

ARTICULATION AGREEMENT
For
2+2 ENGINEERING PROGRAM
Between
SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE
And
ST. CHARLES COMMUNITY COLLEGE

This Articulation Agreement For 2+2 Engineering Program is made and entered into this seventeenth day of August, 2011, by and between the **Board of Trustees of Southern Illinois University**, a body politic and corporate of the State of Illinois, governing Southern Illinois University Edwardsville on behalf of its School of Engineering, and the **Board of Trustees of St. Charles Community College**, a Missouri public community college organized and existing under the laws of the State of Missouri, governing St. Charles Community College.

WHEREAS, Southern Illinois University Edwardsville (SIUE) and St. Charles Community College (SCC) both share a common pride and a history of serving the greater St. Louis metropolitan region with high quality educational programs, offering curricula that combine various disciplines in arts and sciences with programs that prepare students for careers in various fields; and

WHEREAS, the mission of the SIUE School of Engineering is to provide excellent innovative engineering, computer science, and construction education to citizens of Illinois, the greater St. Louis metropolitan area, and representatives of the global community, with a focus on strong undergraduate education and graduate programs that serve the needs of full-time students and employed professionals and a desire to be among the institutions of first choice for top ranking high school students who wish to pursue careers related to engineering, computer science or construction, to produce graduates who are highly valued by both local and national employers and accepted for graduate study by the nation's leading institutions, to be an accessible top quality resource for continued professional development of technical professionals throughout the greater St. Louis metropolitan area, and to be a significant resource for processes that bring environmentally sound growth and economic development to areas surrounding the SIUE Campus and to the greater St. Louis metropolitan area; and

WHEREAS, SIUE and SCC desire to enter into this Articulation Agreement to establish a 2+2 Engineering Program to increase opportunities for student access to and success in engineering education by mutually agreeing to clarify transfer policies and procedures that assure articulation between programs and to assist students in making a seamless transfer of SCC course work to SIUE for the completion of the baccalaureate degree in engineering;

NOW THEREFORE, in consideration of the mutual covenants and promises contained herein, the institutions agree as follows:

I. Purpose - The purpose of the 2+2 Engineering Program is for students to be able to obtain bachelor's degrees in civil engineering, computer engineering, electrical engineering, industrial engineering, manufacturing engineering, or mechanical engineering by attending SCC for two years and attending SIUE for two years. Upon completion of the requirements of both

institutions, students will qualify for a Bachelor of Science degree in the appropriate discipline from SIUE. Sample curricula outlining how a typical student would be able to satisfy the requirements in each of the listed disciplines are attached to this agreement. The two institutions agree to inform each other of any future curriculum changes so that the basic agreement remains in force as curriculum changes occur at either school.

II. Policies and Procedures for Operation of 2+2 Engineering Program

A. Student Eligibility

Students are admissible to SIUE after having completed a minimum of 30 semester hours at SCC with a minimum cumulative GPA of 2.0.

B. Admission to SIUE

Students are required to submit an Application for Admission to SIUE. Students are encouraged to submit the application as soon as they have identified an interest in the 2+2 Engineering Program.

Students identifying their interest in the program at the time of application to the University will be provisionally admitted to SIUE in anticipation of successful completion of the SCC curriculum. The SIUE catalog will be in effect from the term of provisional admission throughout continuous enrollment and timely completion of degree requirements. Students failing to complete requirements within the timeline established by SIUE policy may be subject to new and/or revised requirements.

Prior to the student's anticipated entry term, SIUE will review the student's academic progress to ensure that admission requirements to the University have been satisfied. Students meeting requirements will be formally admitted at that time.

Students who are satisfactorily completing the first two years of the curriculum as outlined at SCC will be admitted directly to their intended major following formal admission to the University.

The students making sufficient progress towards their chosen degree program may transfer to SIUE if they are six hours short of that curriculum, or six hours ahead of that curriculum. This exception is intended to assist in a smoother transition for students who may need to retake a course or who have extra credits from SCC. The six-hour exception strictly applies only to the School of Engineering curricula, and does not affect or alter the earned-hours required by the university. The students should be aware that transferring to SIUE six-hours short may jeopardize their eligibility for Upper Division standing when applicable.

C. Academic Standing

Students must maintain a cumulative GPA of 2.0 to remain in good academic standing. Once admitted to SIUE School of Engineering, students will be subject to standard retention requirements applied to all SIUE students.

