

JCC Curriculum

Equivalent Clarkson Course

Engineering Science Requirements (24 credit hours):

ENS 100 Engineering Orientation

No Comparable Course

ENS 101 Engineering Graphics

See attached transfer chart

ENS 201 Statics

ES 220 Statics

ENS 204 Dynamics

ES 223 Rigid Body Dynamics

Engineering Electives

See attached transfer chart

Mathematics and Science Requirements (36 credit hours):

PHY 143 Science & Engineering Physics I

PH 131 Physics I

PHY 144 Science & Engineering Physics II

See attached transfer chart

PHY 145 Science & Engineering Physics III

See attached transfer chart

CHE 131 General Chemistry I

CM 131 General Chemistry I

CHE 132 General Chemistry II

CM 132 General Chemistry II

MTH 221 Calculus I

MA 131 Calculus I

MTH 222 Calculus II

MA 132 Calculus II

MTH 241 Calculus III

MA 231 Calculus III

MTH 242 Differential Equations

MA 232 Elem. Diff. Equations

Computer Science Requirements (3 credit hours):

CIS 116 Intro to Programming-PASCAL

ES 100 Intro to Engineering Use
of Computer

Or

CIS 126 Intermediate Programming-FORTRAN

**Humanities & Social Sciences Requirements
(12 credit hours):**

ENG 100: Composition 1 ¹	No Comparable Course
ENG 101: Composition 2	LS 195 Great Ideas I
English Elective (3) ENG 102: Composition & Literature	LS 196 Great Ideas II
Social Science Electives (6) ECO 102 Micro-Economics ²	SOC Foundation Courses or Electives EC 151 Principles of Macroeconomics

¹ The ENG 101 and ENG 102 sequence will allow JCC students to receive credit for LS 195 and LS 196 at Clarkson.

² Students should take ECO 102 as one of their Social Science Electives. This will transfer in as EC 151 at Clarkson, a required course for engineering students.

		Clarkson Course Equivalent				
JCC Course	Credits	Civil	Chemical	Mechanical	Aeronautical	Electrical
ENS 101 Engineering Graphics	3	CE002 (Professional Elective)	ES002 (Technical Elective)	ME212 Intro to Eng Design (w/ENS199A and ENS199B)	AE212 Intro to Eng Design (w/ENS199A and ENS199B)	ES100 Intro to Eng Use of Computer or Undesignated Elective
PH144 Science & Engr Physics II	4	PH002 (Professional Elective)	PH002 (Technical Elective)	PH002 (Professional Elective) or PH001 (Undesignated Elective)	PH002 (Professional Elective) or PH001 (Undesignated Elective)	PH132 Physics II or PH001 (Undesignated Elective)
PH145 Science & Engr Physics III	4	PH132 Physics II	PH132 Physics II	PH132 Physics II	PH132 Physics II	PH132 Physics II or PH001 (Undesignated Elective)
CIS116 or CIS126 Pascal/Fortran	3	ES100 Intro to Eng Use of Computer	ES 100 Intro to Eng Use of Computer	ES100 Intro to Eng. Use of Computer	ES100 Intro to Eng Use of Computer	ES100 Intro to Eng Use of Computer or Undesignated Elective
Suggested Engineering Science Electives By Major	6	ENS206 Mechanics of Materials	CHE211/211L Org Chem I w/Lab	ENS206 Mechanics of Materials	ENS206 Mechanics of Materials	ENS207 Electrical Science
		ENS207 Electrical Science	CHE212/212L Org Chem II w/Lab	ENS207 Electrical Science	ENS207 Electrical Science	MTH245 Linear Algebra
			ENS207 Electrical Science			