programming for Engineering	3	CS 202 (Fulfills BS degree requirements)	Intro to Computer Science	T
MATH 236	Linear Algebra	3	MATH 221 (Required for BS degree)	Intro to Linear Algebra	T T
MATH 267	Calculus & Analytical Geometry II	4	MATH 250 (Required for BS degree)	Calculus II	† <del>'</del>
		4-4	MATH 250 (Required for BS degree)	Calculus III	+;
MATH 268	Calculus & Analytical Geometry III	- <del> </del>	MATH 251 (Required for BS degree)		
MATH 269	Differential Equations	3	MATH 305 (Required for BS degree)	Intro to Differential Equations	<u> </u>
PHYS 202	University Physics II	5	PHYS 205/255B (Required for BS degree)	University Physics/Lab	T
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			THE CONTRACTOR OF THE CONTRACT		
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			Materials & Nanophysics Specialization		
			COS Biological Science Requirement	Select 1 additional Life Science course	3
			COS Supportive Skills Requirement	Fulfilled by MATH 282 and CS 202	NA
			CHEM 200/201/202	Intro to Chemical Principles/Lab/Workshop	5
	· <del></del>		PHYS 100	Undergraduate Seminar	1
			PHYS 301	Theoretical Methods in Physics	2
			PHYS 305/355	Modern Physics/Lab	, J
					4
			PHYS 310	Classical Mechanics	3
			PHYS 320	Electricity and Magnetism I	3
			PHYS 420	Electricity and Magnetism II	3
			PHYS 425	Solid State Physics I	3
The second secon		1	PHYS 430	Quantum Mechanics I	3
		1	PHYS 440	Quantum Mechanics II	3
		1	PHYS 445	Thermodynamics and Statistical Mechanics	3
		1	PHYS 450	Advanced Laboratory Techniques	3
			PHYS 476M	Introduction to Materials Science and NanoPhysics	3
		1	Mathematics Elective	Choose from: MATH 405, 406, 407, 409, 450, 455, 475	3
		+		Choose a minimum of 8 hrs from: CS 215, 220, 475, 476; PHYS 390, 424,	
		1	Materials & Nanophysics Electives		8
			그 말까지는 내려면 그 밖에는 그렇게 하는 것이라고 되어 하셨다.	428, 431, 432, 458, 470, 490	
			General Electives	As necessary to fulfill 120-hr requirement	1
			* Students must complete 42 credit hours of 300/400 level	courses	55
Total semester hrs complet	ed with AS degree:	65	Total semester hrs completed with BS degree:		55
rotal semester in a complet	24 William 40 9.00.				
i otal semester ins complet	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				120