D. Transfer of Coursework

Upon receipt of official transcripts from SCC, SIUE will record all transfer credit to the student's record as articulated. Chemistry, computer science, mathematics, physics, English, and engineering science courses with grades lower than C will not apply toward completion of School of Engineering degree requirements.

III. SIUE Responsibilities

- A. Designate a contact person to handle all communication with SCC that relates to the administration of the 2+2 Engineering Program.
- B. Each semester, provide SCC with a list of SCC students enrolled in the 2+2 Engineering program.
- C. Inform SCC of any current and planned changes to the curriculum that may impact the operation of the 2+2 Engineering program.

IV. SCC Responsibilities

- A. Designate a contact person to handle all communication with SIUE that relates to the administration of the 2+2 Engineering Program.
- B. Inform SIUE of any current and planned changes to the curriculum that may impact the operation of the 2+2 Engineering program.
- C. At the end of each semester, provide SIUE Office of the Registrar with official transcripts of SCC students enrolled in the 2+2 Engineering program. The transcripts are to be forwarded to Box 1080, Edwardsville, IL 62026-1080.
- D. Consult with, and obtain the approval of, the SIUE Office of Marketing and Communications prior to using SIUE name and/or logo in any recruitment materials for the 2+2 Engineering Program.

V. **Term** - The term of this Articulation Agreement shall be from _____, 2011, to _____, 20____. This Articulation Agreement may be renewed only by written agreement of the institutions. An institution may terminate this Articulation Agreement with ___ day written notice to the other institution. Termination, however, will not be executed without a negotiated teach-out agreement for students currently enrolled.

VI. Relationship of the Institutions - The institutions agree that they are independent institutions contracting together, and that nothing contained herein is to be construed as making the institutions partners or joint venturers. For purposes of the subject matter of this Articulation Agreement, the employees, officers and agents of one institution shall not be employees, officers, or agents of the other institution and may not hold themselves as such nor may they make any representations or commitments on behalf of the other. Both institutions, through their employees, officers, and agents, may represent such matters and understandings as are contained in this agreement.

VII. Notices - All notices pursuant to this Articulation Agreement shall be made in writing and will be deposited in the United States mail, postage prepaid, addressed to the following designated representatives for each institution:

SIUE

Associate Dean
SIUE School of Engineering
Campus Box 1804
Edwardsville, IL 62026-1804

Phone: (618) 650-2435
Fax: (618) 650-3374

SCC

April Hoekenga
Transfer Coordinator, Student Development
St. Charles Community College
ADM 1204
4601 Mid Rivers Mall Drive
Cottleville, MO 63376
Phone: (636) 922-8239
Fax: (636) 922-8251

VIII. Mutual Understandings

A. Compliance – Performance pursuant to this Articulation Agreement shall comply with all federal, state, and local laws, regulations, ordinances, and orders. Further, each institution shall be governed by the applicable and mandatory policies, procedures, regulations established by their governing bodies, any accrediting bodies, and any other agency with oversight obligations in the implementation and interpretation of this Articulation Agreement. Students shall comply with the policies, rules, regulations and procedures of the institution of their enrollment.

B. Non-Discrimination - The institutions hereto agree that neither institution shall in the performance of this Articulation Agreement discriminate against any individual on the basis of race, religion, sex, sexual orientation, creed, marital status, national origin, physical or mental disability unrelated to ability, or unfavorable discharge from military service not including dishonorable discharge.

C. Program Promotion - Each institution shall advertise the provisions of this agreement so that it is disseminated to prospective and existing students by reasonable means, which may include but is not limited to the Internet, student catalogs, view books, program brochures, and other advertising. Advertising copy for the 2+2 Engineering Program shall be reviewed and approved in writing by each institution prior to publication. Each institution shall have a limited, non-

exclusive right to use the name, trademarks, and logos of the other institution in the advertising for the 2+2 Engineering Program.

D. Cooperation - Each institution shall encourage and maintain a high degree of cooperation between their support staffs in the operation of this Articulation Agreement.

E. Waiver - Waiver by either institution of any term or provision of this Articulation Agreement shall not constitute a waiver of any other or all terms and provisions. To be effective, any waiver, change, discharge or termination of any provision of the Articulation Agreement shall be in writing signed by both institutions.

F. Confidentiality of Student Education Records – Each institution shall comply fully with all provisions of the Family Education Rights and Privacy Act (FERPA) in performance of obligations pursuant to this Articulation Agreement. Subject to FERPA, the institutions shall share student records to the extent necessary to operate the 2+2 Engineering Program and shall protect such records from unauthorized disclosure.

