

2 + 2 Joint Articulation Transfer Agreement

Bachelor of Science in Industrial Engineering

Colorado State University – Pueblo

And

Northeastern Junior College

B.S. Requirements at CSU-Pueblo			A.S. Requirements at NJC		
Lower Division General Education Requirements			Equivalent Courses at NJC		
Course #	Course Title	Credits	Course #	Course Title	Credits
ENG 101	Composition I	3	ENG 121	English Composition I	3
ENG 102	Composition II	3	ENG 122	English Composition II	3
SPCOM 103	Speaking and Speaking	3	COM 115	Public Speaking	3
Humanities	Select from statewide Gen Ed Core	6	Humanities	Select from statewide Gen Ed Core	9
Social Science	Select from statewide Gen Ed Core	6	Social Science	Select from statewide Gen Ed Core	6
History	Select from statewide Gen Ed Core	3	History	Select from statewide Gen Ed Core	3
MATH 126	Calculus and Analytic Geometry I	5	MAT 201	Calculus I	5
PHYS 221/L	General Physics I and Lab	5	PHY 211	Physics: Calculus Based I	5
PHYS 222/1	General Physics II and Lab	5	PHY 212	Physics: Calculus Based II	5
Subtotal		39	Subtotal		42
Additional Math Requirements			Equivalent Courses at NJC		
MATH 207	Matrix and Vector Algebra with Applications	2			
MATH 224	Calculus & Analytic Geometry II	5	MAT 202	Calculus II	5
MATH 337	Differential Equations I	3			
Subtotal		10	Subtotal		5
Major Course Requirements (Lower Division)			Equivalent Courses at NJC		
EN 101	Introduction to Engineering	2	*CIS 118	*Introduction to PC Applications *1 credit may be “carried over” to the Technical Electives Section	2 + *(1)
EN 103	Problem Solving for Engineers	3			
EN 107	Engineering Graphics	2			
EN 211	Engineering Mechanics I	3	EGG 211	Engineering Mechanics – Statics	3
EN 212	Engineering Mechanics II	3	EGG 212	Engineering Mechanics – Dynamics	3
EN 215	Intro to Industrial & Systems Engr	3			
EN 231/L	Circuit Analysis and Lab	5			
Subtotal		21	Subtotal		8
Major Course Requirements (Upper Division)			Equivalent Courses at NJC		
EN 321	Thermodynamics I	3			
EN 324/L	Material Science & Engineering/Lab	4			
EN 343	Engineering Economy	3			
EN 365	Stochastic Systems Engineering	4			
EB 420	Simulation Experiments	4			
EN 430	Project Planning and Control	3			
EN 439	Time and Motion Studies	2			
EN 440	Safety Engineering	3			
EN 441	Engr of Manufacturing Processes	4			
EN 443	Quality Control & Reliability	3			

EN 471	Operations Research	3			
EN 473	Computer Integrated Manufacturing	3			
EN 475	Facilities Planning & Design	3			
EN 477	Operations Planning & Control	3			
EN 488	Engineering Design Project	3			
EN 493	Senior Seminar	2			
Subtotal		50	Subtotal		0
Technical Electives			Equivalent Courses at NJC		
EN	Advisor Approved Tech Electives	3	*CIS 118	*Introduction to PC Applications *1 credit "carried over" from the Course Requirements Section	1
Math/Science Electives	Advisor Approved Electives		BIO 111 or CHE 111	General College Biology I General College Chemistry I	5
Subtotal		6	Subtotal		6
Total Credit Required for A.S.					61
Total Transfer Credit Accepted for A.S.					60
Total Additional Credit Required for B.S.					68
Total B.S. Degree Requirements					128

Students who successfully complete this program as specified are eligible to apply for a *Destination CSU-Pueblo* scholarship.

This articulation transfer agreement replaces all previous agreements between NJC and CSU-Pueblo in Bachelor of Science in Industrial Engineering. This agreement will be reviewed annually and revised (if necessary) as mutually agreed.

cam: 11/16/09
revised: 06/19/10