G. Applicable Law - Questions of validity, execution, construction, and interpretation which may arise hereunder shall be governed by the laws of the state of Illinois without reference to conflict of law principles.

H. Severability - If any clause or provision of this Articulation Agreement, or the application of any clause to a particular context or to a particular situation, circumstance or person, should be held unenforceable, invalid or in violation of law by any court, the validity and enforceability of the enforceable portion of any such provision and/or the remaining provisions shall not be affected thereby.

I. Amendments - This Articulation Agreement may be amended only by written addendum signed by both institutions.

J. Entire Agreement - This Articulation Agreement and its attachments constitute the entire agreement between the institutions pertaining to the 2+2 Engineering Program and supersede all prior written or verbal agreements on the stated subject matter herein between the SIUE and SCC.

Preparation for the FE Exam ⁵	0		
Subtotal	15	Subtotal	16

¹ A grade of C or better is required.

² Possible courses include but are not limited to SIUE's BIOL 111, BIOL 468, ESCI 111, ENSC 210, ENSC 220, ENSC 404, ENSC 473, ENSC 475, GEOG 202, GEOG 210, GEOG 211, GEOG 315, GEOG 320, GEOG 321, GEOG 418, and GEOG 423. Students who take the equivalent of one of these courses at SCC do not need to take the natural science course shown in the curriculum guide. Seek approval of your advisor prior to enrolling.

³ Application form is available in the Civil Engineering Department Office and online.

⁴ Students seeking to become licensed structural engineers (SE) in the State of Illinois should take 18 hours of structural engineering in upper division and/or graduate courses. CE 342, CE 343, CE 455 and CE 493-STR plus any two structural electives can be used to meet this requirement. Two of the 400- or 500-level courses must include structural design.

⁵ Students are strongly encouraged but not required to take the FE exam before graduation.

⁶ Selecting one of IS 324, 326, 336, 340, 352, 353, 363, 375, 377, or 400 will satisfy both the requirement for an Interdisciplinary Studies (IS) course and the requirement for an International Issues (II) or International Culture (IC) course. If some other IS course is selected, then the II/IC requirement must be satisfied by selecting an additional course from the list of II/IC courses in the current SIUE Undergraduate Catalog. IS 350, 352, and 375 also satisfy the Intergroup Relations (IGR) requirement.

⁷ Following is a list of courses that can be taken at SCC to satisfy introductory fine arts & humanities requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ART 101	MUS 111
PHL 101	THE 122

⁸ Following is a list of courses that can be taken at SCC to satisfy introductory social science requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 101	CRJ 140
ECO 100	GEO 100
HIS 145, 146	POL 210
PSY 101	SOC 101

CURRICULUM FOR COMPUTER ENGINEERING MAJOR ^{3,4}

2+2 Program

First Two Years at St. Charles Community College

Year I							
<u>Fall</u>			<u>Spring</u>				
CHM	115	General Chemistry I	5	SPE	110 Interpersonal Comm.	3	
ENG	101	English Composition I ¹	3	PHY	240 College Physics I ¹	4	
MAT	180	Calc. & Analytic Geo. I ¹	5	PHY	243 College Physics I Lab. ¹	1	
PHL	102	Intro. to Logic	3	ENG	102 English Composition II ¹	3	
COL	101	Orientation to College	1	Intro. FA&H ⁵		3	
				MAT	230 Calc. & Analytic Geo. II ¹	5	
Subtotal			17	Subtotal			19

Year II							
<u>Fall</u>			<u>Spring</u>				
MAT	240	Calc. & Analytic Geo. III ¹	5	MAT	250 Differential Equations ¹	3	
PHY	241	College Physics II ¹	4	EGR	220 Electrical Circuits ¹	3	
PHY	244	College Physics II Lab. ¹	1	CPT	186 Object-Oriented Prog. C++ ¹	3	
CPT	182	Programming in C ¹	3	ECO	110 Principles of Macroeconomics	3	
		Intro. FA&H or Intro. Soc. Sci. ^{5,6}	3	Dist. Soc. Science ⁷		3	
Subtotal			16	Subtotal			15

Last Two Years at SIUE

<u>Summer</u>			
ECE	211	Circuit Analysis II	4
Subtotal			4

Year III							
<u>Fall</u>			<u>Spring</u>				
ECE	282	Digital Systems Design	4	ECE	326 Electronic Circuits I	3	
ECE	351	Signals and Systems	3	ECE	381 Microcontrollers	3	
ECE	352	Eng. Probability & Statistics	3	ECE	483 Adv. Digital Sys. Engr.	3	
CS	240	Introduction to Computing III	3	CS	312 Intro. To Comp. Organization	3	
MATH	224	Discrete Mathematics	3				
Subtotal			16	Subtotal			12

Year IV							
<u>Fall</u>			<u>Spring</u>				
ECE	404	ECE Design	3	ECE	405 ECE Design Lab	3	
		ECE/CS Elective I	3				
CS	314	Operating Systems	3	ECE/CS	Elective II	3	
CS	340	Algorithms & Data Structures	3	ECE/CS	Elective III	3	
		Interdisciplinary Studies ²	3	IME	345 Engr. Economic Analysis	3	
Subtotal			15	PHIL	323 Engr. Ethics & Professionalism	3	
				Subtotal			15

¹ A grade of C or better is required.

² Selecting one of IS 324, 326, 336, 340, 352, 353, 363, 375, 377, or 400 will satisfy both the requirement for an Interdisciplinary Studies (IS) course and the requirement for an International Issues (II) or International Culture (IC) course. If some other IS course is selected, then the II/IC requirement must be satisfied by selecting an additional

course from the list of II/IC courses in the current SIUE Undergraduate Catalog. IS 350, 352, and 375 also satisfy the Intergroup Relations (IGR) requirement.

³ Enrollment in any of the ECE courses is limited to students with a declared major in one of the engineering disciplines. Exceptions to this rule require the approval of the department chair.

⁴ A prerequisite for any ECE course can only be fulfilled by a grade of C or better. A grade of D is sufficient to pass a course, but is not sufficient to enroll in a more advanced ECE course that lists the former as a prerequisite.

⁵ Following is a list of courses that can be taken at SCC to satisfy introductory fine arts & humanities requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ART 101	MUS 111
PHL 101	THE 122

⁶ Following is a list of courses that can be taken at SCC to satisfy introductory social science requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 101	CRJ 140
ECO 100	GEO 100
HIS 145, 146	POL 210
PSY 101	SOC 101

⁷ Following is a list of courses that can be taken at SCC to satisfy social science distribution requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 102, 103, 115, 151, 161, 171, 220	CRJ 175
ECO 120, 220	GEO 101, 102, 115, 201
GLC 140, 170, 180	HIS 101, 102, 115, 130, 145, 146, 160, 201, 210, 220, 221, 230, 240, 250, 260, 270, 280
POL 101, 102, 140, 201, 220, 280	PSY 201, 210, 215, 216, 220, 225, 230
SOC 102, 151, 201, 215, 221, 224, 241, 251	

CURRICULUM FOR ELECTRICAL ENGINEERING MAJOR^{3,4} 2+2 Program

First Two Years at St. Charles Community College

Year I							
<u>Fall</u>				<u>Spring</u>			
CHM	115	General Chemistry I	5	SPE	110	Interpersonal Comm.	3
ENG	101	English Composition I ¹	3	PHY	240	College Physics I ¹	4
MAT	180	Calc. & Analytic Geo. I ¹	5	PHY	243	College Physics I Lab. ¹	1
PHL	102	Intro. to Logic	3	ENG	102	English Composition II ¹	3
COL	101	Orientation to College	1	ECO	110	Principles of Macroeconomics	3
				MAT	230	Calc. & Analytic Geo. II ¹	5
Subtotal			17	Subtotal			19

Year II							
<u>Fall</u>				<u>Spring</u>			
MAT	240	Calc. & Analytic Geo. III ¹	5	MAT	250	Differential Equations ¹	3
PHY	241	College Physics II ¹	4	EGR	220	Electrical Circuits ¹	3
PHY	244	College Physics II Lab. ¹	1	EGR	170	Engineering Mech. - Statics ^{1,8}	3
CPT	186	Object-Oriented Prog. C++ ¹	3	Intro. FA&H or Intro. Soc. Sci. ^{5,6}			3
Intro. FA&H ⁵			3	Dist. Soc. Science ⁷			3
Subtotal			16	Subtotal			15

Last Two Years at SIUE

<u>Summer</u>			
ECE	211	Circuit Analysis II	4
Subtotal			4

Year III							
<u>Fall</u>				<u>Spring</u>			
MATH	355	Engineering Mathematics	5	ECE	326	Electronic Circuits I	4
ECE	282	Digital Systems Design	4	ECE	340	Engineering Electromagnetics	3
ECE	351	Signals and Systems	3	ECE	365	Control Systems	3
ECE	352	Eng. Probability & Statistics	3	ECE	375	Introduction to Communications	3
Subtotal			15	Subtotal			13

Year IV							
<u>Fall</u>				<u>Spring</u>			
ECE	341	Electromechanical Energy Conv.	4	ECE	405	ECE Design Lab	3
ECE	404	ECE Design	3	ECE/CS Elective III			3
ECE/CS Elective I			3	ECE/CS Elective IV			3
ECE/CS Elective II			3	IME	345	Engr. Economic Analysis	3
PHIL	323	Engr. Ethics & Professionalism	3	Interdisciplinary Studies ²			3
Subtotal			16	Subtotal			15

¹ A grade of C or better is required.

² Selecting one of IS 324, 326, 336, 340, 352, 353, 363, 375, 377, or 400 will satisfy both the requirement for an Interdisciplinary Studies (IS) course and the requirement for an International Issues (II) or International Culture (IC) course. If some other IS course is selected, then the II/IC requirement must be satisfied by selecting an additional

course from the list of II/IC courses in the current SIUE Undergraduate Catalog. IS 350, 352, and 375 also satisfy the Intergroup Relations (IGR) requirement.

³ Enrollment in any of the ECE courses is limited to students with a declared major in one of the engineering disciplines. Exceptions to this rule require the approval of the department chair.

⁴ A prerequisite for any ECE course can only be fulfilled by a grade of C or better. A grade of D is sufficient to pass a course, but is not sufficient to enroll in a more advanced ECE course that lists the former as a prerequisite.

⁵ Following is a list of courses that can be taken at SCC to satisfy introductory fine arts & humanities requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ART 101	MUS 111
PHL 101	THE 122

⁶ Following is a list of courses that can be taken at SCC to satisfy introductory social science requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 101	CRJ 140
ECO 100	GEO 100
HIS 145, 146	POL 210
PSY 101	SOC 101

⁷ Following is a list of courses that can be taken at SCC to satisfy social science distribution requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 102, 103, 115, 151, 161, 171, 220	CRJ 175
ECO 120, 220	GEO 101, 102, 115, 201
GLC 140, 170, 180	HIS 101, 102, 115, 130, 145, 146, 160, 201, 210, 220, 221, 230, 240, 250, 260, 270, 280
POL 101, 102, 140, 201, 220, 280	PSY 201, 210, 215, 216, 220, 225, 230
SOC 102, 151, 201, 215, 221, 224, 241, 251	

⁸ This course fulfills the technical elective requirement of the SIUE Electrical Engineering curriculum. It may be substituted with CPT 285 if desired..

CURRICULUM FOR INDUSTRIAL ENGINEERING MAJOR

2+2 Program

First Two Years at St. Charles Community College

Year I							
<u>Fall</u>				<u>Spring</u>			
CHM	115	General Chemistry I	5	SPE	110	Interpersonal Comm.	3
ENG	101	English Composition I ¹	3	PHY	240	College Physics I ¹	4
MAT	180	Calc. & Analytic Geo. I ¹	5	PHY	243	College Physics I Lab. ¹	1
PHL	102	Intro. to Logic	3	ENG	102	English Composition II ¹	3
COL	101	Orientation to College	1	ECO	110	Principles of Macroeconomics	3
				MAT	230	Calc. & Analytic Geo. II ¹	5
Subtotal			17	Subtotal			19

Year II							
<u>Fall</u>				<u>Spring</u>			
MAT	240	Calc. & Analytic Geo. III ¹	5	MAT	250	Differential Equations ¹	3
PHY	241	College Physics II ¹	4	EGR	210	Engineering Mech. - Dynamics ¹	3
PHY	244	College Physics II Lab. ¹	1	EGR	220	Electrical Circuits ¹	3
EGR	170	Engineering Mech. - Statics ¹	3	CPT	186	Object-Oriented Prog. C++ ¹	3
EGR	104	Engineering Design ¹	3	Intro. FA&H or Intro. Soc. Sci. ^{4,5}			3
<u>Intro FA&H⁴</u>			<u>3</u>				
Subtotal			19	Subtotal			15

Students need to apply for admission to upper-division classes before starting the junior year at SIUE². The form for "Application for Admission to Upper Division Engineering Courses" must be submitted. SCC students who have successfully completed the first two years as detailed above will be eligible for upper-division standing after completing CE 242 at SIUE during summer.

Last Two Years at SIUE

<u>Summer</u>		
CE	242	Mechanics of Solids
		3
Subtotal		3

Year III							
<u>Fall</u>				<u>Spring</u>			
IME	335	Intro. To Information Proc. Sys.	3	IME	415	Oper. Research – Det. Models	3
IME	345	Engr. Economic Analysis	3	IME	451	Methods Dsgn. & Work. Meas.	3
IME	365	Quantitative Methods in Engr.	3	IME	465	Dsgn. And Ctrl. Of Quality Sys.	3
IME	370	Manufacturing Processes	3	IME	470	Manufacturing Systems	3
IME	375	Comp. Integ. Design and Mfg. I	3				
PSYC	320	Intro. To Industrial/Org. Psyc.	3				
Subtotal			18	Subtotal			12

Year IV							
<u>Fall</u>				<u>Spring</u>			
IME	468	Oper. Research - Simulation	3	IME	490	Senior Design Project	3
IME	476	Plantwide Process Control	3	IME Elective II			3
IME	483	Production Planning and Control	3	IME Elective III			3
IME	484	Facilities Planning	3	PHIL	323	Engr. Ethics & Professionalism	3
<u>IME Elective I</u>			<u>3</u>	<u>Interdisciplinary Studies³</u>			<u>3</u>
Subtotal			15	Subtotal			15

¹ A grade of C or better is required.

² Application form is available in the IME Department Office and online.

³ Selecting one of IS 324, 326, 336, 340, 352, 353, 363, 375, 377, or 400 will satisfy both the requirement for an Interdisciplinary Studies (IS) course and the requirement for an International Issues (II) or International Culture (IC) course. If some other IS course is selected, then the II/IC requirement must be satisfied by selecting an additional course from the list of II/IC courses in the current SIUE Undergraduate Catalog. IS 350, 352, and 375 also satisfy the Intergroup Relations (IGR) requirement.

⁴ Following is a list of courses that can be taken at SCC to satisfy introductory fine arts & humanities requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ART 101	MUS 111
PHL 101	THE 122

⁵ Following is a list of courses that can be taken at SCC to satisfy introductory social science requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 101	CRJ 140
ECO 100	GEO 100
HIS 145, 146	POL 210
PSY 101	SOC 101

CURRICULUM FOR MANUFACTURING ENGINEERING MAJOR
2+2 Program

First Two Years at St. Charles Community College

Year I							
<u>Fall</u>				<u>Spring</u>			
CHM	115	General Chemistry I	5	SPE	110	Interpersonal Comm.	3
ENG	101	English Composition I ¹	3	PHY	240	College Physics I ¹	4
MAT	180	Calc. & Analytic Geo. I ¹	5	PHY	243	College Physics I Lab. ¹	1
PHL	102	Intro. to Logic	3	ENG	102	English Composition II ¹	3
<u>COL</u>	101	Orientation to College	1	ECO	110	Principles of Macroeconomics	3
				<u>MAT</u>	<u>230</u>	<u>Calc. & Analytic Geo. II ¹</u>	<u>5</u>
Subtotal			17	Subtotal			19
Year II							
<u>Fall</u>				<u>Spring</u>			
MAT	240	Calc. & Analytic Geo. III ¹	5	MAT	250	Differential Equations ¹	3
PHY	241	College Physics II ¹	4	EGR	210	Engineering Mech. - Dynamics ¹	3
PHY	244	College Physics II Lab. ¹	1	EGR	220	Electrical Circuits ¹	3
EGR	170	Engineering Mech. - Statics ¹	3	CPT	186	Object-Oriented Prog. C++ ¹	3
EGR	104	Engineering Design ¹	3			Intro. FA&H or Intro. Soc. Sci. ^{4,5}	3
		Intro FA&H ⁴	3				
Subtotal			19	Subtotal			15

Students need to apply for admission to upper-division classes before starting the junior year at SIUE ². The form for "Application for Admission to Upper Division Engineering Courses" must be submitted. SCC students who have successfully completed the first two years as detailed above will be eligible for upper-division standing after completing CE 242 at SIUE during summer.

Last Two Years at SIUE

<u>Summer</u>							
CE	242	Mechanics of Solids	3				
Subtotal			3				
Year III							
<u>Fall</u>			<u>Spring</u>				
IME	365	Quantitative Methods in Engr.	3	IME	345	Engr. Economic Analysis	3
IME	370	Manufacturing Processes	3	IME	465	Dsgn. And Ctrl. Of Quality Sys.	3
IME	375	Comp. Integ. Design and Mfg. I	3	IME	470	Manufacturing Systems	3
ME	310	Thermodynamics I	3	IME	482	Mfg. Engineering Design	3
ME	370	Materials Engineering	3	ME	315	Fluid Mechanics	3
						Dist. Soc. Science	3
Subtotal			15	Subtotal			18
Year IV							
<u>Fall</u>			<u>Spring</u>				
IME	476	Plantwide Process Control	3	IME	475	CAD, CAM, CAE	3
IME	480	Tool Engineering	3	IME	490	Integrated Engineering Design	3
IME	483	Production Planning and Control	3	IME	Elective III		3
IME	Elective I		3	PHIL	323	Engr. Ethics & Professionalism	3
IME	Elective II		3			Interdisciplinary Studies ³	3
Subtotal			15	Subtotal			15

¹ A grade of C or better is required.

² Application form is available in the IME Department Office and online.

³ Selecting one of IS 324, 326, 336, 340, 352, 353, 363, 375, 377, or 400 will satisfy both the requirement for an IS course and the requirement for an International Issues (II) or International Culture (IC) course. If some other IS course is selected, then the II/IC requirement must be satisfied by selecting an additional course from the list of II/IC courses in the current SIUE Undergraduate Catalog. IS 350, 352, and 375 also satisfy the IGR requirement.

⁴ Following is a list of courses that can be taken at SCC to satisfy introductory fine arts & humanities requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ART 101	MUS 111
PHL 101	THE 122

⁵ Following is a list of courses that can be taken at SCC to satisfy introductory social science requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 101	CRJ 140
ECO 100	GEO 100
HIS 145, 146	POL 210
PSY 101	SOC 101

CURRICULUM FOR MECHANICAL ENGINEERING MAJOR

2+2 Program

First Two Years at St. Charles Community College

Year I							
<u>Fall</u>			<u>Spring</u>				
CHM	115	General Chemistry I	5	SPE	110	Interpersonal Comm.	3
ENG	101	English Composition I ¹	3	PHY	240	College Physics I ¹	4
MAT	180	Calc. & Analytic Geo. I ¹	5	PHY	243	College Physics I Lab. ¹	1
PHL	102	Intro. to Logic	3	ENG	102	English Composition II ¹	3
COL	101	Orientation to College	1	ECO	110	Principles of Macroeconomics	3
				MAT	230	Calc. & Analytic Geo. II ¹	5
Subtotal			17	Subtotal			19
Year II							
<u>Fall</u>			<u>Spring</u>				
MAT	240	Calc. & Analytic Geo. III ¹	5	MAT	250	Differential Equations ¹	3
PHY	241	College Physics II ¹	4	EGR	210	Engineering Mech. - Dynamics ¹	3
PHY	244	College Physics II Lab. ¹	1	EGR	220	Electrical Circuits ¹	3
EGR	170	Engineering Mech. - Statics ¹	3	CPT	186	Object-Oriented Prog. C++ ¹	3
EGR	104	Engineering Design ¹	3	Intro. FA&H or Intro. Soc. Science. ^{4,5}			3
<u>Intro FA&H ⁵</u>			<u>3</u>				
Subtotal			19	Subtotal			15

Students need to apply for admission to upper-division classes before starting the junior year at SIUE ². The form for "Application for Admission to Upper Division Engineering Courses" must be submitted. SCC students who have successfully completed the first two years as detailed above will be eligible for upper-division standing after completing CE 242 at SIUE during summer.

Last Two Years at SIUE

<u>Summer</u>			
CE	242	Mechanics of Solids	3
Subtotal			3

Last Two Years in SIUE

Year III							
<u>Fall</u>			<u>Spring</u>				
ME	310	Thermodynamics I	3	ME	312	Thermodynamics II	3
ME	350	Mechanisms	3	ME	315	Fluid Mechanics	3
ME	354	Numerical Simulation	1	ME	380	Design of Machine Elements	3
ME	356	Dynamic Systems Modeling	3	ME	380L	Stress Laboratory	1
ME	370	Materials Engineering	3	PHIL	323	Engr. Ethics & Professionalism	3
<u>Dist. Soc. Science</u>			<u>3</u>	STAT	380	Statistics for Applications	3
Subtotal			16	Subtotal			16

Year IV							
<u>Fall</u>			<u>Spring</u>				
ME	410	Heat Transfer	3	ME	356L	Dynamic Systems Laboratory	1
ME	410L	Thermal Science Laboratory	1	ME	484	Mechanical Eng Design II	2
ME	482	Mechanical Eng Design I	2	ME Elective II			3
ME Elective I			3	ME Elective III			3
IME	345	Engr. Economic Analysis	3	ME Elective IV			3
<u>Interdisciplinary Studies ³</u>			<u>3</u>				
Subtotal			15	Subtotal			12

¹ A grade of C or better is required.

² Application form is available in the ME Department Office and online.

³ Selecting one of IS 324, 326, 336, 340, 352, 353, 363, 375, 377, or 400 will satisfy both the requirement for an Interdisciplinary Studies (IS) course and the requirement for an International Issues (II) or International Culture (IC) course. If some other IS course is selected, then the II/IC requirement must be satisfied by selecting an additional course from the list of II/IC courses in the current SIUE Undergraduate Catalog. IS 350, 352, and 375 also satisfy the Intergroup Relations (IGR) requirement.

⁴ Following is a list of courses that can be taken at SCC to satisfy introductory fine arts & humanities requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ART 101	MUS 111
PHL 101	THE 122

⁵ Following is a list of courses that can be taken at SCC to satisfy introductory social science requirements at SIUE. There may be other courses that qualify as well; please direct questions to SIUE Office of Engineering Student Services.

ANT 101	CRJ 140
ECO 100	GEO 100
HIS 145, 146	POL 210
PSY 101	SOC 101

Application

2+2 Engineering Program Southern Illinois University Edwardsville & St. Charles Community College

Social Security Number: _____ Date of Birth (MO/DAY/YEAR): _____

Gender: Female _____ Male _____

Legal Name (Last/ first/middle/suffix [Sr., Jr.]): _____

Other Names Under Which We May Receive Your Documents: _____

Permanent Home Address: _____ County: _____

City: _____ State: _____ Zip Code: _____ Telephone: () _____

Mailing Address: (If different from permanent) _____

City: _____ State: _____ Zip Code: _____ Email address: _____

Are you a U.S. citizen? Yes _____ No _____ If no, state your Alien Registration Number: _____

Check ONE of the following:

_____ I currently live in Illinois and have lived in Illinois at least 6 continuous months.

_____ I have lived in Illinois for less than 6 months.

_____ I do not live in Illinois.

_____ Requesting consideration under Public Act 93-7.

IMPORTANT: This question will determine your residency for tuition purposes. Applicants failing to respond to this question will be assumed to be out-of-state residents.

Ethnic Origin:

Asian/Pacific Islander (4)

Hispanic(3)

Black, Non-Hispanic(2)

White, Non-Hispanic (1)

Amer. Indian/Alaskan Native (5)

Other(6)

Has a member of your family graduated from SIUE?

_____ Parent(P) _____ Sibling(S) _____ Grandparent(G) _____ Extended Family (X)

Enter code for your engineering major. (Code list on back of application) _____

Check semester for which you are applying. _____ Fall _____ Spring _____ Summer _____ 20 _____

Do you plan to live in on-campus housing? Yes _____ No _____

High School/GED Information:

High School from which you graduated? _____

Did you complete your GED examination? Yes _____ No _____

Postsecondary Information: Required of applicants who have attended any college or university, including SIUE. List all institutions attended and include all requested information. (Use another sheet if necessary).

School Name (include City and State)	Dates Attended (Mo/Year) From and To	External degree(s) earned or planned and dates	Semester Hours Completed

Certification: This certification must be signed and dated by the applicant before action can be taken on this dual admission application. I understand that withholding information requested on this application or giving false information may make me ineligible for admission to the University or subject to dismissal. I certify that the statements I have made on this application are correct and complete. Southern Illinois University Edwardsville is committed to maintaining a safe environment for all members of the University community. The University requires applicants who are under current indictment or have been convicted of a crime (other than a routine traffic offense or in a juvenile proceeding) to disclose this information as a mandatory step in the application process. A previous conviction or current indictment does not automatically bar admission to the University, but does require review. Complete information must be sent by Certified Mail at the time of application for admission to: Southern Illinois University Edwardsville; Office of Admissions Review Committee; Campus Box 1600; Edwardsville, IL 62026. Applicants are responsible for verifying receipt by the University and for maintaining a copy of the receipt certifying submission. Information to be submitted includes: a brief explanation, a location (city, state, country) of conviction or current indictment, dates and court disposition. This statement must also include a grant of permission to the University for complete access to criminal records, if any. For further information on this requirement, call 618-650-3705.

Print Name: _____

Signature: _____ Date: _____